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WHEN DOES IT TAKE A NIXON TO GO TO CHINA?

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Abstract.

Substantial changes in policy are sometimes implemented by "unlikely" parties; for example, radical market-oriented reforms by populist parties and substantial steps towards peace by "hawks" like Begin or Nixon. To account for such episodes, we develop a framework in which incumbent politicians have more information than the voting public about the state of the world, and hence about which policies are optimal. Politicians are unable to transmit fully this information, since there is also incomplete information about their preferences. We conclude that popular support for a policy, or its "credibility," depends on the policymaker-policy pair. (JEL: D7, D8, E6, C72)

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. Argentina under (Peronist) Menem, Peru under Fujimori, and Bolivia under (populist) Paz Estenssoreo underwent profound market-oriented economic reforms. France privatized some of its public sector and shifted the emphasis of economic policy to price stability during the 1980's, under socialist President Mitterand. In the late 1970's, after ten years of vehement opposition to trading land for peace, hawkish Israeli Prime Minister Begin yielded the entire Sinai peninsula in return for peace with Egypt. His partner to this historical deal was President Sadat of Egypt, who is considered to be the first Arab leader to mount a relatively effective military campaign against Israel. Having established a strong and persistent anti-Communist record during the 1950's and 1960's, President Nixon then opened the door to the international legitimization of the People's Republic of China in the early 1970's.

These episodes should not be interpreted to imply that large shifts in policy can be implemented only by political parties having a historical bias against such policies. Privati-
zation 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. Our objective in this paper is to identify conditions under which shifts in policy are more likely to be implemented by improbable characters. To this end, we first develop a political economy framework in which such a phenomenon can occur and use it to pin down a set of conditions which make it more likely that such policies will be implemented by the "wrong" parties.

We then develop an explanation for "policy reversals" within the framework of asymmetric information about the mapping of policy instruments into policy outcomes. Incumbent politicians normally have better information than the general public about the likely outcomes of alternative policies. Governments deal with public policy issues on a daily basis, they have access to the advice of specialists, and in some cases, they possess classified information. Furthermore, since information collection is costly, a large part of the voting public has neither the incentive nor the ability to become fully informed about all the aspects of complex public policy issues. This idea is captured here by assuming that a key stochastic parameter of the mapping of policies into outcomes is observed by policymakers in office but not by the voting public.

People's welfare depends on outcomes, and policy choices affect outcomes. However, outcomes are also influenced by external circumstances about which policymakers normally have better information than does the general public. Thus, 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. In order to implement a policy, the party in office has to elicit support. To that end, it has to transmit to the public its private information about the relative desirability of, in this case, right-wing policies. When the incumbent is a recognized left-winger, his ability to do so and to implement the required policies is greater than the ability of a right-wing incumbent. The reason for this apparent incongruity is that the public has less reason to suspect that the right-wing policy is proposed solely because of the natural ideological tendencies of the
party in office, i.e., it may be perceived as an objectively motivated policy.

Another important element of our framework is the inability of voters to fully distinguish policy shifts that are due to changes in (information about) the mapping of policy into outcomes from those that are due to intraparty politics. This inability prevents the public from making precise inferences about government’s private information concerning this mapping (the state of the world). The reason is that the policy proposals of incumbent governments are affected by shocks to this mapping as well as by changes in the incumbent party’s preferred policy position. The second type of change makes the proposed policy a noisy indicator for the state of the world.

Some conditions make a policy reversal more likely. The policy switch that - in view of external circumstances - is desirable, should be considerable and relatively rare. These conditions appear to have been satisfied in the episodes mentioned before. Major economic reforms, the trading of land for peace, and the opening of a pathway towards China are policy decisions of a scope that occurs infrequently. Furthermore, policy reversals are more likely when the voting public has substantial uncertainty about the governments’ exact preferences. In addition, the final outcomes of the policies under consideration occur far in the future – that is why the voting public has to use the policy proposals of incumbents as signals for the likely future outcomes of the proposed policies. This feature is formalized by assuming that voting takes place before the realization of final outcomes.

The basic ideas of the paper are presented in Section I with a representative-democracy model in which, after receiving some information about the mapping of policies into outcomes, 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.

We show in Section II 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 vice-versa). In Section III, we discuss some implications for credibility. Section IV contains comparative statics. Section V
concludes, pointing to the next steps in this research agenda.

I. The Model

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:

\[ - | x^e - (c_j + \gamma^e) | \]

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 superscript \( e \) attached to \( x \) and \( \gamma \) denotes expected values of these variables conditional to the information available to the voter. \( (c_j + \gamma^e) \) is the (perceived) ideal policy of a 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, \( \gamma \), that induces a unidirectional shift in the preferred policies of all voters.

\( \gamma \) 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 of policies into outcomes, and hence the indirect utility function over policies, has a stochastic element.

People generally have different preferences/opinions about the desirability of alternative policies. But when they learn that there has been a shift in exogenous circumstances, all voters shift their preferred policies in the same direction. To illustrate, consider the "land versus peace" issue in the ongoing negotiations between Israel and Syria. Different individuals in Israel have different opinions about how much territory to give up for a peace of a given quality; some would give up very little and others a lot. In the language of economics, they possess different marginal rates of substitution. But the policy preferred by each individual (how much land to give up) also depends on his or her perception of the "deal" that Israel can work out with Syria. Again in the language of economics, preferred policies also depend on the exogenous marginal rate of transformation between land and peace. When they believe
that it is possible to obtain a higher-quality peace for a given amount of territory, all Israelis advocate more dovish policies, although hawks are still willing to give up less territory than doves. The heterogeneity of preferences is captured by \( c_i \) and the common effect of perceived external circumstances by \( \gamma \).

In a representative democracy, voters do not choose policy directly. Instead, they choose elected officials who decide what policy to follow. We model this institutional setup by postulating two parties, the right \( R \) and the left \( L \), 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 Anne Sibert, 1988.) We use \( h \) to denote this "value of office" term, and \( c_i \) to denote the (deterministic part of the) bliss point of party \( i = L, R \), with \( c_L < c_R \).

