



**Universidad de  
San Andrés**

DEPARTAMENTO DE ECONOMIA

## **When Does it Take a Nixon to Go to China?**

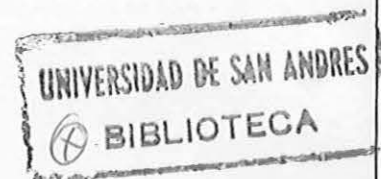
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# When Does it Take a Nixon to Go to China?

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## Abstract

When voters are not fully informed about the way in which policies map into outcomes, policy proposals convey information. This leads to conditions, identified in this paper, under which policies that benefit a majority are more likely to be implemented by “unlikely” characters. Thus, we provide a conceptual framework for understanding some well-known economic and foreign policy “reversals.”

Rodrik (1993) points out that it is ironic that populist and interventionist parties have implemented radical trade liberalizations, fiscal adjustments and institutional reforms. We demonstrate here why those parties had a comparative advantage at such policies. Similarly, sometimes it is “hawks” like M. Begin, R. Nixon and A. Sadat, who are able to take substantial steps towards peace.

Our analysis has more general implications for information transmission and credibility. Drazen and Masson (1994) have distinguished between credibility of policymakers and credibility of policies. We show here how credibility depends on the policymaker-policy pair.

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## When Does it Take a Nixon to Go to China?

May 26, 1995

### Abstract

When voters are not fully informed about the way in which policies map into outcomes, policy proposals convey information. This leads to conditions, identified in this paper, under which policies that benefit a majority are more likely to be implemented by "unlikely" characters. Thus, we provide a conceptual framework for understanding some well-known economic and foreign policy "reversals."

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# 1 Introduction

The history of public policy contains several episodes in which structural reforms or important economic or foreign policy shifts were implemented by parties or policymakers whose traditional position was to oppose such policies. Recent examples are the market oriented reforms and stabilization implemented in Argentina under (Peronist) Carlos Menem, in Peru under Fujimori, and in Bolivia under (Populist) Paz Estenssoro. France privatized some of its public sector and shifted the emphasis of policy to price stability during the eighties under socialist President Mitterand.

After ten years of vehement opposition to trading land for peace hawkish Israeli Prime Minister Begin finally gave up the entire Sinai peninsula in return for peace with Egypt at the end of the seventies. His partner to this historical deal was President Sadat of Egypt who is considered the first Arab leader to mount a relatively effective military campaign against Israel. Having established a strong and persistent anti communist record during the fifties and sixties President Nixon finally opened the door to the international legitimization of the People's Republic of China in the early seventies.

These episodes should not be interpreted to imply that large shifts in policy can be implemented **only** by political parties that have a historical bias against such policies. Privatization and other reforms under Thatcher are an obvious counterexample. But the examples in the preceding paragraph raise an intriguing and important question about the circumstances under which policies are implemented by "unlikely political parties" rather than by the parties whose "ideologies" favor such policies. The objective of this paper is to identify conditions under which required shifts in policy are more likely to be implemented by unlikely characters. To this end, we first develop a political economy framework in which such a phenomenon can occur and we use it to pin down a set of conditions which make it



more likely that such policies will be implemented by the "wrong" parties.

This paper develops explanations for "policy reversals" within the framework of asymmetric information about the mapping from policy instruments to policy outcomes.<sup>1</sup> The utility of individuals depends on outcomes, and policy choices affect outcomes. However, outcomes are also influenced by external circumstances about which policymakers normally have better information than the general public. Depending on external circumstances, a "right wing" policy may or may not be desirable from the point of view of a majority of the population. Suppose that it is, and that the incumbent party is fully informed about this fact. In order to implement this policy, the party in office usually has to elicit the support of a majority. To that end, it has to transmit to the public the private information about the relative desirability of right wing policies. When the incumbent is a recognized "left winger", his ability to do that and to implement the required right wing policies is greater than the ability of a right wing incumbent. The reason is that in the first case the public has less reason to suspect that the right wing policy is proposed because of the "natural" ideological tendencies of the party in office.

The notion that incumbent politicians have better information than the public about the likely outcomes of alternative policies seems both natural and realistic. Acquisition of information in different policy areas requires different types of expertise and is usually quite costly. As a consequence the average citizen does not have the incentive, and in some cases not even the ability, to become fully knowledgeable about the effects of alternative policies.<sup>2</sup> By contrast, when important policy issues arise, it pays incumbent politicians to become reasonably informed - mostly through the advice of specialists - about the possible

<sup>1</sup>The notion that this mapping is stochastic is not new. Recent references are Gilligan and Krehbiel (1989), Rogoff (1990), Alesina and Cukierman (1990), Harrington (1993) and Roemer (1994). Austen-Smith (1993) emphasizes that legislation (or policy more generally) is a means to an end rather than a final objective. Several of these papers also postulate, as we do, that there are some aspects of the mapping from policies to outcomes about which incumbent parties have better information than the general public.

<sup>2</sup>This naturally leads to specialization in knowledge (some people know more about some things than others) and to rational ignorance - Lupia (1992), Gilligan (1993) and Matsusaka (1994).

outcomes of alternative policies. This idea is captured here by assuming that a key stochastic parameter of the mapping from policies to outcomes is observed by policymakers in office but not by the voting public.

Several other conditions make a policy reversal more likely. First, the policy switch that - in view of external circumstances - is desirable should be large and relatively rare. These conditions appear to have been broadly satisfied in the episodes mentioned before. Major economic reforms, the trading of land for peace, and the opening of a pathway towards China are major policy decisions, that occur infrequently.

Also, the enactment of new policies should require the approval of a majority of the public. This may be due to the existence of formal institutions that limit the power of incumbent politicians - elections and policy referenda are examples. But even in the absence of formal ratification of proposed policies, incumbent politicians are likely to seek support for their policies.<sup>3</sup>

In addition, since the outcomes of such policies occur far in the future, it pays the voting public to use the policy proposals of incumbents as signals for the likely future outcomes of the proposed policies. This feature is modeled formally by assuming that voting takes place before the realization of final outcomes.<sup>4</sup> The policymaker observes some relevant aspect of the mapping from policy to outcome. He then takes an action that commits him to a future policy (like making a statement or sending a bill to Congress) thereby revealing part or all of his private information to the public.<sup>5</sup>

<sup>3</sup>Evidence from the U.S. indicates that public policy responds to public opinion not only when administrations change, but also within the term of office of an administration (Page and Shapiro, 1983). Also, in developing countries, policymakers depend on the approval of key interest groups for the implementation of any economic policy (Bates 1990, Meier 1991, and Burgess and Stern 1993).

<sup>4</sup>This is a crucial difference between our model and that in Harrington (1993). Harrington uses a similar informational structure to derive implications from voter uncertainty to policy manipulation for reelection purposes.

<sup>5</sup>Although the action taken by the policymaker might include a verbal statement, it is not cheap talk in the sense of Crawford and Sobel (1982). As stressed by Cukierman and Liviatan (1991) announcements of



The basic ideas of the paper are illustrated within two different institutional structures.<sup>6</sup> The first (section 2) is that of a representative democracy in which the incumbent party commits to a policy platform. This is followed by elections. If the incumbent is reelected he implements the proposed policy; if another party is elected it picks the policy that is nearest to its own preferences given the realization of the stochastic component of the policy-to-outcome mapping. One of the main implications of section 2 is that moderate right-wing policies are more likely to be implemented by right-wing parties (and similarly for the left), but extreme right-wing policies are more likely to be implemented by left-wing parties (and viceversa). Laver and Schofield (1990) have stressed the effect of intraparty politics on policy choices. An important element of our framework is the inability of voters to fully distinguish policy shifts that are due to intraparty politics from those that are due to changes in (information about) the mapping from policy to outcomes.

The other institutional structure (in section 3) is that of a referendum game. After having observed the state of the world the incumbent party may propose a policy that is different from the current status quo and put it up for a referendum. If it decides to make no proposal the status quo remains in effect. If it makes a proposal and submits it to a public referendum there are two possibilities - the proposal is either approved and enacted, or voted down, in which case the status quo prevails. The game theoretic formulation in section 3 enables us to develop specific implications for the credibility of policies and policymakers, in terms of voters' posterior beliefs.

In section 4 we discuss economic (market-oriented reforms) and foreign policy ("land for peace") applications of the models.

future policies by incumbent politicians are not necessarily costless from their point of view. Thus, although our analytical structure bears some resemblance to models of information transmission in debates - like those in Austin-Smith (1990) - it is based on costly rather than costless signalling.

<sup>6</sup>Shepsle and Weingast (1981) have emphasized the effect of institutional structure on policy choices. The search for conditions for reversals within two alternative institutional specifications can be viewed in this spirit since it gives some indication about the robustness of the results. The broad conditions for reversal discussed above apply to both institutional structures.

## 2 The signalling effect of policy instruments in a representative democracy.

This section identifies conditions for “policy reversals” in the context of electoral competition within a *representative* democracy.

