

DISCUSSION PAPERS IN ECONOMICS

Working Paper No. 08-14

The Effects of Political Competition on the Feasibility of
Economic Reform

David Pinto

The Effects of Political Competition on the Feasibility of Economic Reform Job Market Paper

David Pinto

March 9, 2009

Abstract

This paper explores the effects of political competition on reform feasibility. In contrast to previous models, this paper shows that desirable reform may fail even in the absence of economic losers or informational asymmetries, as a result of democracy. Even if reforms were to generate

party. In that context, the elections of Abraham Lincoln, Franklin Roosevelt and Ronald Reagan have been studied as decisive. In all these examples, leaders presided over important changes to the economic structure: in the case of Lincoln, emancipation led to a change in economic power from the agricultural South to the industrializing North; Roosevelt's New Deal transformed the role of government from into an active player needed to stabilize, regulate and in

sented by a party. Parties share control of the legislative branch. There is the possibility to enact an institutional reform which increases the overall productivity of the economy. While the reform is costless to implement, it only gets enacted if both parties support it. Although this sounds like a stark assumption, it is basically used to capture the idea that in functioning democracies, opposition parties have a degree of veto power over decisionmaking. This can be especially true in the case of Constitutional amendments, which may require a support of two thirds of Congress to take place. Even in the case of the U.S., the filibuster can act as a de facto tool to veto policy.² Finally, parties differ in their implementation ability, which in turn determines the value of reform. There can be several reasons for one party to have greater implementation efficiency. Leadership may be one reason.³ This can be manifested as competence or honesty, and maybe crucial in times of institutional transformation and political change. Knowledgeably about the reform, perhaps from previous experience implementing the reform at a local or state level or from technical competence, could also explain efficiency differentials. Alternatively a party may be more credibly committed to the reform because of ideology or political ties. Finally, an important source of differences in implementation efficiency could come from incumbency advantage, in which the incumbent has experience dealing with the bureaucracy that would be in charge of implementation.

As voters observe whether a reform was enacted or not, they vote for the party that maximizes their expected utility. Two considerations can affect the voters' preferences: class identity, in which voters elect the party that represents them, since it chooses the voters preferred fiscal policies and implementation ability, in which voters may vote for the party that has the ability differentials are sufficient to ensure that economic benefits offset fiscal losses. Different abilities therefore can generate electoral asymmetries from reform. Some readers may be troubled with the timing of events, in which reform takes place after the election. There can be several ways to justify this assumption. The first is that in competitive democracies there is always an election taking place in the distant future. The second is that important reforms take time to implement: sometimes years if not decades, which means that they have consequences for future elections.⁴ Another important thing to keep in mind is that while in this model ability differentials generate the electoral asymmetries, there may be several other reasons why reform may generate electoral asymmetries and the same idea holds. For example, reform may signal the ability or level of commitment of an incumbent party, especially when the party's campaign promises in the previous electoral cycle included those reform promises. Alternatively, when promises

strictly Pareto improving reform. While in practice, we live in an uncertain world and all reforms have redistributive consequences, it is easy to think of examples where it is possible for this normalization to arise. Consider the case of reforms favored by a supermajority. In that case, as Jain and Mukand (2003) argue, the reform is ex-ante welfare improving for all individuals: the benefits offset the probabilities of being an economic loser, and thus everyone wants reform. Alternatively, if the reform benefits a minority, the losers may tax the winners as suggested by Jain and Mukand (2003), Besley and Coate (1998) and Acemoglu and Robinson (2000). In any case, by making reform Pareto improving and making information complete and public, I show that even in the absence of informational frictions and economic losers, reform may still fail due to electoral calculations.

Other papers study the effect of political competition on policymaking efficiency and focus on problems of commitment credibility: in these models, the incumbent may choose inefficient policies to tie her successor's hands.⁹ In contrast to those models, in this paper, the inefficient policy (blocking the reform) is used to prevent the opposing party from winning rather than to limit its policy space once it takes control of power.

The remaining of the paper proceeds as follows: the next section presents and solves the benchmark specification. Section 3 offers a discussion in which the main assumptions of the model are justified or relaxed. Section 4 summarizes the main findings of the model and the extensions and offers some concluding remarks.

2 Model

2.1 Agents

There are two types of agents in this economy, voters and parties.