An idea well established in political science - see Otto 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. We model this effect by postulating that the preferred policies of parties are subject to intraparty shocks labelled \( \varepsilon_i \), \( i = L, R \). The realizations of these shocks, which are independently and normally distributed with mean zero and variance \( \sigma_i^2 \), are known to the parties but not to the public. In addition, as is the case with voters, the parties' ideal point also depends on \( \gamma \). Those factors are incorporated by postulating that the bliss point of party \( i \) is given by \( (c_i + \varepsilon_i + \gamma) \), and its objective function by

\[
h = \| x_i - (c_i + \varepsilon_i + \gamma) \|
\]

The deterministic component, \( c_i \), is common knowledge, but the stochastic component, \( \varepsilon_i \), is not known by the public. Similarly, the realization of \( \gamma \) is observed by the incumbent party, not by the general public. This is a stylized way of expressing the presumption that government has a more precise notion than does the general public about 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 not able to transmit fully this information to voters. But the voting public normally learns something about the realization of $\gamma$ from the incumbent’s policy proposal.

A. Timing, Information and Elections

It is convenient to divide the sequence of events, illustrated in Figure 1, into two periods. At the beginning of the first period, the incumbent observes $\gamma$ and his own $\varepsilon$. He then makes a proposal $x$. After having observed the incumbent’s proposal, 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 proposed in the first period (the proposal is a binding commitment). If the challenger gets elected, he picks the policy that maximizes the ex-post value of his objectives (knowing $\gamma$ and his own $\varepsilon$).

This way of modeling the interaction between the voting public and government is designed to capture the fact that a policy has to satisfy two conditions in order to be implemented. First, the government has to propose the policy; second, the proposal should draw sufficient public support. Obviously, the model can be interpreted literally as stated in the previous paragraph. But it is also possible to interpret the model more broadly, as capturing the fact that a policy cannot be implemented if it does not gather sufficient public support or if it raises too much opposition. Under such a broader interpretation, a “vote against the incumbent” would refer to a state in which the proposed policy is abandoned after some trial period for lack of sufficient public support (even in the absence of formal elections), while a “vote for the incumbent” permits the continuation of the policy.8

[INSERT FIGURE 1 ABOUT HERE]

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 his preferred policy. This asymmetry reflects the presumption that reputational and other considerations make it more difficult to adjust policy for the incumbent than for the challenger.9

At election time, each individual votes for the party that he perceives is going to
implement a policy nearest his own preferred policy. But this depends, in turn, on the individual's perception of the exogenous shock $\gamma$. Knowing that the incumbent's proposed policy partially reflects that party's private information about $\gamma$, each voter utilizes governmental policy as a signal for $\gamma$ (in a way that will be made explicit below.)

Let $g(c_j, \omega)$ be the fraction, or density, of voters with preference parameter $c_j$, where $\omega$ is a stochastic shift parameter. Given the realization of $\omega$, the distribution of $c_j$ is non-stochastic, so that electoral uncertainty is captured by the distribution of $\omega$. Each realization of $\omega$ induces a different non-stochastic distribution of $c_j$, each with its own median $c_m$. The median $c_m$ is, hence, a function of $\omega$; we assume that it is a linear function, and that $\omega$ has a uniform distribution. This implies that $c_m$ also possesses a uniform distribution. Let $\hat{c}$ and $c$ be, respectively, the upper and lower bounds of this distribution.

Since voters' preferences are single-peaked, the outcome of the elections is determined by the preferred policy of the median voter. The party whose (expected) policy position is nearest to the ideal policy $(c_m + \gamma^*)$ of the median voter on election day wins the elections. Uncertainty about the distribution of voters' ideal points induces probabilistic voting—the probability of reelection of an incumbent party is, in general, strictly between zero and one (see Coughlin, 1992).

\begin{center}
\textbf{B. Equilibrium}
\end{center}

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

\begin{equation}
(2) \quad P_L(x_L) [h - (x_L - (c_L + \varepsilon_L + \gamma))] + [1 - P_L(x_L)] [\gamma - E(x_R | \gamma) - (c_L + \gamma)].
\end{equation}

$P_L(\cdot)$ is the probability that $L$ will be reelected and depends on policy choice $x_L$. The second term in the incumbent party's objective is the utility it expects to obtain if it loses
the election and policy is chosen by the challenger. As the incumbent knows $\gamma$, the policy it expects from $R$ is $E(x_R | \gamma)$.

The functional form of $P^L(\cdot)$ depends on the way the voting public forms its perception of $\gamma$. However, the formation of this perception depends on the (optimal) 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 public’s expectation formation process assumed by the incumbent 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, $x_L(\gamma, \varepsilon_L)$ and $x_R(\gamma, \varepsilon_R)$, together with voters’ beliefs, $\gamma'(x_L)$, such that:

- The incumbent party chooses policy (prior to elections) so as to maximize (2).
- If elected, the challenging party chooses policy after elections so as to minimize $|x_R - (c_R + \varepsilon_R + \gamma)|$.
- 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.
- Voters’ perceptions about $\gamma$ (and about the policy of the challenging party, if elected) are formed rationally, using all the available information.

If the right-wing challenger is elected, he selects the policy that maximizes his ex-post objectives, namely, he implements policy:

$$x_R = c_R + \varepsilon_R + \gamma.$$ (3)

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

$$x^*_R \equiv E(x_R | x_L) = c_R + \gamma^*.$$ (4)

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 policy on voters' expectations and, through
them, on the probability of reelection. Using (3) and the fact that $E(\varepsilon_R) = 0$ and that
$E(x_R | \gamma) = c_L + \gamma$, the objective function (2) can be rewritten as:

$$ P^L(x_L) [h - x_L - (c_L + \varepsilon_L + \gamma)] - (1 - P^L(x_L))[c_R - c_L] $$

The equilibrium solution for $x_L$ is obtained by the method of undetermined coef-

cients. We first postulate that the equilibrium choice of $x_L$ is the following linear function
of $\gamma$ and $\varepsilon_L$:

$$ x_L = B_L + b_L \gamma + b_L \varepsilon_L $$

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 effect of $\gamma$ from the effect of $\varepsilon$; it is easy to verify that
this implies that $b_L\gamma = b_L\varepsilon = b_L$. Therefore, (6) simplifies to

$$ x_L = B_L + B_L(\gamma + \varepsilon_L) $$

Voters know the decision rule in (7), 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 (De Groot 1970, p. 169):

$$ \gamma^* \equiv E(\gamma | x_L) = \theta(x_L - B_L) $$

where

$$ \theta \equiv \frac{\sigma_\gamma^2}{\sigma_\gamma^2 + \sigma_\varepsilon^2} $$

$$ \sigma_\gamma^2 $$
Since the policy of any incumbent becomes more right-wing the larger the $\gamma$ (it will be shown that $b_L > 0$) - and this is known by the public - a more right-wing policy (a larger $x_L$) is partially interpreted by the public as being due to a larger $\gamma$. But this signal is noisy because the incumbent's policy choice is also influenced by the intraparty shock. For this reason, the impact of $x_L$ on $\gamma^*$ is weighted by $\theta$.