The economy consists of a large number of individual voters with different preferences over a single policy issue. The utility of a type  $j$  voter is given by:

$$- |x^* - (c_j + \gamma^*)| \quad (1)$$

where  $x$  is policy,  $c_j$  is a constant and  $\gamma$  is a normally distributed stochastic variable with zero mean and variance  $\sigma_\gamma^2$ . The stars attached to  $x$  and  $\gamma$  denote expected values of these variables conditioned on the information available.  $(c_j + \gamma^*)$  is the ideal policy of type  $j$  voter. It depends on the type-specific “taste” parameter  $c_j$  as well as on the voter’s perception of the realization of an exogenous state of nature parameter  $\gamma$  which induces unidirectional shift in the preferred policies of all voters.<sup>7</sup>

In a representative democracy, voters do not choose policy directly. Instead they

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<sup>7</sup> $\gamma$  is meant to capture the effect of external circumstances on the ideal *policies* of voters. Voters have well defined and stable preferences over outcomes, but the mapping from policies to outcomes, and hence the indirect utility function over policies, has a stochastic element.

An example from current Israeli politics may clarify the conception underlying this specification. For a given probability of achieving a stable agreement with the Palestinians, Israelis differ with respect to the amount of land they are willing to yield. But when a given territorial concession maps into a greater probability of peace, the ideal policy of everybody shifts towards yielding larger amounts of land. The heterogeneity of preferences is captured by  $c_j$  and the common effect of external circumstances by  $\gamma$ . More specifically, let a larger  $x$  represent a more hawkish policy on the land versus peace issue and let a larger  $\gamma$  represent a smaller probability of peace for a given amount of land relinquished. Viewed in these terms, equation (1) states that an increase in the perceived probability of peace for a given amount of land relinquished (a lower  $\gamma$ ) shifts everybody’s ideal point to a more dovish range ( $c_j + \gamma$  is smaller for all  $j$ ’s.) This, and other more economically oriented examples (in which we interpret  $\gamma$  as an “efficiency” effect) are discussed in section 4.



choose elected officials who decide what policy to follow. We model this institutional setup by postulating two parties that compete for office. Each party cares about the issues as well as about being in office per se (this "Downsian" component is called ego-rents by Rogoff and Sibert, 1988.) There is a right wing party denoted by  $R$  and a left wing party denoted by  $L$ . Parties' objective functions are:

$$h - |x_i - (c_i + \varepsilon_i + \gamma)| \quad i = L, R, \quad c_R > c_L. \quad (2)$$

$h$  is the value of being in office per-se,  $x_i$  is the policy chosen by party  $i$  when in office and  $c_i + \varepsilon_i + \gamma$  is party  $i$ 's ideal policy.  $c_i$  is deterministic, and  $\varepsilon_i$  and  $\gamma$  are independent normally distributed stochastic variables with mean zero and variances  $\sigma_\varepsilon^2$  and  $\sigma_\gamma^2$  respectively. The deterministic component  $c_i$  is common knowledge, but the stochastic component  $\varepsilon_i$  is known only by party  $i$ .  $\varepsilon_i$  reflects changes in the party's position that are due to intra-party politics.<sup>8</sup>

The realization of  $\gamma$  is observed by the incumbent party, but not by the general public. This is a stylized way of expressing the presumption that the government has a more precise notion than the general public of the effect of external circumstances on the way in which policy instruments map into outcomes. Since the incumbent party has its own policy preferences, it is often not able to perfectly transmit this information to voters. But the voting public normally learns something about the realization of  $\gamma$  from the incumbent's policy proposal.

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<sup>8</sup>An idea well established in political science - see Kirchheimer (1966) and Laver and Schofield (1990) - is that different parties cater to the interests of different but contiguous groups of constituencies. The ideal policy of the left-wing party reflects a compromise between the different leftist groups and similarly for the right wing party. The relative ability of each such group to affect the party's policy position is usually in a state of flux and not fully known by the general public. The stochastic component,  $\varepsilon_i$ , reflects this element of asymmetric information.

## 2.1 Timing of Events

It is convenient to divide the sequence of events into two periods. In the first period, the incumbent observes  $\gamma$  and his own  $\varepsilon$ . He then makes a policy proposal  $x$ . After having observed the incumbent party's platform, the general public votes for or against the incumbent. In the second and last period public policy is carried out. If the incumbent is reelected he carries out the policy he proposed in the first period (the proposal is a binding commitment). If the challenger is elected, he gets to observe the realization of  $\gamma$  and his own  $\varepsilon$  and then picks the policy that maximizes the ex-post value of his objectives. The sequence of events is illustrated in Figure 1.

Note that there is an asymmetry between the incumbent and the challenger. While the first commits to a policy prior to elections the second, if elected, gets to choose policy only after the elections. This asymmetry reflects the presumption that reputational and other considerations make it more difficult to adjust policy for the incumbent than for the challenger.<sup>9</sup>

## 2.2 Elections and their Outcome

Since voters' preferences are single peaked, the outcome of the elections is determined by the preferences of the median voter. Let  $c_m$  be the median of the distribution of the  $c_j$ 's across the voting population. The party whose perceived policy is nearest to the ideal policy,  $c_m + \gamma^*$ , of the median on election day will win the elections. More formally the elections' outcome is determined by the condition:

$$\text{Min}_{x_L^*, x_R^*} [ |c_m + \gamma^* - x_L^*|, |c_m + \gamma^* - x_R^*| ] \quad (3)$$

where  $x_i^*$  is the policy that voters expect from party  $i$  if that party is elected.

<sup>9</sup>The notion that incumbents' platforms are more reliable indicators of their future policies than are the platforms of challengers for their policies is not new, see Bernhardt and Ingberman (1985) and Ingberman (1984).



Prior to elections the exact policy preferences of the median voter are unknown. We model this uncertainty by assuming that  $c_m$  is a uniformly distributed stochastic variable. Formally

$$c_m \sim U[\underline{c}, \bar{c}]. \quad (4)$$

### 2.3 Equilibrium

Suppose, for concreteness and without loss of generality, that the incumbent is party  $L$ . Since policy must be chosen prior to elections and since their outcome is uncertain, the incumbent takes into consideration the effect of current policy choice on the probability of reelection. More precisely it picks policy so as to maximize:<sup>10</sup>

$$\text{Max}_{x_L} P^L[x_L] [h - |x_L - (c_L + \varepsilon_L + \gamma)|]. \quad (5)$$

$P^L[\cdot]$  is the probability that incumbent  $L$  will be reelected and it depends on policy choice,  $x_L$ .

The functional form of  $P^L[\cdot]$  depends on the way the voting public forms its perception of  $\gamma$ . But the formation of this perception depends, in turn, on the policy rule of the incumbent which depends, in turn, on  $P^L[\cdot]$ . In equilibrium, the policy rule that the public postulates in order to form perceptions of  $\gamma$  has to be consistent with the actual policy rule followed by the incumbent, and the expectation formation process assumed by the incumbent

<sup>10</sup>This specification subsumes the simplifying assumption that a party that is not in office does not care about policy outcomes. A possible justification is that the party leadership acts as an agent for particular groups of constituencies that have an interest in the implementation of a specific policy. These constituencies penalize the party leadership for deviations from their preferred position when the party is in office and therefore able to affect policy. However, when the party is not in office there is no penalty since those constituencies realize that the party leadership is not in a position to affect policy. Hence the penalty for deviating from the preferred policy applies only when the party is in office. For simplicity, we normalize to zero the payoff of being out of office.



has to be identical to the actual process of expectation formation. A full definition of equilibrium follows.

**Definition 1** *An equilibrium is a pair of policy functions,  $(x_L[\gamma, \varepsilon_L], x_R[\gamma, \varepsilon_R])$ , together with voters' beliefs  $\gamma^*[x_L]$ , such that:*

- *The incumbent party chooses policy (prior to elections) so as to maximize (5).*
- *If elected, the challenging party chooses policy after elections so as to maximize (2).*
- *Voters' perceptions about  $\gamma$  (and about the policy of the challenging party, if elected) are formed rationally using all the available information.*
- *Given his perception of  $\gamma$  (and of the policy of the challenging party) the median voter votes for the party whose expected policy is nearest to his ideal point.*

If the right wing challenger is elected, he picks the policy that maximizes his ex-post objectives in equation (2). Hence, if elected, he implements policy:

$$x_R = c_R + \varepsilon_R + \gamma. \quad (6)$$

The policy expected by voters from  $R$  prior to elections is, therefore:

$$x_R^* \equiv E[x_R | x_L] = c_R + \gamma^*. \quad (7)$$

Note that the policy expected from  $R$  depends on the policy proposed by the left wing incumbent prior to elections. The reason is that the choice of policy by both  $R$  and  $L$  depends on  $\gamma$  and that voters receive information about  $\gamma$  from  $x_L$ .

The choice of policy by the left wing incumbent is more complicated, since he has to take into consideration the effect of his current choice of policy on voters' expectations and through them on the probability of reelection. The equilibrium solution for  $x_L$  is obtained by the method of undetermined coefficients. We first postulate that the equilibrium choice of  $x_L$  is the following linear function of  $\gamma$  and  $\varepsilon_L$ :

$$x_L = B_L + b_{L\gamma}\gamma + b_{L\varepsilon}\varepsilon \quad (8)$$

where  $B_L$ ,  $b_{L\gamma}$  and  $b_{L\varepsilon}$  are coefficients to be determined. Observation of  $x_L$  by voters does not enable them to disentangle the effects of  $\gamma$  and of  $\varepsilon$ . It is easy to verify that this implies that (8) simplifies to

$$x_L = B_L + b_L(\gamma + \varepsilon) \quad (9)$$

Voters know the decision rule in (9), observe  $x_L$  prior to elections, and use it to improve their forecast of  $\gamma$ . Since  $B_L$  is a known combination of parameters, it is easy to show that the expected value of  $\gamma$  conditional on  $x_L$  is given by:<sup>11</sup> (see for instance Brunk (1965, pp. 212-218))

$$\gamma^* \equiv E[\gamma | x_L] = \frac{\theta}{b_L} (x_L - B_L) \quad (10)$$

where

$$\theta \equiv \frac{\sigma_\gamma^2}{\sigma_\gamma^2 + \sigma_\varepsilon^2} \quad (11)$$

**Assumption 1:** In equilibrium voters believe that the policy proposed by the left wing incumbent is always to the left of that of the right wing challenger, or:  $x_L^* = x_L < x_R^*$ .