2.1.1 Voters

There are $N > 2$ voters of two types who differ only in their productive ability: rich, r and poor, p . Rich voters have high productivity ability, k_r , and make up $\alpha < \frac{1}{2}$ of the population; poor voters have low productive ability where $k_p = \frac{1}{\alpha} k_r$ and make up $1 - \alpha$ of total population, where $\alpha \in (0, 1)$. All voters are endowed with a unit of labor, whose value

efficiency of the party that takes control of the executive by winning the election and implements the reform. The technology of the economy therefore becomes:

$$Z = \begin{cases} \theta & \text{when both parties support reform and the high ability party is elected} \\ \delta & \text{when both parties support reform and the low ability party is elected} \\ 1 & \text{when either party blocks reform} \end{cases} \quad (5)$$

where $\theta > \delta > 1$. It is assumed that the party of the rich is the high ability party.

2.3 Taxation and Public Sector Production

A proportion of private production is employed in the production of a public good. The production of the public sector good is solely financed by a linear tax on private production. Let τ denote the tax rate faced by voters. A voter of class i pays τY_i and consumes the rest, $y_i = (1 - \tau)Y_i$. Public sector production equals total public revenue. That is,

$$g = N[\tau Y_r + (1 - \tau)Y_p] = Z \quad (6)$$

The tax rate is determined by the party that wins the election.

2.4 Timing of Events

1. Party abilities are revealed to all agents. Parties simultaneously choose whether to support or block the reform.
2. Rational forward-looking voters simultaneously vote to elect the party that maximizes their expected incomes. Voting is costless and mandatory. If both parties offer the same level of utility to a given social class of voters, then voters split their vote evenly. If the poor split their vote in half then rich individuals act as tie-breakers. If both parties offer the same levels of income to both social classes, then the election is decided by a fair coin toss.
3. The winning party chooses its optimal tax policy, τ_j^* where j denotes the class identity of the winning party.¹²

2.5 Solving the Model

2.5.1 Reexpressing Utility Functions

The voter's utility function is reexpressed as an indirect utility function (Equation 2) in terms of τ .

$$U(\tau; k_i; Z) = f(Z)^{\frac{1}{2}} + [(1 - \tau)Zk_i]^{\frac{1}{2}}g \quad (7)$$

¹²See section 3 for a discussion on the timing of events.

Claim 1 The utility function is homogeneous of degree one on institutional development, Z .

Proof. $\frac{\partial U}{\partial Z} = \frac{U}{Z}$ () $U = Z \frac{\partial U}{\partial Z}$. ■

The utility can be reexpressed as:

$$U(\tau; k_i; Z) = Z f\left(\frac{\tau}{Z}\right) + [(1 - \tau)k_i]^{\frac{1}{2}} g \quad (8)$$

This formulation is convenient because it explicitly shows the reform is strictly welfare improving: taxation decision is independent from institutional development and $\frac{\partial U}{\partial Z} = \frac{U}{Z} > 0$.

The parties' utility function (equation 3) is therefore:

$$U(\tau; k_i; Z) + r \quad (9)$$

The model is a subgame perfect Nash equilibrium. It is solved backward induction. In the last stage of the game, the winning party chooses the tax rate that maximizes the utility of its constituents.

2.5.2 Stage 4. Selecting the Optimal Tax Policy.

The winning party solves:

$$\max_{\tau} U(\tau; y_i; Z) + r \quad (10)$$

Claim 2 The solution to the maximization problem is $\tau_i^* = \frac{1}{k_i}$.

Proof. Necessity: The first order condition is set equal to 0

6. 1 [(=)] p d g t

2.5.3 Stage 3. Electing a Party

At this point voters have observed: whether the reform was enacted, and the implementation efficiencies and class identities of both parties. Therefore, voters can perfectly infer their expected payoff from electing either party. They elect the party that maximizes their expected utility.¹³

Let

$$Z^{\text{elect}} = \frac{(1 + k_r)(1 + k_r)}{(1 + \frac{1}{2}k_r)} \quad (11)$$

Claim 4 $\frac{k_r}{\frac{1}{2}k_r} > 1$.

Proof. $\frac{k_r}{\frac{1}{2}k_r} > \frac{k_r}{k_r} > 1$. ■

It follows from the previous claim that $Z^{\text{elect}} > 1$.