We assume (assumption 1) that voters believe that the policy proposed by the incumbent $L$ is always to the left of that of the challenger $R$, 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 for the fulfillment of this assumption are presented in the Appendix (see also Alesina and Cukierman, 1990).

Assumption 1 together with the decision rule of the median voter, implies that there exists a critical value of $c_m$, denoted $c_m^c$, such that if $c_m \leq c_m^c$, the incumbent $L$ wins the elections, and if $c_m > c_m^c$, the challenger $R$ wins the elections. The value of $c_m^c$ is obtained from:

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

which, due to Assumption 1, is equivalent to:

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

Rearranging (10) and using (4), we obtain:

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

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 $c_m^c$. Since $c_m$ is uniformly distributed, this probability is given by:

$$P^L(x_L) = \frac{c_m^c - \zeta}{\bar{c} - \zeta},$$
Using (8) in (11) and the resulting expression in (12), we obtain:

\( P^L(x_L) = \frac{1}{2(c - \xi)} \left[ c_R - 2\xi + \theta \frac{B_L}{b_L} + dx_L \right], \)

where \( d \equiv 1 - \theta/b_L. \)

Substituting (13) into \( L \)’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:

\[ d(h - x_L + \varepsilon_L + \gamma + c_R) - 2(c - \xi)P^L(x_L) = 0 \]

\[ -d < 0. \]

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

\[ d[h + x_L - (2c_L + \varepsilon_L + \gamma) + c_R] + 2(c - \xi)P^L(x_L) = 0. \]

\[ d < 0. \]

Rearranging the first-order conditions, we obtain:

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

\[ x_L = \frac{1}{2d} \left[ d(c_R + h) - c_R - \theta \frac{B_L}{b_L} + 2\xi \right] + \frac{1}{2} (\gamma + \varepsilon_L) \]
Case 2: \((x_L < c_L + \varepsilon_L + \gamma)\)

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

Equating coefficients across equations (18), (19) and (7) we obtain:

\[
(20) \quad b_L = \frac{1}{2}
\]

and

\[
(21) B_L = \begin{cases} 
\frac{1}{2} \left[ (2\xi - c_R) \left( 1 + \frac{\sigma_1^2}{\sigma_2^2} \right) + (h + c_R) \left( 1 - \frac{\sigma_1^2}{\sigma_2^2} \right) \right] & \text{for } x_L > c_L + \varepsilon_L + \gamma \\
\frac{1}{2} \left[ (2\xi - c_R) \left( 1 + \frac{\sigma_2^2}{\sigma_1^2} \right) + (2c_L - c_R - h) \left( 1 - \frac{\sigma_2^2}{\sigma_1^2} \right) \right] & \text{for } x_L < c_L + \varepsilon_L + \gamma.
\end{cases}
\]

Equation (20) implies that

\[
d = \frac{\sigma_2^2 - \sigma_1^2}{\sigma_2^2 + \sigma_1^2}
\]

so that the second-order conditions for a maximum in the two cases are, respectively:

- **Case 1**: \(\sigma_2^2 < \sigma_1^2\) for \(x_L > c_L + \varepsilon_L + \gamma\)
- **Case 2**: \(\sigma_2^2 > \sigma_1^2\) for \(x_L < c_L + \varepsilon_L + \gamma\)

From (13), (15), and (17), \(P^L(x_L)\) 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 \(\gamma^e\), 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 all voters to the right and increases the electoral prospects of the challenging right-wing party. We refer to this as the "expectation effect."
When $\sigma_r^2 < \sigma_e^2$, 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 $L$ to choose a policy that is more centrist than its ideal policy $(c_L + \varepsilon_L + \gamma)$. When $\sigma_r^2 > \sigma_e^2$, the expectation effect dominates and a shift to the right reduces, on balance, $L$'s reelection prospects. It therefore chooses a policy that is more extreme than its ideal point.

It is shown below that in both Cases 1 and 2, a right-wing incumbent (RWI) is more likely to propose a relatively right-wing policy. In Case 2, as policy shifts to the right, the probability of reelection of a left-wing incumbent (LWI) falls and that of a RWI rises. Hence, policy reversals (i.e., higher chances of a right-wing policy being adopted by a left-wing incumbent) are ruled out in Case 2. Since we are interested in the conditions determining policy reversals, we concentrate on Case 1 in the following. $\sigma_r^2 < \sigma_e^2$ is, therefore, one of the conditions required for policy reversals. A small $\sigma_r^2$ means that the mass assigned to the tails of the normal distribution of $\gamma$ is small (i.e., that the probability of $\gamma$ taking extreme values is small).

II. Which Party is More Likely to Implement Which Policies?

We now come to the central issue, stated in the title of this section. To do that, we focus on a comparison between the behavior of left and right-wing incumbents.

A derivation equivalent to that of the previous section, for a right-wing incumbent (for $\sigma_r^2 < \sigma_e^2$) leads to:

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

with the mean (equilibrium) policy choice of a right-wing incumbent being

$$B_R = \frac{1}{2} \left[ \left( 1 - \frac{\sigma_r^2}{\sigma_e^2} \right) (c_L - h) + \left( 1 + \frac{\sigma_r^2}{\sigma_e^2} \right) (2\varepsilon - c_L) \right].$$

The probability of reelection of a right-wing incumbent as a function of his (privately optimal) policy choice is:
Notice, comparing (21) and (22), that as the value of office, \( h \), increases, both parties' policies converge to the center (the Hotelling effect). On the other hand, as the degree of electoral uncertainty increases (a larger \( \bar{c} \) and/or smaller \( \underline{c} \)), the policy of \( R \) becomes more right-wing (and that of \( L \) becomes more left-wing.) Finally, \( c_R \) and \( c_L \) also enter with the expected sign.