The assumption states that party  $R$  is always perceived to be the right-wing party. Conditions on the model's parameters that assure the fulfillment of this assumption are presented in the appendix of Cukierman and Tommasi (1994). (See also Alesina and Cukierman, 1990.)

A direct implication of equation (3) and of Assumption 1 is that there exists a critical value of  $c_m$ , denoted  $c_m^c$ , such that if  $c_m \leq c_m^c$  the left wing party wins the elections and if  $c_m > c_m^c$  the right wing party wins the elections. The value of  $c_m^c$  is obtained from:

<sup>11</sup>Some of the more tedious derivations of the results of the section are omitted. They appear in a previous version, Cukierman and Tommasi (1994), that is available upon request.

$$|x_L - \gamma^* - c_m^c| = |x_R^* - \gamma^* - c_m^c|$$

which, due to Assumption 1, is equivalent to:

$$\gamma^* + c_m^c - x_L = x_R^* - \gamma^* - c_m^c. \quad (12)$$

Rearranging (12) and using (7) we obtain:

$$c_m^c = \frac{1}{2}(c_R + x_L - \gamma^*). \quad (13)$$

The probability  $P^L[x_L]$ , that the left wing incumbent is reelected is equal to the probability that the ideal point,  $c_m$ , of the stochastic median voter falls to the left of  $c_m^c$ . Equation (4) implies that this probability is given by:

$$P^L[x_L] = \frac{c_m^c - \underline{c}}{\bar{c} - \underline{c}}. \quad (14)$$

Using (10) in (13) and the resulting expression in (14), we obtain:

$$P^L[x_L] = \frac{1}{2(\bar{c} - \underline{c})} \left[ c_R - 2\underline{c} + \theta \frac{B_L}{b_L} + dx_L \right]. \quad (15)$$

where  $d \equiv 1 - \theta/b_L$ .

Substituting (15) into the left wing incumbent's objective function (5) we obtain the following first and second order conditions for an internal maximum:

**Case 1:** If  $x_L > c_L + \varepsilon_L + \gamma$ , the first and second order conditions are given respectively by:

$$d(h - |x_L - (c_L + \varepsilon_L + \gamma)|) - 2(\bar{c} - \underline{c})P^L[x_L] = 0 \quad (16)$$

$$-d < 0. \quad (17)$$



**Case 2:** If  $x_L < c_L + \varepsilon_L + \gamma$ , the first and second-order conditions are given respectively by:

$$d(h - |x_L - (c_L + \varepsilon_L + \gamma)|) + 2(\bar{c} - \underline{c})P^L[x_L] = 0. \quad (18)$$

$$d < 0. \quad (19)$$

Rearranging the first-order conditions we obtain:

**Case 1:** ( $x_L > c_L + \varepsilon_L + \gamma$ )

$$x_L = \frac{1}{2d} \left[ d(c_L + h) - c_R - \theta \frac{B_L}{b_L} + 2\underline{c} \right] + \frac{1}{2} (\gamma + \varepsilon_L) \quad (20)$$

**Case 2:** ( $x_L < c_L + \varepsilon_L + \gamma$ )

$$x_L = \frac{1}{2d} \left[ d(c_L - h) + c_R + \theta \frac{B_L}{b_L} - 2\underline{c} \right] + \frac{1}{2} (\gamma + \varepsilon_L) \quad (21)$$

Equating coefficients across equations (20), (21) and (9) we obtain:

$$b_L = \frac{1}{2} \quad (22)$$

and

$$\begin{aligned} B_L &= \frac{1}{2} \left[ (2\underline{c} - c_R) \left( 1 + \frac{\sigma_L^2}{\sigma_\varepsilon^2} \right) + (h + c_L) \left( 1 - \frac{\sigma_L^2}{\sigma_\varepsilon^2} \right) \right] \text{ for } x_L > c_L + \varepsilon_L + \gamma \\ B_L &= \frac{1}{2} \left[ (2\underline{c} - c_R) \left( 1 + \frac{\sigma_L^2}{\sigma_\varepsilon^2} \right) + (c_L - h) \left( 1 - \frac{\sigma_L^2}{\sigma_\varepsilon^2} \right) \right] \text{ for } x_L < c_L + \varepsilon_L + \gamma. \end{aligned} \quad (23)$$

This implies that the second order conditions for a maximum in the two cases are respectively:

Case 1:  $\sigma_\gamma^2 < \sigma_\varepsilon^2$  for  $x_L > c_L + \varepsilon_L + \gamma$

Case 2:  $\sigma_\gamma^2 > \sigma_\varepsilon^2$  for  $x_L < c_L + \varepsilon_L + \gamma$

Notice from (15), (17) and (19) that  $P^L[x_L]$  will be increasing in case 1 and decreasing in case 2. The intuition underlying the two cases is the following. When  $L$  moves policy to the right, he triggers two conflicting effects on his reelection prospects. For a given  $\gamma^*$ , this moves him closer to the center of the political spectrum and increases his probability of reelection. We shall refer to this as the **Hotelling effect**. But the shift of policy to the right also raises the forecast of  $\gamma$ . This moves the ideal points of voters to the right and increases the electoral prospects of the challenging right wing party. We refer to this as the **expectation effect**. When  $\sigma_\gamma^2 < \sigma_\varepsilon^2$ , this shift of policy induces a moderate reduction in the reelection prospects of  $L$  via the expectation effect, and the Hotelling effect dominates, raising the reelection prospects of the left wing incumbent. It therefore pays him to choose a policy that is more centrist than his ideal policy ( $c_L + \varepsilon_L + \gamma$ ). When  $\sigma_\gamma^2 > \sigma_\varepsilon^2$ , a shift to the right reduces, on balance,  $L$ 's reelection prospects. He therefore chooses a policy that is more extreme than his ideal point.

Since we are interested in conditions for "policy reversals" (i.e., higher chances of a right wing policy by a left wing incumbent), we concentrate from now on case 1 ( $\sigma_\gamma^2 < \sigma_\varepsilon^2$ ). The smaller  $\sigma_\gamma^2$ , the smaller the mass assigned to the tails of the normal distribution of  $\gamma$  (i.e., the lower the probability of  $\gamma$  taking extreme values.)

## 2.4 Which party is more likely to implement which policies?

We come now to the central issue, by focusing on a comparison between the behavior of left and of right-wing incumbents. Notice that an equivalent derivation for a right-wing incumbent delivers (for  $\sigma_\gamma^2 < \sigma_\varepsilon^2$ ):

$$x_R = B_R + \frac{1}{2}(\gamma + \varepsilon_R),$$

$$B_R = \frac{1}{2} \left[ \left(1 - \frac{\sigma_\gamma^2}{\sigma_\varepsilon^2}\right) (c_R - h) + \left(1 + \frac{\sigma_\gamma^2}{\sigma_\varepsilon^2}\right) (2\bar{c} - c_L) \right],$$

and

$$P^R[x_R] = \frac{1}{2(\bar{c} - c)} [2\bar{c} - c_L - 2\theta B_R - dx_R].$$

Let  $PI^i(x)$  be the probability that incumbent party  $i$  implements policy  $x$ , and  $Q^i(x)$  be the probability that incumbent party  $i$  proposes policy  $x$ , so that:

$$PI^i(x) = Q^i(x)P^i(x),$$

where  $P^i(x)$  are the probabilities of reelection, derived above.

Notice that  $x_i = B_i + \frac{1}{2}(\gamma + \varepsilon_i)$  implies that proposals  $x_i$  are distributed  $x_i \sim N[B_i, V]$ , with  $V = (\sigma_\gamma^2 + \sigma_\varepsilon^2)/4$ . Hence:

$$Q^i(x) = (2\pi V)^{-(1/2)} \exp\left\{-\frac{(x - B_i)^2}{2V}\right\}.$$

All of the above information is summarized in Figure 2. Figure 2a shows the probabilities of each proposal,  $Q^i(x)$ . Figure 2b shows the probability of winning the election as a function of the proposal,  $P^i(x)$ . Notice that the picture of  $PI^L(x) = Q^L(x)P^L(x)$  can be obtained by increasing the mass of the right tail and decreasing the mass of the left tail of  $Q^L(x)$ , and conversely for  $R$ . This is shown in Figure 2c. Under some conditions,<sup>12</sup> this partitions the range of  $x$  into 2 regions:

- a central region  $(\underline{x}, \bar{x})$  in which the conventional result obtains (policies to the left of the average policy are more likely to be implemented by  $L$ , and policies to the right of the average policy are more likely to be implemented by  $R$ )
- a "reversal" region outside  $(\underline{x}, \bar{x})$  in which very left wing policies ( $x < \underline{x}$ ) are more likely to be implemented by  $R$ , and very right wing policies ( $x > \bar{x}$ ) are more likely to be implemented by  $L$ .