Claim 5 The party of the rich is elected if and only if reform is enacted and $Z^{\text{elect}} > 1$.

Proof. Notice that support from the poor is a necessary and sufficient condition for the party of the rich to get elected. Suppose first that no reform is enacted.

The poor elect the party of the rich if and only if $\frac{k_r}{\frac{1}{2}k_r} > (1 + k_r)$, $1 > \frac{k_r}{k_r}$. It follows from the previous claim that this is a contradiction.

Now suppose that the reform is enacted. The poor elect the party of the rich if and only if $\frac{k_r}{\frac{1}{2}k_r} > (1 + k_r)$, $\frac{k_r}{\frac{1}{2}k_r} > 1 + k_r$. ■

Since $Z^{\text{elect}} > 1$, having higher ability to implement an enacted reform is not a sufficient condition for the party of the rich to get elected when a reform has been enacted. The party of the rich requires a substantial differential in ability in order to get elected by the party of the poor. In other words, the electoral benefits of being a majority party for the party of the poor are sufficient to ensure victory, as long as the ability differentials between the two parties are low.

Now let us focus on the decision to support by the parties.

2.5.4 Stage 2. Supporting or Blocking Reform

Let us first study the decision to support by the party of the rich.

Claim 6 The party of the rich always supports reform (i.e. supporting reform always weakly dominates blocking reform for the party of the rich).

¹³As stated in the timing of events, since the poor are majority, the party that can offer the highest utility level to the poor wins. If they both offer the same level, then the party that maximizes the utility to the rich gets elected.

Proof. It follows from the previous claim that if both parties support and $H > L$ (Z^{elect}), then the party of the poor wins and the payoff for the party of the rich is $L - \frac{1}{2} \frac{k_r^2}{k_r}$. If both support and $H < Z^{\text{elect}}$, then the party of the poor wins and the payoff for the party of the rich is $H(1 + k_r) + R$ and if either party blocks reform, the payoff to the party of the rich is $-\frac{1}{2} \frac{k_r^2}{k_r}$. Since $-\frac{1}{2} \frac{k_r^2}{k_r} < L - \frac{1}{2} \frac{k_r^2}{k_r} < H(1 + k_r) + R$ it follows that the rich always supports reform. ■

The intuition is simple: the party of the rich can never win the election if there is no reform. Since reform is strictly welfare improving, the rich always want reform to take place. The interesting question then becomes: When does the party of the poor support or block reform?

Let

$$Z^{\text{enact}} = \frac{(1 + k_r + R)(1 + k_r)}{(1 + \frac{1}{2} k_r)} \quad (12)$$

Claim 7 The party of the poor blocks reform whenever $H > Z^{\text{enact}}$ and supports reform otherwise.

Proof. It follows from the previous claim that the party of the rich always supports reform. Suppose that $H < Z^{\text{enact}}$ it follows that

whenever the party of the poor has lower implementation efficiency and political rents are sufficiently high to entice opportunistic behavior by the low efficiency party. Let \underline{R} denote the minimum level of political rents under which there is opportunistic behavior by the party of the poor.

$$\underline{R} = (Z_p - 1)(1 + k_r) \quad (13)$$

Both parties choose whether to support or block the reform. For the high efficiency party, the decision is trivial. The reform raises the overall welfare of voters. It also increases its opportunities of getting elected, which benefits it both directly through political rents and indirectly through the effect on fiscal policy. For the low efficiency party, the decision involves a tradeoff: reform can improve welfare of its constituents but it can make constituents vote for the high efficiency party if reform gains are greater than fiscal losses. When the electoral

bb.i) Whenever $\theta_H > 2(\theta_L; Z^{\text{elect}})$, the party of the poor wins the election, as efficiency differentials are insufficient to offset fiscal policy differentials. The reform gets implemented by the low efficiency party.

bb.ii) Whenever $\theta_H < Z^{\text{elect}}$ the party of the rich wins the election as efficiency differentials are sufficient to entice the poor to vote for the party of the rich and efficiency gains are sufficient to offset political and fiscal losses for the party of the poor.

Proof. Omitted. a) follows from claim 8. b) Follows from direct application of claims 5, 6 and 7 and remark 2. ■

It is important to understand how different parameters affect the feasibility of reform. When $\theta_H < Z^{\text{elect}}$ there is no incentive to block reform, as there are no electoral costs attached to reform. This case is analogous to either a dictatorship or to a regime where there is a majority or monopolistic control of electoral outcomes. If the majority party has a higher ability, it becomes electorally invulnerable.