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 \( x \). For a policy to be implemented, it has to be proposed by the incumbent party and, given this proposal, the incumbent party has to receive public support via reelection. It follows that the probability of implementation of policy \( x \) by party \( i \) is:

\[
PI^i(x) = Q^i(x)P^i(x),
\]

where \( P^i(x) \) are the probabilities of reelection as stated in (13) and (23).

Notice that \( x_i = B_i + \frac{1}{2}(\gamma + \epsilon_i) \) implies that

\[
x_i \sim N[B_i, V],
\]

with \( V = (\sigma_2^2 + \sigma_2^2)/4 \). Hence:

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

To simplify the calculations, we confine ourselves, henceforth, to the symmetric case:

\[
P^L(x) = \frac{A - \psi}{4\underline{c}}, \quad \text{and} \quad P^R(x) = \frac{A + \psi}{4\bar{c}},
\]
where

\[ A = 2 \left( 1 - \frac{\sigma_2^2}{\sigma_1^2} \right) \xi + \left( 1 - \frac{2\sigma_1^4}{\sigma_2^2(\sigma_2^2 + \sigma_1^2)} \right) c_R + \frac{\sigma_1^2(\sigma_2^2 - \sigma_1^2)}{(\sigma_2^2 + \sigma_1^2)} h. \]

Notice, as before, that the (average) policy of each of the parties contains the following factors: an electoral uncertainty effect \((B\) increasing in \(c\)), a Hotelling-Downs effect \((B\) decreasing in \(h\)), and an ideological preference effect \((B\) increasing in \(c_R\))./13

Let

\[ \Delta PI(x) = PIR(x) - PIL(x). \]

When \(\Delta PI(x) > 0\), policy \(x\) is more likely to be implemented by a right-wing party than by a left-wing party; the converse is true when \(\Delta PI(x) < 0\). Let

\[ F(x) = \frac{2B}{V} x + \ln(A - dx) - \ln(A + dx). \]

**LEMMA 1.** \(\text{sign}[\Delta PI(x)] = \text{sign}[F(x)]\)

**PROPOSITION 1.** If \(Vd/B < A < 2\bar{c}\), then the range of policies \(x\) can be partitioned in the following way:

1. There is a central region \((\bar{x}, \bar{x})\) in which the conventional result obtains (policies to the left of the center of the political spectrum are more likely to be implemented by \(L\), and policies to the right of the center are more likely to be implemented by \(R\)).

2. (Policy Reversals) There is a region outside \((\bar{x}, \bar{x})\) in which very left-wing policies \((x < \bar{x})\) are more likely to be implemented by \(R\), and very right-wing policies \((x > \bar{x})\) are more likely to be implemented by \(L\).

3. (Only Nixon) For even more extreme values of \(x\), above \(x_R^0\) and below \(x_L^0\) (where \(x_R^0 > \bar{x}\) and \(x_L^0 < \bar{x}\), only the unlikely party can implement policy \(x\) (i.e., \(PR[x > x_R^0] = 0\), and \(PL[x < x_L^0] = 0\)).

**[INSERT FIGURE 2 ABOUT HERE]**

Proofs of Lemma 1 and Proposition 2 are provided in the Appendix. Figure 2 summarizes the intuition of the proposition. Panel (a) shows the probabilities of each proposal,
III. Comparative Statics

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 of policies into outcomes and of the intraparty shocks are relatively rare. However, when such events do appear, the probability that the corresponding extreme policy will be implemented by an "unlikely" party is greater 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 of policies into 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 $\gamma$.

In order to gain additional insights, we will now perform comparative statics to see how the range of reversals, the complement of $(\underline{x}, \overline{x})$, varies with the parameters of the model. We know that $\underline{x}$, 0 and $\overline{x}$ are the three roots of $F(x) = 0$ (although only the location of $\underline{x}$ and $\overline{x}$ varies with the underlying parameters.) Let $\alpha$ denote any parameter. Applying the implicit function theorem to $F(x) = 0$,

\[
\begin{align*}
\frac{dx}{d\alpha} &= -\frac{1}{F'(x)} \left( \frac{2x}{V^2} \left( \frac{\partial B}{\partial \alpha} V - \frac{\partial V}{\partial \alpha} B \right) + \frac{\partial A}{\partial \alpha} - x \frac{\partial A}{\partial \alpha} - \frac{\partial A}{\partial \alpha} + x \frac{\partial A}{\partial \alpha} \right) \right),
\end{align*}
\]
where \( x = 0, 0, x \).

Applying (24) to the electoral uncertainty parameter \( \xi \), we obtain

\[
\frac{dx}{dc} = -\frac{x}{F'(x)} \left\{ \frac{2(1 + \frac{\sigma^2}{\sigma_z^2})}{V} + \frac{4(1 - \frac{\sigma^2}{\sigma_z^2})d}{A^2 - (dx)^2} \right\}
\]

Notice that

\[
\begin{aligned}
&\frac{x}{F'(x)} < 0 \quad \text{at } x = 0 \\
&\frac{x}{F'(x)} = 0 \quad \text{at } x = 0 \\
&\frac{x}{F'(x)} > 0 \quad \text{at } x = x > 0
\end{aligned}
\]

and that the expression in curly brackets in (25) is positive. This leads to:

**Result 1:** An increase in electoral uncertainty (measured by \( \xi \)), reduces the range of "policy reversals."

Similarly,

\[
\frac{dx}{dc_R} = -\frac{2x}{F'(x)} \left\{ \frac{\sigma^2}{V\sigma_z^2} + \frac{d}{A^2 - (dx)^2} \left( 1 - \frac{\sigma^2}{\sigma_z^2} \right) \right\}
\]

Since \( \frac{\sigma^2}{\sigma_z^2} < 1, \left( 1 - \frac{\sigma^2}{\sigma_z^2} \right) \) is positive. It is easy to see the following:

**Result 2:** An increase in the degree of party polarization or ideological distance between the parties (measured by \( c_R \)), decreases the range of "policy reversals."

Following a similar procedure, we are able to show:

**Result 3:** An increase in uncertainty about to the incumbent's ideological position (measured by \( \sigma^2_e \)), increases the range of "policy reversals."