<sup>12</sup>The details of all that follows are in Cukierman and Tommasi (1994).



It turns out that for even more extreme values of  $x$ , above  $\bar{X}$  and below  $\underline{X}$ , we obtain that  $P^R[x > \bar{X}] = 0$ , and  $P^L[x < \underline{X}] = 0$ . In those outermost regions, **only** the unlikely party can implement policy  $x$ .

For the ranges of reversal in which there is a positive probability of implementation by both parties, reversals are more likely: (1) the smaller the uncertainty with respect to the position of the median voter, (2) the smaller the ideological distance between the parties, and (3) the stronger the love of office.

## 2.5 An intuitive discussion of the main result

Figure 2c suggests that, in general, relatively extreme policies are unlikely to be implemented by either party. The reason is that extreme realizations of the stochastic component of the mapping from policies to outcomes are relatively rare. However, when this realization turns out to be extreme, the probability that the corresponding extreme policy will be implemented by an “unlikely” party is larger than the probability that it will be implemented by the “likely” party.

Intuitively, the conditions that are conducive to policy reversals can be summarized as follows: First, the variability of intraparty policy preferences has to be large in comparison to the variability in the mapping from policies to outcomes. This assures that when the policy proposal of the incumbent party shifts towards the center, the Hotelling effect dominates the expectation effect, thus increasing the reelection prospects of the party. Second, reversals are more likely to occur the more extreme the policy that is being proposed. Since extreme policies are proposed infrequently, policy reversals will also be infrequent events that will be associated with extreme and relatively rare realizations of  $\gamma$ .

### 3 Credibility of Policymakers and Policy Proposals in a Direct Democracy

The political economy literature has emphasized the effect of political institutions on policy choices; an early example of this approach is Shepsle and Weingast (1981). In that spirit, this section derives conditions for reversals in a *direct* rather than a *representative* democracy. Interestingly, the major result – that reversals are more likely to occur when relatively rare and extreme values of the mapping from policies to outcomes realize – is robust to this change in the structure of political institutions. The formal model is a referendum game, similar to the one in Lupia (1992) and (1993).<sup>13</sup> Notice that this structure is more general than the specific institution of referendum. In many countries (especially LDC's) approval of key interest groups, is a prerequisite for the successful implementation of any policy (Bates, 1990). The ways in which disapproval is converted into effective actions are varied, ranging from binding referenda to assassinations.

We present a game between a policymaker and the voting public. The structure is kept to the bare minimum necessary for identifying conditions that are conducive to policy “reversals”. The formal analysis focuses on the case in which the policymaker is of the “left” type. The symmetric case of a “right-wing” policymaker is not analyzed explicitly, but it is in the background. The main results come from comparing the differential ability of right-wing ( $R$ ) and left-wing ( $L$ ) policymakers to implement certain policies.

Preferences of player  $j$  - including  $L$ ,  $R$ , and voters - are given by

$$U_j = -|z - (c_j + \gamma)| \quad (24)$$

where  $z$  is the policy implemented,  $c_j$  is a constant for each player, and  $\gamma$  is a stochastic

<sup>13</sup>An early theoretical discussion and evidence on policy choices in referenda, in the context of school budgets, appears in Romer and Rosenthal (1979). Banks (1990) extends the analysis to an asymmetric information environment, in a spirit similar to that of our paper. A recent summary and extension of work on the setter model is provided by Rosenthal (1990).



variable. The ideal policy of any player depends on the type-specific "taste" parameter  $c_j$ , as well as on the realization of the exogenous state of nature parameter  $\gamma$ .  $\gamma$  induces unidirectional shifts in the preferred policies of everyone, capturing the effect of external circumstances. To simplify the exposition we assume, without loss of generality that  $c_L = -c$ ,  $c_R = c > 0$ , and  $c_m = 0$ , where  $c_m$  is the bliss point of the median voter. Hence  $U_L = -|z - (\gamma - c)|$  and  $U_m = -|z - \gamma|$

The timing of events (summarized in Figure 3) is as follows. First,  $L$  observes the realization of the random variable  $\gamma$  which affects everybody's payoffs. Then he chooses between doing nothing (in which case the status quo policy, which we normalize to 0, prevails) or proposing a policy  $x_L \in \{-x, x\}$ , where  $x > 0$ . We interpret  $-x$  as a left wing policy (to the left of the status quo), and  $x$  as a right wing policy.<sup>14</sup> After a policy  $x_L$  is proposed, voters choose  $v \in \{0, 1\}$ , where 0 is a vote-against and 1 a vote-for the proposed policy. Voters have single peaked symmetric preferences, hence the outcome is decided by the median voter, with bliss point  $c_m (= 0)$ .

$z$  denotes the final policy.  $z = 0$  if the policymaker chooses not to propose an alternative or if the proposed alternative is voted against.  $z = x_L$  if the proposed alternative is accepted by voters.

The prior distribution of  $\gamma$ , which is common knowledge, is:

<sup>14</sup>We do not feel embarrassed to model policy choices as discrete. On the one hand, the results do not depend on this assumption, as suggested by the model of section 2. But also, the cases we have in mind seem to involve a somewhat discrete choice set. Policy choices in the Arab-Israeli conflict are not over squared centimeters of land to be relinquished, but over entire regions, like the Sinai or Gaza strip. Economic policy making broadly defined also seems to have elements of discreteness, as stressed by Harrington (1993). In the case of economic reforms in the developing world, the issue is whether to have extensive or minimal government intervention in the economy. Perktold and Tommasi (1994) identify conditions under which equilibrium choices of degree of government intervention will be discrete.



$$\gamma = \begin{cases} -a & \text{with probability } p \\ 0 & \text{with probability } (1 - 2p) \\ a & \text{with probability } p \end{cases} \quad (25)$$

where  $a > 0$ . If  $\gamma = a > 0$ , right wing policies become relatively more desirable for everyone. As explained in the introduction, the underlying idea is that policies map into outcomes in an uncertain way. Even though people have well defined stable preferences over outcomes, the uncertainty over the mapping from policy to outcomes induces reduced form preferences over policies which have a “stochastic” component. The implicit assumption of the model is that the policymaker is better informed than the median voter about that mapping. In particular, he observes the realization of  $\gamma$  while the voters do not. Voters will infer something about  $\gamma$  from the policy proposals and the identity of the policymaker making them. In section 4 we provide specific examples from economic and foreign policy making.

Let  $S_L : \{-a, 0, a\} \rightarrow \{-x, 0, x\}$  be the (left wing) policymaker strategy,  $S_m : \{-x, x\} \rightarrow \{0, 1\}$  be the strategy of the voter, and  $B = \{\pi(-a|x), \pi(0|x), \pi(a|x), \pi(-a|0), \pi(0|0), \pi(a|0)\}$  be the voter’s posterior belief system about  $\gamma$  after observing the choice of  $x_L$ .<sup>15</sup>

### 3.1 Equilibrium

The game is a sequential game of incomplete information; a natural solution concept is Perfect Bayesian Equilibrium (PBE). A PBE of this game consists of a strategy for the policymaker, a strategy for the median voter, and beliefs (over  $\gamma$ ) for the voter, which satisfy three properties. First, the voter’s beliefs are consistent with  $L$ ’s strategy in the sense that they are generated by Bayes updating whenever possible. Second, the voter’s strategy is optimal given these beliefs and  $L$ ’s strategy. Finally,  $L$ ’s strategy is optimal given the voter’s strategy and beliefs.

<sup>15</sup>A belief system is a probability measure for each history of play (Osborne and Rubinstein, 1994, p.223).

We introduce now three conditions which assure that equilibrium has the feature that it takes a left-wing party to implement a right-wing policy.

$$(A1) \quad a - c > x/2$$

$$(A2) \quad c > x/2$$

$$(A3) \quad p < 1/3$$

Notice that A1-A3 characterize a non-empty set of parameter values. We discuss the role and interpretation of each condition below.

Let  $x(\gamma)$  be the action chosen by  $L$  as a function of his observation of  $\gamma$ , and  $v(x)$  be the vote chosen after observing proposal  $x$ .

Consider the strategies  $S_L^*$  and  $S_m^*$  such that:

$$S_L^* : \quad x(-a) = x(0) = -x, \quad x(a) = x;$$

$$S_m^* : \quad v(-x) = 0, \quad v(x) = 1;$$

and the belief system  $B^*$ :

$$\pi(-a|-x) = p/(1-p), \quad \pi(-a|x) = 0;$$

$$\pi(0|-x) = (1-2p)/(1-p), \quad \pi(0|x) = 0;$$

$$\pi(a|-x) = 0, \quad \pi(a|x) = 1.$$

Define the equilibrium  $E^*$  as  $\{S_L^*, S_m^*, B^*\}$ .

**Proposition 1:** *If A1-A3 are satisfied, then:*

(1) *(Existence)*  $E^*$  is a PBE.

(2) *(Uniqueness)*  $E^*$  is the only equilibrium that survives iterated elimination of weakly dominated strategies.