The interesting solutions arise when $\theta_H > Z^{\text{elect}}$. What affects the possibilities of having a party opportunistically block reform? By simple manipulation of equation (13) it can be shown that holding the high efficiency level, θ_H , and political rents, R , constant, a smaller differential in efficiency levels (i.e. a higher θ_L) reduces the area over which reform is blocked. The intuition is that increasing θ_L increases the area over which the differential in abilities is insufficient to offset the differences in fiscal policies. Conversely, increases in either income, k_r , or reductions of inequality (increases in β) reduce the area over which reform is blocked. This happens because increasing β or k_r raises

done extensive research concerning the expected value of the reform. Finally, the profile of the party leadership or the party ideology might be more appropriate for implementing a given reform.

There is an equally interesting explanation which focuses on reputation rather than efficiency or experience as sources of asymmetric electoral gains when reform is implemented. After that party captures executive control, voters assess its performance on whether reforms were successfully enacted and implemented. If the opposition is able to block these policies or render them either ineffective or costly, it hurts voters' assessment of the incumbent's performance: Successful implementation translates into high political gains for the incumbent. This generates incentives for the opposition to block reform. This behavior could explain the reform paralysis that Mexico has faced since 1997 when the party in power lost majority control of Congress. President Clinton also experienced a similar situation when failure to implement his ambitious health reform program led the Democratic party controlling Congress to block the reform.

counter argument would be that even within the restrictive set of fiscal rules that a legislature imposed on the executive there might be differences in fiscal policies. For instance, a party representing the poor might use tax proceeds for projects that benefit the poor disproportionately, like in building elementary schools in poor neighborhoods. The party of the rich, on the other hand, might reduce social programs to finance the introduction of technological infrastructure which might increase the productivity of capital or to subsidize programs targeted towards the rich like tertiary education (e.g. Fernandez and Rogerson (1995)) or export subsidy programs. Alternatively, executive from different parties might target fiscal law selectively. A party representing the rich might prosecute black markets while a party representing the poor might focus on corporate evasion. So even under the most restrictive scenario, the actual value of fiscal policies might differ across parties. A second reason why parties might deviate from a Downsian equilibrium fiscal policy is the existence of multiple policy issues (e.g. Grossman and Helpman (2001)). Furthermore, the choice of off-center political or fiscal stances might be justified as strategic deterrents of new entry into the political arena. Even then it is interesting to see how relaxing the assumption of fiscal divergence affects the results. Fiscal convergence can be achieved by either making a) preferences converge which can occur if either the elasticity of substitution is 0 or if the preference weights for the public good are either 0 or 1, if b) both parties cater to the same constituency or if c) the tax rate is fixed institutionally.

3.2.1 Extension 1: Fixed Fiscal Policy

Without loss of generality it is assumed that the tax rate is fixed institutionally, $b \in [b_r^*, b_p^*]$.¹⁴ Parties only compete on implementation efficiency.

A small change in notation is used to ease exposition. Let k_L and k_H denote the earning ability of the social class that the low and high efficiency parties represent (e.g. if the party of the poor is the high efficiency party, then $k_L = k_r$ and $k_H = k_p$).

The timing of events is as follows:

In period 1, nature determines the tax rate, b , as well as the implementation efficiencies and class identities of the parties. In period 2, parties simultaneously decide whether to enact or block reform. In period 3, the election takes place. In period 4 the winner implements reform if it was enacted in period 2.

Claim 9 When no reform takes place, voters elect each party with probability $\frac{1}{2}$. When reform takes place, the high efficiency party is elected.