Result 3 suggests that the policy reversals we are studying should be more common in countries characterized by "catchall" parties that comprise a wide spectrum of relatively heterogeneous constituencies, or by coalition governments within which there are agreements (deals) which are not easily observed by the general public. The Peronist movement in Argentina fits the first interpretation quite well, and some of the broad "unity" governments in Israel conform to the second.
IV. Implications for Credibility

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 order to elicit support for their policies, politicians argue that those policies are beneficial for the majority of the population. In the context of our model they would argue that $\gamma$ is quite large (small) when they propose a right (left)-wing policy.

In this section, we use two notions which measure the credibility of (implicit) statements about $\gamma$ by looking at the posterior beliefs about $\gamma$ held by voters have after having observed policy proposals. We shall continue to refer to any policy that is to the right of the center of the political spectrum as "right wing" and to any policy that is to the left of this center as left wing. (For the symmetric case the center of the political spectrum is at $0$.)

1. The credibility of a given policymaker when he proposes a relatively left (right)-wing policy can be characterized as the posterior probability that $\gamma$ is smaller (larger) than a given value of $\gamma$.

The public's observation of the policy proposal $x$, given their knowledge of $B_i$ and of $b_i = 1/2$, is equivalent to an observation of $(\gamma + \varepsilon_i) = 2(x - B_i)$, for $i = L, R$. We are interested in inferences about the unknown value of $\gamma$ made from the observation of $(\gamma + \varepsilon_i)$. This observation is a random drawing from a normal distribution with an unknown mean $\gamma$ and variance $\sigma_i^2$. The prior distribution over that unknown mean is $N(0, \sigma_i^2)$. Using Theorem 1 of Section 9.5 of De Groot (1970, p. 167), the posterior distribution of $\gamma$, $f_i(\gamma, x)$, is $N(\gamma_i'(x), \Sigma^2)$, where $\gamma_i'(x) = \theta(\gamma + \varepsilon_i) = 2\theta(x - B_i)$, and $\Sigma^2 = \sigma_i^2\sigma_i^2/((\sigma_i^2 + \sigma_i^2)$.

Recalling that $B_L < B_R$, it is easy to see that $\gamma_L'(x) < \gamma_R'(x)$ for all $x$. This means that any given policy, $x$, is interpreted by the public as being associated with a lower (posterior mean) value of $\gamma$ when this policy is proposed by a RWI than when it is proposed by a LWI. The intuition is simple. Being aware of the systematic ideological differences between the two parties, the public expects to observe the same policy from both incumbents only when the RWI observes a lower value of $\gamma$ than his leftist counterpart.
The posterior distribution that the public assigns to \( \gamma \) after observing a proposal \( x \), is depicted (for the symmetric case) in Figure 3. It is clear that, for any given \( x \),

\[
\begin{align*}
 f_L(\gamma, x) &< f_R(\gamma, x) \text{ for } \gamma < 0, \\
 f_L(\gamma, x) &> f_R(\gamma, x) \text{ for } \gamma > 0
\end{align*}
\]

and

\[
F_L(\gamma, x) < F_R(\gamma, x), \forall \gamma,
\]

where \( F \) is the c.d.f. of \( f \).

It follows:

Result 4: (Credibility of implicit statements about \( \gamma \) across policymakers) For any given (common) policy proposal: (i) a left-wing policymaker is more credible than a right-wing policymaker when he claims that right-wing policies are desirable, and (ii) a right-wing policymaker is more credible than a left-wing policymaker when he claims that left-wing policies are desirable.

2. Consider now “extreme” policies. Extreme policies are defined as policies that are to the right of the average policy proposal made by a RWI or to the left of the average policy proposal made by a LWI. Politicians can convince a majority that an extreme policy is necessary by claiming that there has been an extreme realization of \( \gamma \). We therefore measure the credibility of policy proposals by the posterior probability assigned by the public to the event “\( \gamma \) is larger than a sufficiently large and positive \( \tilde{\gamma} \)” when an extreme right-wing policy \( x \) is proposed — and by the posterior probability assigned by the public to the event “\( \gamma \) is smaller than \( -\tilde{\gamma} \)” when an extreme left-wing policy is proposed.

Consider a policy \( x > B > 0 \) and its mirror image (in the symmetric case) \(-x\), and let \( \tilde{\gamma} > 2\theta(B + x) \). We know that \( \gamma^*_L(x) = 2\theta(B + x) \) and that \( \gamma^*_L(-x) = 2\theta(B - x) \). It is easy to see that \( B > 0 \) implies

\[
\gamma^*_L(-x) - (-\tilde{\gamma}) > \tilde{\gamma} - \gamma^*_L(x);
\]
that is, \( \tilde{\gamma} \) deviates from \( \gamma_L(x) \) less than \( -\tilde{\gamma} \) deviates from \( \gamma_L(-x) \). This yields

\[
(27) \quad [1 - F_L(\tilde{\gamma}, x)] > F_L(-\tilde{\gamma}, -x).
\]

A similar derivation for a right-wing incumbent yields:

\[
(28) \quad F_R(-\tilde{\gamma}, -x) > [1 - F_R(\tilde{\gamma}, x)].
\]

In words, (27) and (28) imply:

**Result 5:** (Credibility of a given policymaker across extreme policies) (i) A left-wing policymaker has more credibility when he proposes a significant policy shift to the right than when he proposes a significant policy shift to the left. (ii) A right-wing policymaker has more credibility when he proposes a significant policy shift to the left than when he proposes a significant policy shift to the right.

**V. Conclusions**

When governments have better information than do voters about the way in which policies map into outcomes, policy proposals convey information. This may lead to situations in which extreme, but rarely proposed, policies are more likely to be implemented by "unlikely" actors. A necessary, but not sufficient, condition for such reversals is that the uncertainty about the preferred policy position of parties be sufficiently large compared to the uncertainty about the state of the world.

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 outcomes. A corollary to this result is that policy reversals occur infrequently.