### 3.2 Proof of Proposition 1.

Note that this is a signalling game. First  $L$  learns his "type"  $\gamma \in \{-a, 0, a\}$ . Then he sends a message  $m \in \{-x, 0, x\}$ . Then the voter chooses an action  $v \in \{0, 1\}$ . (If  $L$  chooses  $m = 0$ , then the voter's action is irrelevant.) The resulting game is depicted in Figure 4.

(1) To prove that  $E^*$  is a PBE, consider first the left-wing policymaker *with type* (i.e., *who has observed*)  $-a$ . He is supposed to choose  $-x$ , which will be rejected. Deviating to action 0 does not change his payoff. Deviating to  $x$  will lead to acceptance and a payoff of  $-a - c - x$  rather than his equilibrium payoff  $-a - c$ . This deviation is unprofitable for  $x > 0$ . Now take the left-wing policymaker with type 0. He is also supposed to choose  $-x$ . Deviating to action 0 does not change his payoff. Deviating to action  $x$  decreases his payoff to  $-c - x$  from  $-c$ . Finally take  $L$  with type  $a$ . He is supposed to choose action  $x$ , which will be accepted, resulting in payoff  $-|a - c - x|$ . Deviating results in a payoff  $-a + c$ . If  $a - c - x > 0$ , this is unprofitable for  $x > 0$ . If  $a - c - x < 0$ , this is unprofitable for  $a - c > x/2$ . Both conditions obtain, so there is no profitable deviation for the policy maker.

Now turn to the voter. If he sees message  $x$ , he assumes the policymaker is of type  $a$ . His best response is  $v = 1$ , since  $-a + x > -a$ . On the other hand, if he sees  $-x$ , he assumes  $L$  is of type  $-a$  with probability  $p/(1-p)$  and of type 0 with complementary probability, using Bayes rule. Voting  $v = 0$  is optimal if  $p < 1/3$ , as assumed in (A3). Therefore, the voter does not want to deviate from the proposed equilibrium.

(2) To show uniqueness, we begin by noting (from Figure 4) that for  $L$  with type  $-a$ ,  $-x$  weakly dominates 0 and  $x$ , because  $-a - c + x > -a - c > -a - c - x$ ; therefore, we can prune these two strategies. Next, for  $L$  of type  $a$ ,  $x$  weakly dominates 0 and  $-x$ , because  $-|a - c - x| > -a + c > -a + c - x$ ; therefore, we can prune these two strategies. Finally, note that for  $L$  of type 0,  $-x$  weakly dominates 0 and  $x$  because  $-|c - x| > -c > -c - x$ , so we can prune these strategies. This results in the much simplified game depicted in Figure 5.

In the reduced game, the voter is better off voting yes to proposal (message)  $x$ . On the other hand, when he sees the message  $-x$ , he uses Bayes rule to update his beliefs, and given  $p < 1/3$ , he rejects the proposal. Hence, only  $E^*$  survives iterated elimination of weakly dominated strategies.



### 3.3 Intuition

In equilibrium, the left wing policymaker proposes left wing policies for  $\gamma = -a$  and  $\gamma = 0$ , while he proposes right wing policies for  $\gamma = a$ . The median voter will accept the right wing policies and reject the left wing ones from  $L$ .

Remember that  $\gamma \in \{-a, 0, a\}$  is a parameter that affects everybody in the same direction. In the economic applications, we will call it an "efficiency" effect.  $A1$  requires  $a$  to be large enough to induce  $L$  to choose  $x$  when  $\gamma = a$ , i.e., large enough to overcome his leftist "preference." Condition  $A2$  requires this preference effect to be large enough to induce a tendency towards  $-x$  for  $\gamma = 0$  (when there is no "efficiency" effect, he indulges in his leftist tendencies). Notice that this tendency is the source of  $L$ 's credibility problem when  $\gamma = -a$ , i.e., when left wing policies are indeed efficient. This is commonly referred to as a "cry wolf" situation.

$A3$  states that the probability of  $\gamma = -a$  has to be small enough compared to the probability of  $\gamma = 0$  so that the median voter votes against  $-x$ . (If the probability of  $-a$  is high, then it might be beneficial to accept  $-x$  from any party). Parties propose policies which are "ideologically" ( $c_L$  or  $c_R$ ) motivated often enough (with high enough likelihood,  $(1 - 2p) > 1/3$ ) so that they have a credibility problem. If, when voters observed  $x_L = -x$ , they assigned a high probability to the truth being  $-a$ , they would tend to accept it. In that case, anyone could implement any policy and we wouldn't have the "only Nixon could go to China" effect. This condition is a discrete equivalent of the condition  $\sigma_\gamma^2 < \sigma_\varepsilon^2$  in section 2.

### 3.4 Implications for credibility and information transmission

Politicians usually justify their policy proposals by claiming that the state of the world is the one that (if believed) would elicit maximum public support for their proposed policies. In the context of this model, the statement that would elicit maximum support (if believed) for policy  $-x$  (for policy  $x$ ) is " $\gamma = -a$ " (" $\gamma = a$ "). One measure of the credibility of policy

proposals is, therefore, the posterior probability assigned by the public to the event  $\gamma = -a$  (or  $a$ ) when policy  $-x$  (or  $x$ ) is proposed.<sup>16</sup> For this definition of credibility we obtain:<sup>17</sup>

**Result 1: (Credibility of a given policymaker across policies).**

$$\pi(a|x_L = x) = 1 > \pi(-a|x_L = -x) = p/(1 - p).$$

*A left wing policymaker has more credibility when he proposes right wing policies than when he proposes left wing policies.*

$$\pi(-a|x_R = -x) = 1 > \pi(a|x_R = x) = p/(1 - p).$$

*A right wing policymaker has more credibility when he proposes left wing policies than when he proposes right wing policies.*

That is, credibility increases as politicians move away from their “ideological” positions. Note that credibility depends on the pair policy-policymaker.

**Result 2: (Credibility across policymakers for a given proposal).**

$$\pi(a|x_L = x) = 1 > \pi(a|x_R = x) = p/(1 - p).$$

*A left wing policymaker is more credible than a right wing policymaker when announcing a right wing policy.*

$$\pi(-a|x_R = -x) = 1 > \pi(-a|x_L = -x) = p/(1 - p).$$

*A right wing policymaker is more credible than a left wing policymaker when announcing a left wing policy.*

<sup>16</sup>In Roemer (1994) political parties make announcements about “the way the economy works” ( $\gamma$  in our model), and then propose policies. In his model, there is complete convergence of policies (median voter theorem) but different parties announce different  $\gamma$ 's to try to influence people's reduced-form preferences. Roemer does not model the formation of beliefs explicitly, he just postulates a mapping from announcements to beliefs. Here, we deduce the belief-formation process from the rational (Bayesian) behavior of voters.

<sup>17</sup>The notion of credibility in the text is by no means the only one possible. Alternative notions of credibility are discussed in chapter 11 of Cukierman (1992).

Also, our analysis has implications for the transmission of information embedded in policy announcements.<sup>18</sup> We could measure the degree of information by the posterior probability that voters assign to the true value of  $\gamma$ ,  $\pi(\gamma|\gamma)$ . Notice that, when  $L$  is in office:

$$\pi(-a|-a) = p/(1-p) < \pi(0|0) = (1-2p)/(1-p) < \pi(a|a) = 1.$$

Hence:

**Result 3: (Information transmission).**

*Voters obtain better information the further away is the required policy from the ideological position of the party in office.*<sup>19</sup>

As was the case for credibility, the quality of information transmission depends both on the policy and on the policymaker's type. Crawford and Sobel (1982) find that equilibrium signalling is more informative when agent's preferences are more similar. Here we find that equilibrium signalling is more informative, the further away the action (signal) from the ex-ante preferences of the sender. In a wider sense, this result is consistent with that of Crawford and Sobel since (when  $L$  is in office) the information transmission is maximal when  $\gamma = a$ , that is when the relative divergence between the objectives of  $L$  and of the median voter is the smallest.

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<sup>18</sup>This relates to work on strategic models of talk in political decision making - Austen-Smith (1992), Gilligan (1993) and Gilligan and Krehbiel (1989) - and in the choice of monetary policy - Cukierman and Meltzer (1986), Stein (1989), and Cukierman and Liviatan (1991). See also chapters 14 and 16 of Cukierman (1992).

<sup>19</sup>Information acquisition is passive in our model. Calvert (1985) analyses the (active) choices of a political actor seeking costly advice. He shows that in some cases it is best to seek biased sources of information, which are very unlikely to give advice contrary to the actor's priors. In the event that the unexpected recommendation is given, it contains a lot of information (very similar to our result.) In Calvert the bias is just assumed, while we derive it in equilibrium from the preferences of the informed agent.



## 4 Applications

We provide here some applications of our framework to specific policy issues. For the sake of brevity, we do so in the context of the model of section 3.