Proof. Since the tax rate is fixed, $U(b; k_i; Z) = ZU(b + (1 - b)k_i)$ for $i = p, r$ regardless of the class identity of the party. Since $Z = 1$, under each party

¹⁴These are all multiple points of equilibria for taxation if changes to the tax policy require agreement from both the party of the rich and the party of the poor: Recall that voters have single peaked preferences with respect to taxation. Now suppose that the status quo rate is below (above) the range $[b_r^*, b_p^*]$. In that case, increases (decreases) in taxation to point b_r^* (b_p^*) would represent Pareto improvements. If on the other hand, taxation was within the range $[b_r^*, b_p^*]$ the party of the rich (poor) would not agree to any increases (decreases).

when reform is blocked which makes all voters indifferent, and equal to U_H and U_L under the high efficiency and low efficiency parties respectively. Since $U_H > U_L$, voters prefer, and thus vote for the party with high efficiency. ■

This claim is the analogous to claim 5 in the benchmark and studies voters' behavior. Since class advantage has disappeared, each party can get elected with equal probabilities in the absence of reform. Reform enactment, tilts electoral outcomes in favor of the high efficiency party. The decision to support reform by the low efficiency party depends on whether the utility from supporting reform is sufficient to offset the electoral losses.

The low efficiency party supports reform if and only if

$$U_H U(b + (1 - b)k_L) - U(b + (1 - b)k_L) + \frac{R}{2} \quad (14)$$

This equation is analogous to claim 7 in the benchmark. The main difference is that now the identity of the party willing to block is no longer limited to the party of the poor. Since there is no longer class advantage, any party can win the election, the low efficiency party has electoral incentives to block reform regardless of its class identity.

Claim 10 The high efficiency party always supports.

Proof. If the best response for the low efficiency party is to support reform, then the payoff for the high efficiency party when it supports reform is $U_H U(b + (1 - b)k_H) + R > U(b + (1 - b)k_H) + \frac{R}{2}$, which is the expected utility it gets when it blocks reform. When the best response for the low efficiency is to block then the high efficiency party weakly prefers (or is indifferent) between supporting and blocking. ■

This claim is analogous to claim 6. The decision for the high efficiency party is trivial, since it can only benefit from reform (both electorally and in terms of economic efficiency) it always supports reform.

From the previous claims, a central proposition can be constructed.

Equilibria Under a Fixed Tax Rate

Proposition 2 When class advantage is suppressed, there can emerge the following political equilibria:

A. If the party of the poor has higher efficiency, there can be two outcomes:

A.i) When $R \leq 2 U_H(b + (1 - b)k_r)$, the party of the poor gets elected and reform is implemented by the party of the poor, who has the high level of efficiency.

A.ii) When $R > 2 U_H(b + (1 - b)k_r)$, each party gets elected with probability $\frac{1}{2}$, and reform is blocked by the party of the rich.

B. If the party of the rich has higher efficiency, there can be two outcomes:

B.i) When $R \leq 2 U_H(b + (1 - b)k_r)$, the party of the rich gets elected and reform is implemented by the party of the rich, who has the high level of efficiency.

A.ii) When $R > 2 \frac{H}{H + (1 - b) k_r}$

reform, it follows from claim 9 that if the high efficiency party accepts the offer, it wins the election. For that reason, the high efficiency party compares the political and efficiency benefits of reform to the fiscal concessions it has to make in order to ensure reform. That is, it compares its expected utility levels under each alternative and accepts the low efficiency party's offer when

$$V(\theta; k_H; \tau_H; R) \geq U(b; k_H; 1) + \frac{R}{\dots}$$

Equilibria Under Fiscal and Institutional Logrolling

Proposition 3 When there is fiscal and institutional logrolling, there can emerge the following political equilibria:

The interesting difference with respect to the benchmark is that when logrolling is present, the high efficiency party, may be induced into opportunistic behavior by agreeing to an undesirable fiscal policy in exchange for the electoral benefits from reform.

Another point to discuss is the effect of informational asymmetries.

3.3 Informational Issues

In contrast with models that require informational asymmetries to justify inefficient policies, even under perfect information, politicians still block good policies for political reasons. Uncertainty gives more credence to the story: Suppose that parties have conducted research on the potential benefits and costs of a given reform. If voters believe that one party has better chances of successfully implementing reform, asymmetrical political gains arise. Since information is private, the low efficiency party might underestimate the value of the reform, while the high efficiency party might overestimate them.

In order to study the effects of uncertainty and informational asymmetry, a simple extension is presented in which uncertainty and informational asymmetry are added to a fixed tax specification.¹⁵ In this extension I just allow exogenous probabilities to exist for the two different parties and make those private information. The standard approach would be to make the probabilities and endogenous process which may depend on a policy choice by the parties, but those are complications that do not add to the explanation.