This logic can be applied to several policy arenas. In Cukierman and Tommasi (1996) we apply it to the specific issue of market-oriented reforms undertaken by many countries.
over the last decade. We argue there that politicians coming from the left of the spectrum, when faced with the fact that such policies were necessary, had a comparative advantage in convincing people of the long-run necessity of these changes, even if they hurt now. There is some preliminary evidence in favor of this point. John Williamson asked the contributors to his 1994 edited volume to check the conventional wisdom that market-oriented reforms are creatures of right-wing governments. Little support was found for such an association, as summarized by Williamson and Stephan Haggard (1994). As a matter of fact, in only three of their 13 cases was market-oriented reform implemented by what they classified as right-wing governments. Interestingly, these three cases included the two military dictatorships in their sample (Chile and Korea.) This seems 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. 19 In Cukierman and Tommasi (1996) we discuss some cases, other than those included in the Williamson volume, which display similar characteristics.

Some well-known foreign policy reversals are also consistent with the framework of this paper, such as the opening up to the People’s Republic of China by staunch anti-Communist Richard Nixon, and the trading of land for peace by hawkish Israeli Prime Minister Begin, cited above. Begin managed to overcome strong, and sometimes violent, opposition to the dismantling of Jewish settlements in the Sinai Peninsula largely because he had a long and respectable record against such a policy. His record as a hawk helped him convince voters that the agreement was beneficial for a majority of Israelis. If the same policy had been adopted by the dovish Labor Party, mobilization of sufficient public support would have been harder if not impossible. Similarly, if the opening up to China had been attempted by Humphrey rather than by Nixon, opposition to that policy would have been more difficult to overcome.

The analysis has some interesting implications for the question of credibility. In particular, we show that the credibility of a policy depends on the ideological identity of the policymaker proposing it, as well as on the policy he proposes. This is related, although not identical, to the distinction between the credibility of policies and the credibility of policymakers made by Drazen and Masson (1994). 21 In both papers, the notion of credibility
employed depends upon the policy–policymaker pair. But there are also important differences. In Drazen and Masson credibility refers to the likelihood that an announced policy will be carried out (under discretion), within a framework in which there is uncertainty about the policymaker’s type and about economic shocks that may alter his ex-post preferred policy. Here there is no uncertainty about the policy of the incumbent since he is committed to the policy “announced;” hence, our concept of credibility refers to the incumbent’s ability to convince voters that the policy he will implement, if reelected, is better from the point of view of the majority than the challenging party’s policy. In both cases there is uncertainty about the policy that will, ultimately, be implemented. In our case the uncertainty is due to political competition in conjunction with electoral uncertainty, while in Drazen and Masson it is due to uncertainty about the policymaker’s type in conjunction with uncertainty about economic shocks. Each notion of credibility is natural within the framework under consideration. Combining the two frameworks may yield more general insights about basic institutional determinants of credibility. We leave this task for future work.
Appendix

Note: This appendix focuses on the case $\sigma^2_1 < \sigma^2_\varepsilon$, which is necessary for policy reversals.


Assumption 1 requires that

$$x_L = B_L + \frac{1}{2}(\gamma + \varepsilon_L) < c_R + \theta(\gamma + \varepsilon_L) = x_R^*$$

(A1)

Using (21) we can rearrange (A1) as:

$$\frac{(\gamma + \varepsilon_L)}{(\sigma^2_\varepsilon + \sigma^2_\gamma)} < \frac{2(1 + \frac{\sigma^2_\varepsilon}{\sigma^2_\gamma})(c_R - \xi) - (1 - \frac{\sigma^2_\varepsilon}{\sigma^2_\gamma})h}{(\sigma^2_\varepsilon - \sigma^2_\gamma)}$$

(A2)

The l.h.s. of (A2) is a standard normal. Therefore, the condition is satisfied with very high probability if $c_R$ is sufficiently larger than $\xi$ and/or the (positive) difference $(\sigma^2_\varepsilon - \sigma^2_\gamma)$ is sufficiently small. (It is also more likely to be satisfied, the smaller the value of $h$.)

2. Taking Care of Corners

Note: For the sake of brevity, we work directly with the symmetric case, as in Section II.

The analysis in the text was undertaken under the implicit assumption that the probability of reelection described by equation (13) belongs to $(0, 1)$. For the incumbent $L$, this means that

$$P^L(x) = A + \frac{dx}{d\xi} \in (0, 1)$$

(A3)

Let $\mu_L = \gamma + \varepsilon_L$. From the policy function $x_L = B_L + \frac{1}{2}\mu_L$, it is easy to see that (A3) requires

$$\mu_L \in (\mu^0_L, \mu^1_L)$$
where \( \mu_L^0 = -2(A/d + B_L) \) and \( \mu_L^1 = 2[(4\xi - A)/d - B_L] \). (The corresponding values of \( x_L \) are \( x_L^0 = -A/d \) and \( x_L^1 = (4\xi - A)/d \).)

In equilibrium, the probability of reelection \( P^L(x) \) can be thought of as the stochastic aggregation of the median voter's best response to the policy function \( x_L(\mu_L) \). This policy function is, in turn, the best response to \( P^L(x) \). We have established in Section I that \( P^L(x) = \frac{A + dx}{4\xi} \) and \( x_L(\mu_L) = B_L + \frac{1}{2}\mu_L \) are best responses to each other, which is true only for \( \mu_L \in (\mu_L^0, \mu_L^1) \). Now we proceed to describe behavior outside that range.

1. When \( \mu_L < \mu_L^0 \), \( P^L(x) = 0 \) and \( x_L(\mu_L) = B_L + \frac{1}{2}\mu_L \) are best responses to each other. For \( x_L < -A/d \), all potential median voters prefer to vote for the challenger \( R \), so that \( P^L(x) = 0 \). Given that, the incumbent faces the decision of either definitely losing the election, or committing to a policy \( x_L > -A/d \). The first course of action gives a payoff of \(-2c_R\) and the second, an expected payoff of

\[
\left( \frac{A + dx}{4\xi} \right) [h - x_L + c_L + \mu_L] - \left( 1 - \frac{A + dx}{4\xi} \right) 2c_R.
\]

It can be shown that \( [h - x_L + c_L + \mu_L] < -2c_R \) for \( x_L > -A/d \) and \( \mu_L < \mu_L^0 \), implying that the first course of action is preferred. This is demonstrated by showing that this inequality is satisfied for \( x_L = -A/d \) and \( \mu_L = \mu_L^0 \) and by noting that it is a fortiori satisfied for higher values of \( x_L \) and lower values of \( \mu_L \).