### 4.1 Economic Applications

#### 4.1.1 A simple model of market-oriented reforms

There are three groups in society: rich ( $R$ ), middle class ( $M$ ) and poor ( $P$ ). Rich and poor can be reinterpreted as any other distributive cleavage, with the government having some power for (and some interest in) redistribution. We can think of group  $P$  as trade unions, urban dwellers, import-competing sectors, etc.; and of  $R$  as export sectors, non-tradable sectors, etc. The income of each group is given by:

$$\begin{aligned} y_M &= kY \\ y_P &= d(1 - k)Y \\ y_R &= (1 - d)(1 - k)Y, \end{aligned} \tag{26}$$

where  $Y$  is aggregate income,  $k \in [0, 1]$  is an exogenous parameter, and  $d \in \{\underline{d}, d_s, \bar{d}\}$  is a policy parameter.  $d_s$  is the status quo,  $\underline{d}$  is a right-wing policy with less redistribution towards the poor, and  $\bar{d}$  is a left-wing policy. Let  $d_s = \frac{1}{2}(\bar{d} + \underline{d})$ . We will interpret a movement from  $d_s$  to  $\underline{d}$  as a market-oriented shift. (It is worth repeating here that we are agnostics, so that  $R$  and  $P$  should not be taken to literally mean Rich and Poor.) Assume that party  $L$ 's objective is a weighted average of  $y_M$  and  $y_P$ , while party  $R$ 's objective is a weighted average of  $y_M$  and  $y_R$ .

Aggregate income, which realizes after policy implementation, equals

$$Y = Y_0 + \gamma(d_s - d) \tag{27}$$

Equations (26) capture the distributive effect of policy  $d$ , while (27) captures the (stochas-

tic) efficiency effect of policy  $d$ .

Equation (25) in section 3 characterizes the prior beliefs over  $\gamma$ , which has the same interpretation as before - "the correct model of the world", or "the way the economy really works" (Roemer, 1994). We interpret  $p < 1/3$  as the probability that the policymaker is convinced (by facts, readings, advice) that the true model of the world is  $\gamma = \underline{c}$  (or  $-\underline{c}$ ).  $\gamma$  is private information to policymakers, and the crux of the problem is the differential ability of right and of left wing policymakers to credibly communicate different values of  $\gamma$ .

The information structure and decision sequence is the same as that of section 3. The median voter equals group  $M$  with probability  $(1 - 2\varepsilon)$ , equals  $R$  with probability  $\varepsilon$ , and equals  $P$  with probability  $\varepsilon$ . Normalize policy as  $(d_s - d)$ , so that  $x = (d_s - \underline{d})$ ,  $x_s = 0$ , and  $-x = (d_s - \bar{d})$ . Policy  $x$  represents a decrease in redistribution from  $R$  to  $P$  (or an increase in redistribution from  $P$  to  $R$ .) Policy  $-x$  represents an increase in redistribution towards  $P$ .

If the "efficiency" effect is such that  $\gamma = \underline{c}$ , everybody shifts to the right, in the sense that  $x$  becomes relatively more desirable. This shift might be enough to induce group  $M$  to prefer less redistribution, but not enough for  $P$  to prefer it. Imagine a policymaker observing  $\gamma = \underline{c}$ , stating: "tough adjustments are needed," and proposing  $x = (d_s - \underline{d})$ . Who has the credibility to do so? As our analysis of the previous section suggests:

#### Result 4: (Comparative advantages in policy implementation)

*A left-wing policymaker will be able to implement a market-oriented swing, not feasible for a right wing government.*

*Symmetrically, if a major move to the left were necessary, a right-wing policymaker is more likely to succeed.*

We have interpreted successful implementation of market reforms by a left-wing poli-

cymaker as a case in which he convinces group  $M$  that these measures are efficiency enhancing. We could also build a case in which the approval of  $P$  is necessary for the reforms and the efficiency effect is so strong that even  $P$  benefits from  $x = (d_s - \underline{d})$ . In that case, if  $L$  proposes  $x$ ,  $R$ 's benefit no matter what, so they approve, and  $P$ 's approve since it is their representative ( $L$ ) who is proposing, while they would reject if the policy had been proposed by a right-wing policymaker.<sup>20</sup>

#### 4.1.2 Examples of market-oriented reforms in Latin America

**Argentina.** Peronist president Carlos Menem has implemented an extensive and quite successful transformation of Argentina into a market-friendly economy. This is particularly surprising since "Peronism has been virtually synonymous with populism and protectionism" (Rodrik 1993, p.356). While our model does not explain why a Peronist administration chose such a comprehensive shift to markets,<sup>21</sup> it does explain why a Peronist administration has a comparative advantage at such policies. The explanation is that Menem could credibly claim that such reforms are necessary and good for (most of) the people. "Menem used Peronist language even as he conveyed new proposals. The public, far from considering this to be contradictory, understood it quite well. The public knew that Peronism had changed, was speaking of privatization, of producing, of integrating Argentina in the world, of foreign investment, and that none of it was any less Peronista. When he announced his program and began implementing it, when he opened up to entrepreneurs ... , Menem did not lose any of his electoral support." (Mora y Araujo 1991, English quote from Packerham

<sup>20</sup>On a related issue, Martinelli and Tommasi (1994) argue that the implementation of reform packages might suffer from time consistency problems. Groups that benefit from early reforms but suffer from later reforms may blockade the later stages making some reform paths time-inconsistent. An implication of the logic of this section is that policymakers may, then, start a reform sequence by implementing the measures that hurt their own constituencies.

<sup>21</sup>Perktold and Tommasi (1994) provide an information-based model, which is consistent with the view in this paper.



1992). Pakenham also discusses the previous administration: Alfonsín was president (1983-1989) representing the Union Civica Radical, a historically middle class, centrist party. He also attempted privatization and stabilization with little success. Some of the fiercest obstacle were the (Peronist related) trade unions.

**Peru.** President Fujimori was elected (with the electoral support of populist APRA and of the left) by being to the left of the opposing candidate Vargas Llosa. As Menem, he was the "president like you" candidate - a message destined to distinguish himself from the "oligarchic" and "IMF-oriented" alternative, in the eyes of the middle and lower class voters. Yet, he implemented tough market oriented reforms. Inflation was reduced from 7,650 in 1990 to 57 percent in 1992. Fujimori mounted an aggressive campaign to privatize some of the largest state-owned enterprises, and restored the country's creditworthiness. In spite of bad foreign press for his closure of Congress, he is considered by Peruvians a success (his approval rate following the closure of Congress was 80%).

**Bolivia.** The orthodox 1985 stabilization was successfully implemented by Victor Paz Estenssoro - one of the leaders of the MNR (a revolutionary movement with socialist orientation) - who had pursued inflationary spending policies in his previous presidency. He, like Menem, was able to overcome trade union opposition, since he could claim to be a representative of the working class.

**Brazil.** President Fernando Collor de Melo won the elections as the right-center candidate over the left-center candidate Lula. He later pledged to liberalize the Brazilian economy, with very limited success. There were other elements, but analysts believe that his structural situation was a big obstacle (Pakenham 1992).

**Cross-country evidence.** Williamson asked the contributors to his (1994) edited volume to check the conventional wisdom that market-oriented reforms are creatures of right-wing governments. Williamson and Haggard (1994), in their summary, found little support for such an association. As a matter of fact, in only 3 out of their 13 cases was market-oriented reform implemented by what they classify as right-wing governments. Interestingly, these three cases included the two military dictatorships in their sample (Chile and Korea.)

This is consistent with the prediction that, under democratic conditions, large shifts in policy are more likely to involve "reversals" of a party's traditional policy position.

## 4.2 Political applications

### 4.2.1 Land for peace (foreign policy)

Imagine a country involved in important territorial disputes, with frequent armed confrontations. We can think of "land" ( $x$ ) and "peace" ( $P$ ) as two arguments in the utility function, with different people having different preferences (marginal rates of substitution.) For instance, a "dove" (left-wing) will have very flat indifference curves in the  $x$ - $P$  space, and a "hawk" (right-wing) will have very steep ones - it requires a large gain in peace to compensate for a small loss of territory.

There is also a transformation curve that shows feasible combinations of land and peace, which depend among other things on the domestic situation and foreign policy of the "enemy." Normalizing the current territory (land) to 0, territorial concessions  $-x$  presumably map into increases in peace (decreases in the likelihood of armed confrontation.) Territorial expansion  $x$  maps into decreases in  $P$ . The exact marginal rate of transformation is not known with certainty. It is reasonable to argue that policymakers are better informed than the average citizen about the domestic situation and foreign strategy of the enemy.<sup>22</sup> Imagine that the policymaker observes  $\gamma = -c$ ; that is, territorial concessions will map into a large increase in the chances for peace. If this were public information, doves as well as "intermediates" will be in favor of making those concessions, while extreme hawks might still oppose.

The question is, what type of policymaker will have more credibility (and hence will be able to influence the voting decision of non-extremists) when proposing  $-x$ : one with a hawkish or one with a dovish past? The answer seems to be the former. Examples are

<sup>22</sup>Intelligence services report to the head of the executive (and sometimes to a few ministries) but not to the general public.



Menahem Begin, Annuar-el-Sadat, and stretching the application, Richard Nixon.

## 5 Concluding Remarks

When governments have better information than voters about the way in which policies map into outcomes, policy proposals convey information. This leads to situations in which extreme, but rarely proposed, policies that benefit a majority are more likely to be implemented by “unlikely” characters. We argued that these conditions were at work in some well-know economic and foreign policy episodes.

A main result of the paper is that policy reversals are more likely following the realization of extreme and relatively unlikely values of parameters that map policy choices into welfare outcomes. A corollary to this result is that policy reversals occur infrequently.