3.3.1 Extension 3: Informational Asymmetries

The tax rate is fixed as in the first extension of the model. There is an institutional reform with uncertain outcomes: if reform is successful then the level of institutional efficiency increases to Z

In terms of efficiency, reform should be enacted if

$$E[Z] \geq q_H Z_S + (1 - q_H) Z_F \quad (17)$$

Parties compare their expected utility when reform is enacted and when it fails in order to decide whether to support or block reform. The expected value of an enacted reform for the high ability party is $E[Z]U(b; k_H; 1) + R$ as it wins the election versus $U(b; k_H; 1) + \frac{R}{2}$ where it wins the election with a probability $\frac{1}{2}$. For the low ability party, when reform is enacted, expected utility is $E[Z]U(b; k_L; 1)$ versus $U(b; k_L; 1) + \frac{R}{2}$ when it is not.

As a result, the high ability party supports reform when

$$2(E[Z] - 1)U(b; k_H; 1) \geq R \quad (18)$$

and; k

Remark 5 The high efficiency party may unsuccessfully try to opportunistically support bad reforms (i.e. when $E[Z] \geq \frac{R}{U_{b;K_L}}; 0$) but it is preempted by the low efficiency party. The low efficiency party, on the other hand can successfully block good reforms opportunistically (i.e. when $E[Z] \geq 0 > \frac{-R}{U_{b;K_H}}$)).

This is an unexpected consequence of checks and balances.¹⁶

This extension uncovers another source of opportunistic behavior. The main difference with the benchmark is that voters cannot tell whether the high ability party opportunistically supporting an undesirable reform or whether the low efficiency party is opportunistically blocking a desirable reform from being enacted. Uncertainty and informational asymmetries present a justification why parties may get away with blocking beneficial reform without getting punished by constituents within a repetitive game.

Another justification for unpunished opportunistic blockage of reform has to do with concentration of political power, and is implicitly assumed in this model. When there are limited political actors due to high levels of entry, voters face limited options. If voters have preferences that depend on both the "moral character" of a party or candidate and its policies, voters are forced into accepting "character flaws" as long as the policies are sufficiently similar to those of the voters.

The other main factors through which political competition and reform inefficiencies have been linked are rent expropriation and special interest groups.

3.4 Rent Preservation and Special Interest Groups

Rent preservation is perhaps the most popular explanation for reform failure. When reform leads to economic losses by some groups in society, these may oppose reform. An example of a reform leading to asymmetric economic gains and losses is the reduction of trade barriers (e.g. Fernandez and Rodrik (1991), Jain and Mukand (2003)). In that case the protected sector may vote against reform due to potential losses.

In the context of this model, since the differing groups are the rich and the poor one could think of many reforms that benefit the rich at the expense of the poor. For example, the adoption of new technologies may create a skill bias which hurts unskilled labor. Alternatively, liberalization of the labor market through immigration reform could reduce unskilled labor's real wages by increasing supply. Other reforms benefit the poor at the expense of the rich. For example if oligopolistic profits arise due to regulatory and institutional rules that discourage competition and innovation, regulation changes would benefit consumers at the expense of the oligopolist. Many of the privatization of the 1990's led to the establishment of rich oligopolists in developing countries in

¹⁶Aghion, Alesina, and Trebbi (2004) discuss the issue of optimal checks and balances by focusing on the tradeoff between granting the incumbents sufficient power to ensure reform and restrain them to prevent expropriative abuse. This model shows that electoral considerations exacerbate that tension.

sectors such as telecommunications, energy and construction materials. Rules to limit the power of oligarchs in strategic sectors would benefit consumers.

Two sources of inefficiencies dealing with rent preservation have been identified in the literature: potentially beneficial reforms may be blocked if they hurt the pivotal decisionmaker (either directly as in Fernandez and Rodrik (1991) or indirectly by affecting voter's distribution as in Jain and Mukand (2003) and Besley and Coate (1998)). Alternatively, reform may be blocked if it hurts small groups which might face different organizational incentives than large constituencies. Small, homogeneous groups are more efficient at solving collective action problems than large heterogeneous groups: small size makes enforceability easier while homogeneity leads to converging incentives and large concentration of benefits (Olson (1965), Olson (1982)). Consequently special interest groups, may utilize their organizational ability to grant either pecuniary or political benefits to political parties. These types of explanations have been studied in the context of trade protection (Grossman and Helpman (1994), Grossman and Helpman (1996)) and the undertaking of inefficient public projects (Coate and Morris (1995)).