Hence, when \( \mu_L < \mu_L^0 \), the incumbent chooses a policy that gives \( P^L(x) = 0 \) since, in order to attain \( P^L(x) > 0 \) he would have to commit to a policy too far from his (ex-post) preferred one. This means that any policy function \( x_L(\mu_L) \) that gives \( x_L < -A/d \forall \mu_L < \mu_L^0 \) is consistent with \( P^L(x) = 0 \forall x < -A/d \). In particular, \( x_L(\mu_L) = B_L + \frac{1}{2}\mu_L \) is one such function.

ii. When \( \mu_L > \mu_L^1 \), the previous policy function induces an \( x_L \) so large that \( \frac{A + dx}{4\xi} > 1 \), which means that all potential median voters would vote for the incumbent (so that \( P^L(x) \), properly defined, equals 1). In this range, the electoral effect on policy becomes irrelevant, since he is going to be reelected with certainty. Hence, party L adopts its most preferred policy, \( x_L = c_L + \mu_L \). If the public knows that \( x_L = c_L + \mu_L \), it forms expectations according to \( \gamma^* = \theta(x_L - c_L) \). This expectation function leads to the incumbent L being reelected.
with probability one for \( x_L \geq 2\varepsilon/(1 - \theta) - c_R \) or, equivalently, \( \mu_L > 2\varepsilon/(1 - \theta) \). Notice that, depending on the values of the underlying parameters, \( \mu^*_L \) can be smaller than, larger than, or equal to \( 2\varepsilon/(1 - \theta) \). For the sake of brevity, assume that \( \mu^*_L \geq 2\varepsilon/(1 - \theta) \). In that case, \( \{ P^L(x) = \frac{A + dx}{4\varepsilon}, x_L(\mu_L) = B_L + \frac{1}{2}\mu_L \} \) for \( \mu_L < \mu^*_L \), \( \{ P^L(x) = 1, x_L(\mu_L) = c_L + \mu_L \} \) for \( \mu_L > \mu^*_L \), and both are best-response pairs for \( \mu_L \in (\frac{2\varepsilon}{1 - \theta}, \mu^*_L) \). If, as a refinement, we require continuity of the \( P^L() \) function, the full characterization of equilibrium is:

\[
x_L(\mu_L) = \begin{cases} 
B_L + \frac{1}{2}\mu_L & \text{for } \mu_L \leq \mu^*_L \\
c_L + \mu_L & \text{for } \mu_L > \mu^*_L 
\end{cases}
\]

and

\[
P^L(x) = \begin{cases} 
0 & \text{for } x \leq -A/d \\
\frac{A + dx}{4\varepsilon} & \text{for } -A/d < x < (4\varepsilon - A)/d \\
1 & \text{for } x \geq (4\varepsilon - A)/d.
\end{cases}
\]

3. Proof of Lemma 1:

\[
\Delta P_I(x) = \frac{(2\pi V)^{(1/2)}}{4\varepsilon} \left\{ (A - dx) \exp \left[ -\frac{(x - B)^2}{2V} \right] - (A + dx) \exp \left[ -\frac{(x + B)^2}{2V} \right] \right\} 
\]

\[
= \frac{(2\pi V)^{(1/2)}}{4\varepsilon} \exp \left[ -\frac{x^2 + B^2}{2V} \right] \left\{ (A - dx) \exp \left[ \frac{B}{V} x \right] - (A + dx) \exp \left[ -\frac{B}{V} x \right] \right\}.
\]

Clearly,

\[
\Delta P_I(x) \geq 0 \text{ as } (A - dx) \exp \left[ \frac{B}{V} x \right] \geq (A + dx) \exp \left[ -\frac{B}{V} x \right].
\]

Taking the logarithms (a monotonic transformation) of both sides of the inequality, we arrive at

\[
\Delta P_I(x) \geq 0 \text{ as } \frac{B}{V} x + \ln(A - dx) \geq -\frac{B}{V} x + \ln(A + dx),
\]

as claimed.

4. Proof of Proposition 2:

First notice that panels (c) and (d) of Figure 2 are equivalent.
In order for the curves to be as presented, it is necessary that the interior regions $(x_L^0, x_L^1)$ and $(x_R^0, x_R^1)$ overlap, or $x_L^1 = (4\varepsilon - A)/d > (A - 4\varepsilon)/d = x_R^1$, which is to say $4\varepsilon > A/2$

We now proceed to characterize $F(x)$. Note that $F(0) = 0$, that $F(x) \to \infty$ as $x \to x_L^0$ from above, and that $F(x) \to -\infty$ as $x \to x_R^0$ from below. Hence, we know from continuity, that $F(x) = 0$ at least three times, at $x = z \in (x_L^0, 0)$, at $x = 0$, and at $x = \bar{z} \in (0, x_R^0)$.

We can verify that these are indeed the three crossings by analyzing

$$F'(x) = \frac{2B}{V} - \frac{d}{(A - dx)} - \frac{d}{(A + dx)}.$$ 

Notice that $F'(x) = 0$ at

$$x = \frac{1}{d} \sqrt{1 - \frac{Vd}{AB}} \quad (A4)$$

Since $Vd < AB$, $F'(x) = 0$ has exactly two real roots, one positive and one negative, which are equidistant from zero.

Also,

$$F''(x) = -d^2 \left[ \frac{1}{(A - dx)^2} - \frac{1}{(A + dx)^2} \right].$$

It is easy to see that $F''(x) < 0$ for $x > 0$ and that $F''(x) > 0$ for $x < 0$. This implies that the negative root of (A4) corresponds to a minimum of $F(x)$, and that the positive root of (A4) corresponds to a maximum of $F(x)$. Hence, in the range $(x_L^0, x_R^0)$, the slope of $F(x)$ switches signs three times. Since $F(x)$ is positive near the lower end of this range, negative near its upper end, and 0 at $x = 0$, it follows that $F(x)$ has exactly three roots and that Figure 2d correctly represents the curve. Since the figure and the proposition are equivalent, this completes the proof.
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FOOTNOTES

*Cukierman: Tel-Aviv University, Tel-Aviv, Israel; Tommasi: Universidad de San Andrés (1644) Victoria, Buenos Aires, Argentina. The Amnon Ben Nathan Chair in Economics at Tel-Aviv University, the Center for Economic Research at Tilburg University, the Harvard/MIT RTG in Positive Political Economy and CIBER and the Academic Senate at UCLA provided financial support. We benefited from useful suggestions of three anonymous referees. We are indebted to Olivier Blanchard, Greg Hess, Eric Rasmusen, Tom Piketty and seminar participants at Boston College, Brown, Chicago, Dartmouth, ECARE at ULB, Geneva, Groningen, IGIER, Limburgh, MIT, San Andrés, Strathclyde, Tel-Aviv, Tilburg and UCLA for helpful comments, and to Carola Schenone for research assistance.