Rodrik (1993) points out that it is ironic that populist and interventionist parties have implemented radical trade liberalizations, fiscal adjustments and institutional reforms. We demonstrate here why those parties had a comparative advantage at such policies. Similarly, sometimes it is “hawks” like M. Begin, R. Nixon and A. Sadat, who are able to take substantial steps towards peace.

Our analysis has more general implications for information transmission and credibility. Drazen and Masson (1994) have distinguished between credibility of policymakers and credibility of policies. We show here how credibility depends on the policymaker-policy pair.

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Figure 1

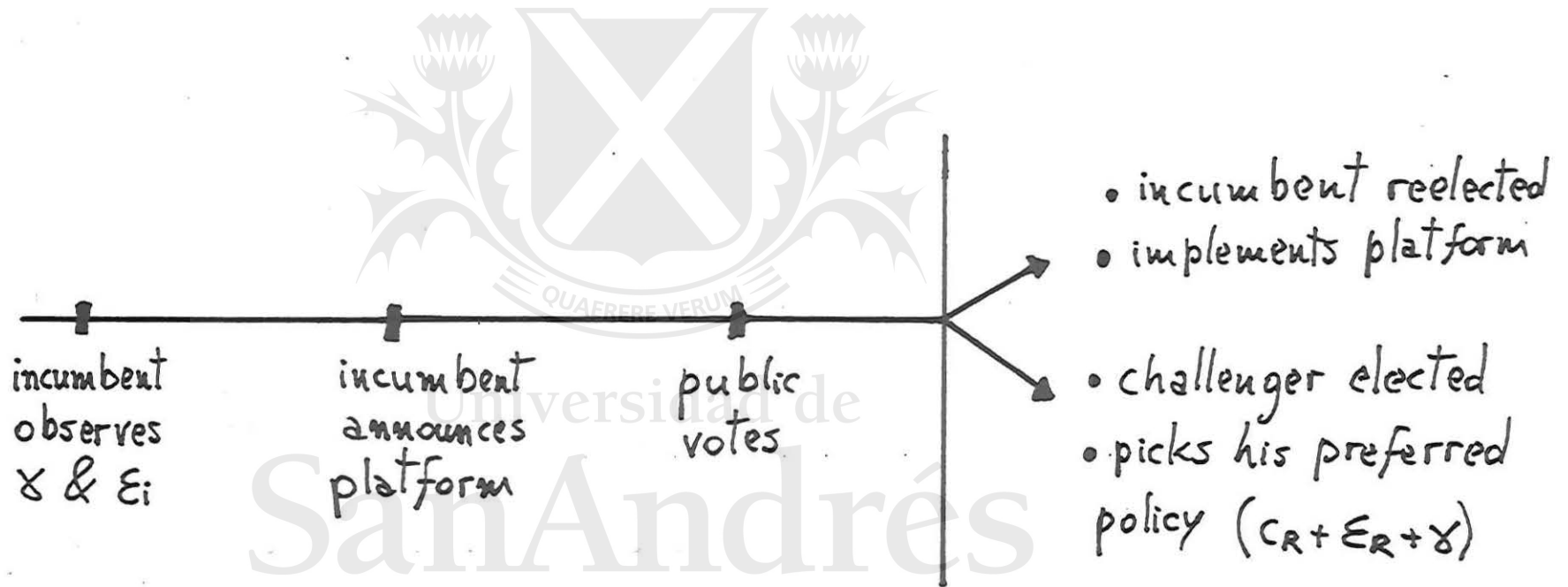
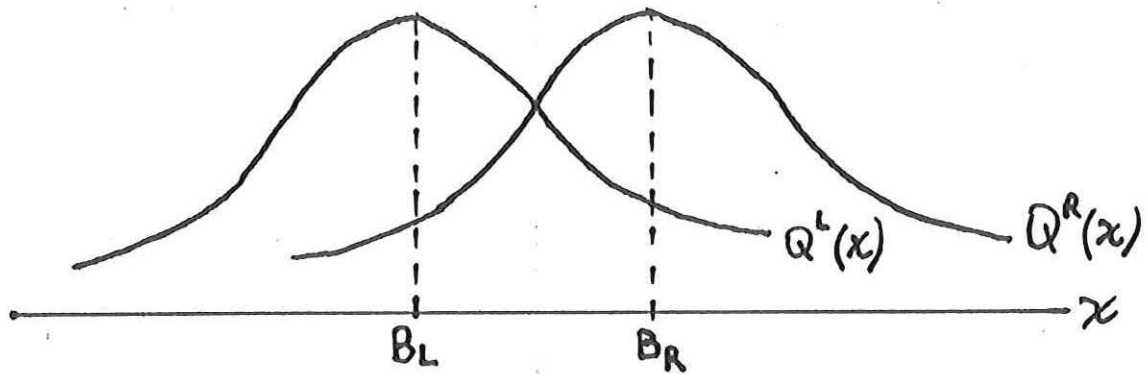
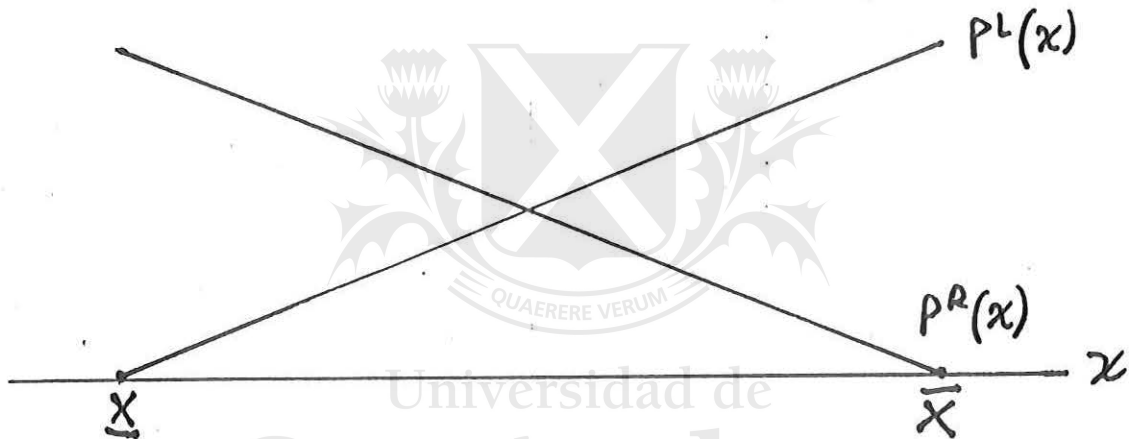