3.4.1 Extension 4: Rent Preservation and Special Interest Groups

In contrast with the previous extensions, class identity matters, so the tax rates, are decided by each party to cater to their respective constituencies. The benchmark specification is thus employed with two minor changes: 1) Reforms now become costly and costs are borne by one of the social classes and 2) rich voters are allowed to form special interest groups which may bribe either party in order to get their desired policy enacted.

Timing of events is as follows: 1) Class identities and implementation efficiency levels are realized and observed by all agents in the economy. The identity of the cost bearers from reform is realized and observed, as well as whether rich voters can organize and offer a bribe to one of the parties in order to affect its decision concerning reform. 2) When the rich are able to organize, the rich may offer a bribe to one of the parties in order to induce support or opposition to reform. 3) Both parties simultaneously choose whether to support or block reform. If the party that is offered the bribe decides to accept the bribe offer, it simultaneously accepts the bribe and chooses the policy that rich voters prefer.²⁰ 4) Voters observe whether the reform was enacted and elect the party that maximizes their expected utility. 5) The winner of the election implements the reform if it was enacted.

This game is solved by backward induction.

There are three main parameters over which cases differ: the class identity of the high efficiency party, the class identity of the social group that bears the costs and whether there are special interest groups (i.e. whether the rich can organize effectively to bribe the parties).

For ease of exposition, each combination of class identity of high efficiency party and class identity of cost bearer are studied individually. Additionally, the effects of the existence of a special interest group are discussed at the end of each of the four cases. After all cases have been presented, a general statement discusses all the possible equilibria.

3.4.2 Case 1: The High Efficiency Party Represents the Rich, The Rich are Hurt by Reform

It follows from equation (20), that rich voters always oppose reform, so if they form a special interest group, it is employed to block reform. Let us focus on the last stage of the game.

Claim 11 When no reform takes place, the party of the poor gets elected, when reform takes place, the party of the rich gets elected.

Proof. It follows from comparing the utility of poor voters under each party, $U(\bar{c}_p; k_p; 1) > U(\bar{c}_r; k_p; 1)$. The second part of the statement follows from equation (20): Since $U(\bar{c}_p; k_r; 1) > U(\bar{c}_r; k_r; H) - c_r > U(\bar{c}_p; k_r; L) - c_r$, the party of the rich only supports reform when it leads to its electoral success i.e. $U(\bar{c}_r; k_p; H) > U(\bar{c}_p; k_p; L)$. ■

The difference with the benchmark at this stage is that the solution where the low efficiency party implements is not available. The reason is that since reform hurts the rich, the party of the rich may only accept reform if it leads to electoral

functional form, this reduced form treatment of the bribe is not without generality: in either case, there would be a reduction in the utility of rich voters to finance an increase in utility for one of the parties. This is only aggregation amongst rich voters and of no importance in terms of results.

²⁰ It is assumed that the bribe is paid simultaneously to the institutional reform decision in order to avoid credibility issues about the payment of the bribe.

gains which offset reform costs. For that reason, if efficiency differentials are insufficient to make poor voters elect the party of the rich, it has no incentives to ever support reform.

Claim 12 A necessary condition for reform to be enacted is for i) $U(r; k_p; H) - U(r; k_p; 1) \geq R - U(r; k_r; 1) - U(r; k_r; H) - c_r$ and ii) $U(r; k_p; H) - U(r; k_p; L) \geq c_r$ to hold.

Proof. ii) By contradiction, assume equation ii) does not hold. In that case, the party of the poor gets elected when reform takes place. Using equation (20) it can be shown that $U(p; k_r; L) - c_r < U(p; k_r; L) - c_r < U(p; k_r; 1)$, thus the party of the rich blocks reform. Electoral success for the party of the rich is therefore a necessary condition for reform feasibility. Assuming reform gets the party of the rich elected, reform gets enacted only when the expected utility from supporting is greater than blocking for both parties. The left part of equation i) is directly derived from the utility comparisons for the party of the poor of supporting reform and losing election blocking reform and winning election whereas the right part is directly derived from the utility comparisons for the party of the rich of supporting the costly reform and winning the election versus blocking reform and losing the election. ■

The first part of the statement argues that the economic benefits from reform for the party of the poor need to outweigh the electoral cost, while the electoral benefits to the party of the rich must offset the economic costs from reform, the

This extension differs from the benchmark in three ways: 1) the party of the rich may opportunistically support a reform that hurts its constituents in order to get elected. 2) Rich voters may either have to bribe their own party or make an unlikely alliance with the party of the poor to prevent reform. 3) When the party of the poor accepts the bribe, it is acting against the best interests of its constituents as well.