1. Rodrik (1993) points out that it is ironic that populist and interventionist parties have implemented radical trade liberalizations, fiscal adjustments and market-oriented reforms.
2. The notion that this mapping is stochastic is not new. Recent references are Thomas Gilligan and Keith Krehbiel (1989), Kenneth Rogoff (1990), Alberto Alesina and Alex Cukierman (1990), Joseph Harrington (1993), John Roemer (1994) and Christian Schultz (1996). David Austen-Smith (1993) emphasizes that legislation (or policy more generally) is a means to an end rather than a final objective. Several of these authors also postulate, as we do, that incumbent parties have better information about some aspects of the mapping of policies into outcomes than does the general public.

3. This naturally leads to specialization in knowledge (some people know more about some things than others) and to rational ignorance. This idea goes back to Anthony Downs (1957); for recent treatments see Arthur Lupia (1992), Gilligan (1993) and John Matsusaka (1995).

4. Michael Laver and Norman Schofield (1990) have stressed the effects of intraparty politics on policy choices.

5. This timing is a crucial difference between our model and that in Harrington
(1993). Harrington uses an otherwise similar informational structure to derive implications from voter uncertainty to policy manipulation for reelection purposes.

6. We are assuming that the incumbent 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. Although the action taken by the policymaker might include a verbal statement, it is not "cheap talk" in the sense of Vincent Crawford and Joel Sobel (1982). As stressed by Cukierman and Nissan Liviatan (1991), announcements of 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 - such as those in Austin-Smith (1990) and (1992) - it is based on costly rather than costless signalling.

7. In Cukierman and Mariano Tommasi (1996), we explore the same ideas in the context of a referendum game (direct democracy). The broad conditions for the type of reversal discussed in this paper apply to both institutional structures.
8. Policy is known to react to opinion polls even between elections. See Page and Shapiro (1983) for U.S. evidence. These considerations are developed in more detail in Cukierman and Tommasi (1996), with a focus on developing countries.

9. M. Daniel Bernhardt and Daniel Ingberman (1985) and Ingberman (1984) analyze the notion that the platforms of incumbents are more reliable indicators of their future policies than are the platforms of challengers. Schultz (1996) discusses the case in which both parties commit to their respective policy platform.

10. It is commonly accepted that probabilistic voting is more realistic than deterministic voting. For example, Calvert (1986) points out that "this view is in harmony with the importance attached by traditional political scientists to the role of imperfect information in politics" (p.54).

11. We assume that the intraparty shock $\varepsilon_L$ is "semi-persistent." That is, it persists into the post-election period only if the incumbent party is reelected. Besides simplifying the algebra considerably, this assumption has some descriptive realism since success in the elections normally increases the durability of a given
deviation from the mean bliss point, \( c_L \), while failure normally reduces it.

12. Obviously, the probability function is bound to belong to \([0, 1]\). In Part 2 of the Appendix, we analyze what happens when \( c_m^e < c \) and when \( c_m^e > c \).

13. We assume, henceforth, that the mean policy proposed by a RWI is larger than the mean policy proposed by a LWI. That is, \( B_R > B_L \). This is the case when the systematic difference between the ideological positions of the two parties is sufficiently large in comparison to their (shared) love of office, \( h \). In the symmetric case, this implies that \( B_R \) is positive, \( B_L \) is negative, and that they are positioned at equal distances from the center of the political spectrum (which is at \( x = 0 \)).

14. Notice that we concentrate on comparing the probabilities of implementation attached to different incumbents. We believe that this is the relevant comparison since in our (two-period) model, only the incumbent behaves in an interesting strategic way; the behavior of challengers is passive.

15. Note that the probability of implementation of the policy \( x = 0 \), at the
center, is identical for both parties. The fact that $F(0) = 0$ is a consequence of the postulated symmetry, but the general qualitative nature of Proposition 2 does not depend on the symmetry assumption.

16. Schultz (1996) addresses other effects of polarization in a model that also emphasizes asymmetric information about a parameter that he calls "the functioning of the economy," which plays the exact same role as our $\gamma$.

17. The notions of credibility that we use in this section are by no means the only ones possible. Alternative notions of credibility are discussed in Chapter 11 of Cukierman (1992). See also the discussion of Allan Drazen and Paul Masson (1994) in Section V below.

18. 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 (the median voter theorem) but different parties announce different $\gamma$'s in an attempt to influence people's reduced-form preferences. Roemer does not model the formation of beliefs explicitly, he just
postulates a mapping of announcements into beliefs. Here, we deduce the belief-
formation process from the rational (Bayesian) behavior of voters.

19. On a related issue, Cesar 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 ones may blockade
the later stages, making some reform paths time-inconsistent. An implication of
the logic of this paper is that policymakers may, then, initiate a reform sequence
by implementing those measures that hurt their own constituencies.

20. Putting this idea together with the comparative static results in Section
III, we obtain several empirical implications. Our model predicts that market-
oriented reforms are adopted more often by left-wing governments when electoral
uncertainty and political polarization are relatively small, and uncertainty about
intraparty (or coalition) politics is large. We plan to explore this implication in
future work.

21. See also Drazen (1996) for a more general treatment.
22. For the detailed drawing of Figure 2, it matters whether \( x_L^1 \) is smaller than, equal to or greater than \( x_R^0 \), the value of \( x \) such that \( P^R(x_R^0) = 0 \). The figure is drawn with \( x_R^0 < x_L^1 \), which implies \( 2\bar{c} > A \), which is stronger than the condition in the text.
FIGURE 1: SEQUENCE OF EVENTS.
(a) Probabilities of policy proposals by incumbents I. and R.

(b) Probabilities of reelection as a function of policy proposals.

(c) Probabilities of Implementation: $P_I(x) = Q_I(x) - P_I(x)$

(d) $F(x) = P_I^R(x) - P_I^L(x)$

FIGURE 2
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