Figure 2

(a) Probabilities of Policy Proposals by Incumbents L & R



(b) Probabilities of Reelection as Function of Policy Proposals



(c) Probabilities of Implementation:  $PI_i(x) = Q_i(x)P_i(x)$

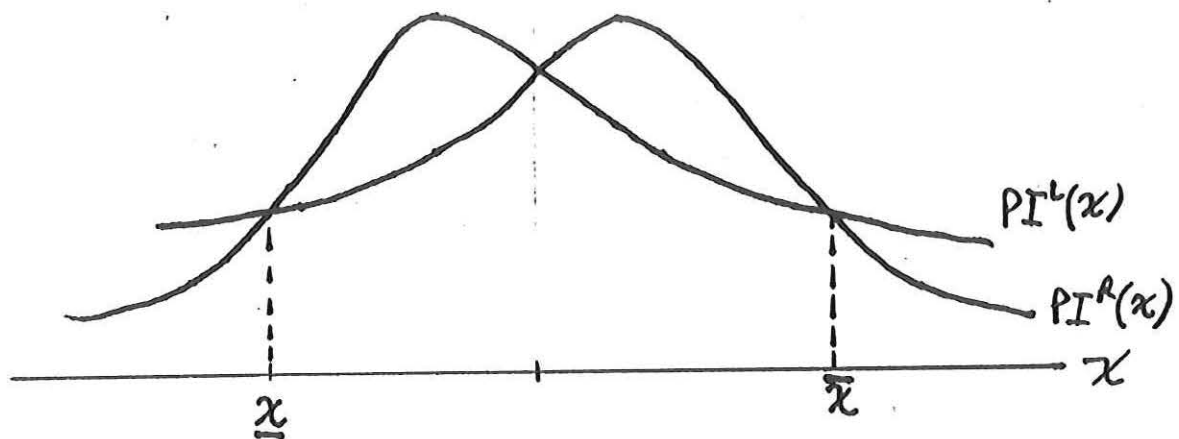
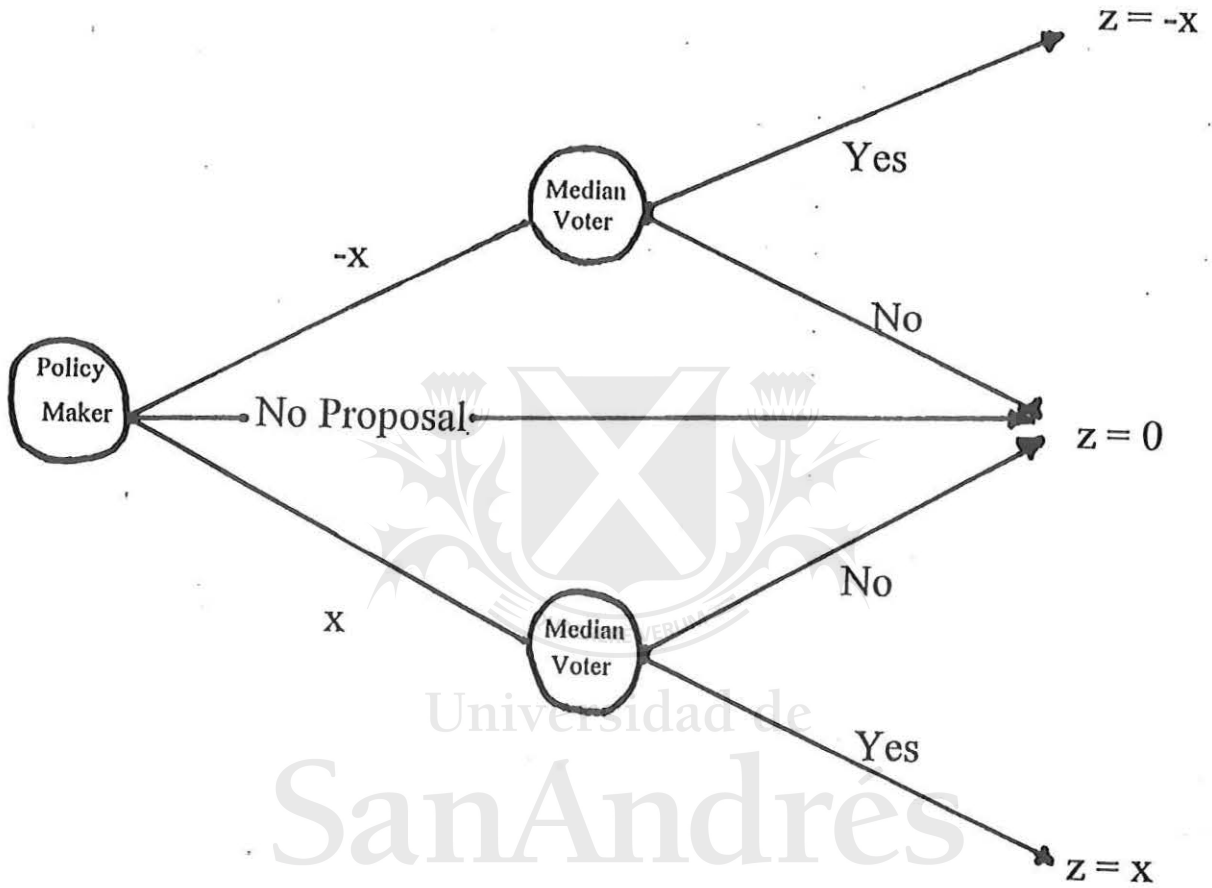
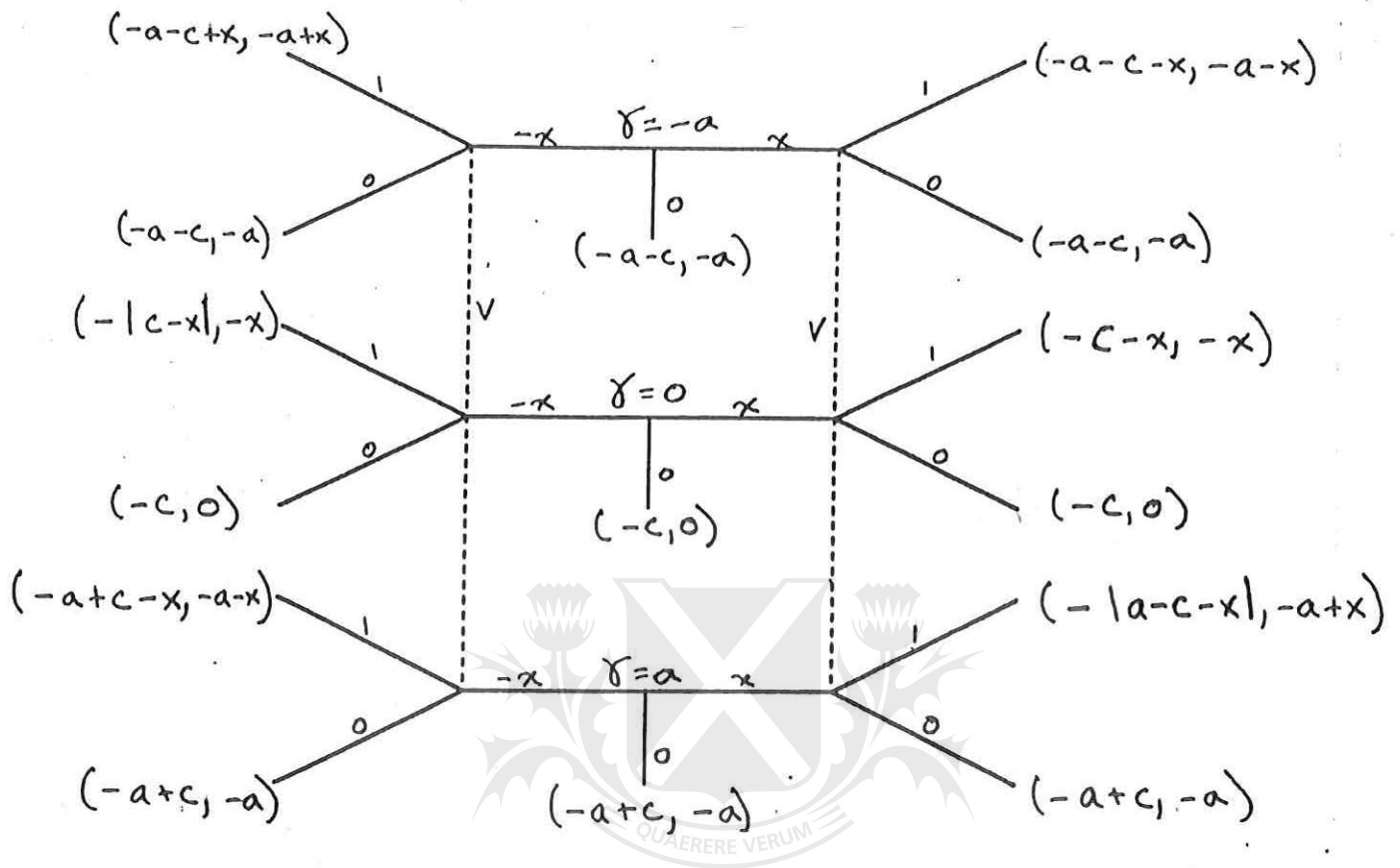




Figure 3

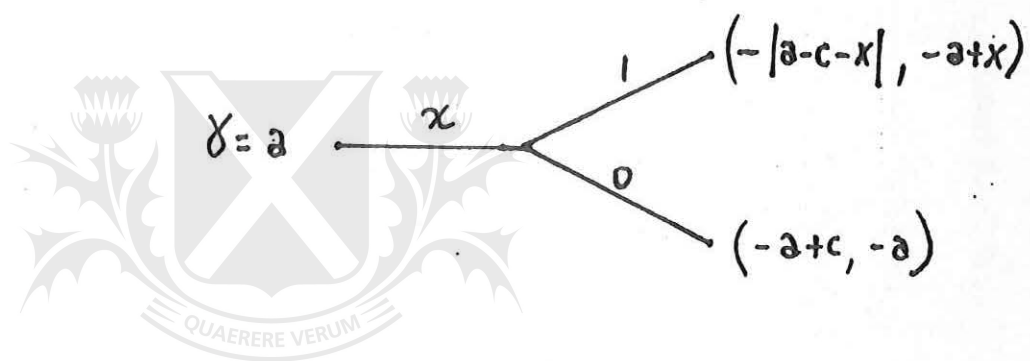
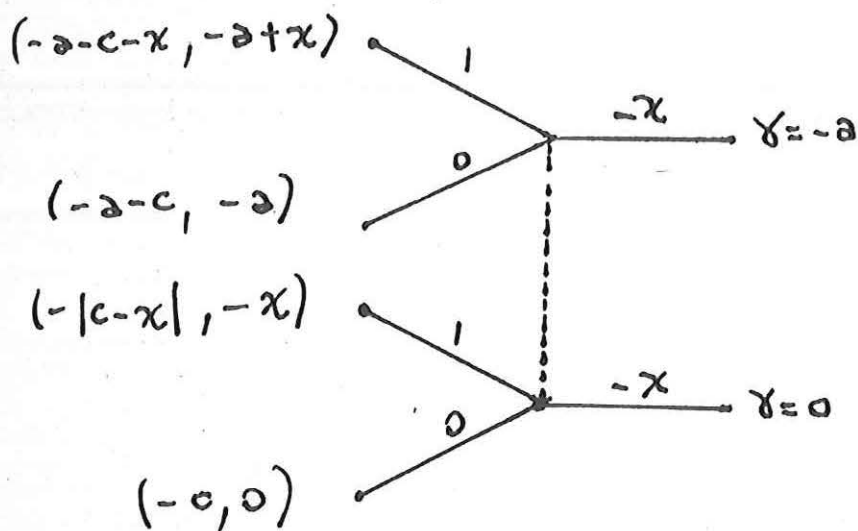




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Figure 4

NOTE: The game tree should be read from the center to the two sides and down. First, Nature picks the realization of  $\gamma$  (center). Then, the policymaker proposes  $0$  (down),  $x$  (right) or  $-x$  (left). Finally, in the last two cases, the voter approves ( $v=1$ ) or rejects ( $v=0$ ).



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Figure 5  
 Reduced Game