3.4.3 Case 2: The High Efficiency Party Represents the Rich, The Poor Are Hurt by Reform

3.4.4 Case 3: The High Efficiency Party Represents the Poor, The Rich are Hurt by Reform

Claim 16 Reform always fails and the party of the poor always wins the election.

Proof. The party of the poor always wins the election as $Z_p U(\bar{p}; k_p; 1) > Z_r U(\bar{r}; k_r; 1) \geq Z_p$. From equation (20) $U(\bar{p}; k_r; 1) > U(\bar{r}; k_r; 1) - c_r > U(\bar{p}; k_r; 1) - c_r$ so the party of the rich always blocks reform. ■

In this case, the incentives of rich voters and their party are perfectly aligned. Since the party has the ability to prevent reform from occurring, reform is blocked.

3.4.5 Case 4: The High Efficiency Party Represents the Poor, The Poor are Hurt by Reform

Claim 17 In the absence of special interest groups, reform is blocked.

Proof. The rich can never win the election: $Z_p U(\bar{p}; k_p; 1) > Z_r U(\bar{r}; k_r; 1) \geq Z_p$

A.i.ii) If there are special interest groups and $U(r^*, k_p; H) - U(p^*, k_p; 1) - R < \min\{N(U(p^*, k_r; 1) - U(r^*, k_r; H)), U(r^*, k_r; H) - c_r + R - U(p^*, k_r; 1)\}$, rich voters bribe the party of the poor into blocking reform. The party of the poor wins the election.

A.i.iii) If there are special interest groups and $U(r^*, k_r; H) - c_r + R - U(p^*, k_r; 1) < \min\{N(U(p^*, k_r; 1) - U(r^*, k_r; H)), U(r^*, k_r; H) - U(p^*, k_p; 1)\}$, Rg rich voters bribe the party of the rich into blocking reform. The party of the poor wins the election.

A.ii) When either $U(r^*, k_p; H) - U(p^*, k_p; 1) - R - U(p^*, k_r; 1) - U(r^*, k_r; H) + c_r$ fails or $U(r^*, k_p; H) < U(p^*, k_p; L)$, reform is blocked without the need for bribes, and the party of the poor wins the election.

B. When costs are borne by the poor and the party of the rich is the high

rich. When reform is costly for the rich, but electorally advantageous for the party of the rich, it may choose to support a reform that hurts its constituency. Consequently, it is possible to observe a strategic alliance between rich voters and the party of the poor, who block a reform which benefits its constituents in exchange for a bribe from rich voters.

4 Summary of Results and Concluding Remarks

The main result of the paper is introduced in the benchmark: the existence of political competition can have a negative effect on reform feasibility. As reform generates asymmetric electoral gains, electoral losers face incentives to block reform for electoral reasons. This result is shown under highly optimistic conditions for reform feasibility: in the absence of informational frictions or asymmetric economic costs. Several extensions are presented in order to show the robustness of results and to link the theory to the standard explanations for reform failure. As further restrictions are introduced into the model, the main result is strengthened. Additionally, different mechanisms also affect reform feasibility. The first extension relaxes the assumption of class advantage. As a result, political competition becomes fierce and opportunistic blocking of reform becomes more pervasive. In the second extension, logrolling is employed as a mechanism to mitigate electoral inefficiencies by compensating electoral losers through fiscal benefits: Logrolling reduces electoral inefficiencies to some extent but cause a different problem. Potential electoral winners are tempted into logrolling institutional reform support in exchange for fiscal concessions

Fernandez, R. and D. Rodrik (1991, Dec). Resistance to reform- status quo bias in the presence of individual specific uncertainty.

- Rajan, R. G. (2009, Jan). Rent preservation and the persistence of underdevelopment. *American Economic Journal: Macroeconomics* 1 (1), 178–218.
- Silbert, A. and K. Rogo^α (1988, Jan). Elections and macroeconomic policy cycles. *Review of Economic Studies* 55 (1), 1–16.