Political Competition in Economic Perspective

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I. Introduction and Overview of Existing Literature

Democracy, particularly with its foundation in liberal values, is widely acclaimed. Even in its narrower sense of giving scope for political competition, it is supposed to be welfare-enhancing for the citizens. The analogy from economic markets is often applied to political markets. Political scientists have, of course, long pointed to the complexities in the effects of democracy, both in aggregation of individual preferences and in accomplishing efficient outcomes in political markets. The theoretical literature on the *economic* costs and benefits of political competition is somewhat more limited. This paper is a contribution to the latter literature. Our emphasis is largely on intuitive explanations of some of the broad features of economic costs and benefits of political competition in terms of extremely simple models, and not on intricacies of particular types of voting behavior and party strategy or the multi-dimensionality of the policy space.[1]

The term "political competition" has been used in different studies to describe different things. One interpretation of political competition, which we shall refer to as *accountability for incumbents*, focuses on the process of political turnover. According to this interpretation, political competition is more intense when the public can more easily remove incumbent leaders and replace them with challengers. Note that this view of political competition is inter-temporal in nature: political competition affects the behavior of incumbent leaders today via tomorrow's threat of dismissal.

[1] Those interested in the latter should consult Persson and Tabellini (2000) and Roemer (2001).

Some of the potential benefits of this first form of political competition are straightforward: to the extent that incumbent rulers have a personal interest in maintaining power, their incentives to respond to the public's wishes are stronger when the public can more easily strip them of their power. Simply put, the public holds more bargaining power when it holds a tighter leash on incumbents. This first interpretation of political competition might therefore be the one most easily associated with the concept of political "accountability." In other words, increased political competition of this first sort increases the ease with which the public can hold incumbent rulers accountable for their actions in office.

However, as the existing literature has noted, the public's ability to threaten incumbent rulers with dismissal can also backfire if the threat of dismissal becomes too strong. This risk of backfire can emerge wherever elections take place at discreet intervals (as in most real world settings). The problem arises out of the fact that the behavior of an incumbent ruler *between elections* can be disciplined by his desire to gain re-election, but only to the extent that he views re-election as a realistic possibility. As a result, when political competition based on political turnover makes re-election sufficiently unlikely, an incumbent may purposefully abandon any lingering hopes of re-election in order to extract the maximum rents possible during his remaining time in office. Thus a too strong threat of future dismissal may induce a wholesale shift in political incentives towards the short term. It is the public's need to dissuade incumbents from engaging in massive looting that lends incumbents what Persson, Roland, and Tabellini (1997) term "power between elections." In particular, the public may need to

tolerate *some* graft by legislators, even if it is within their powers to punish it with dismissal from office, in order to stave off wholesale graft.

In a recent series of papers, Acemoglu and Robinson (2000 and 2002) have attributed another potential cost to political competition based on political turnover.[2] Acemoglu and Robinson focus on incumbent rulers' incentives to undertake public investments. In their models, public investments[3] are economically productive but politically destabilizing, meaning that an incumbent ruler must balance his incentive to expand his tax base (through investment) against his incentive to keep his position secure (through non-investment). In settings marked by low levels of political competition, the latter consideration plays a small role: the incumbent faces little risk of losing power in any case, and is therefore emboldened to undertake investments that grow his empire. However, when political competition is more intense, the destabilizing effects of public investment weigh more heavily on the incumbent, leading in many cases to a non-investment outcome.

The Acemoglu-Robinson framework involves an assumption linking investment by an incumbent to an exogenous reduction in the entry costs that his challengers face.

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[2] In a recent paper, de Figueiredo (2002) advances a novel argument concerning the potential benefits of political turnover. In his model, two competing parties have differing preferences for policy. In each period of an infinitely repeated game, one party takes office with probability α while the other takes office with probability $1 - \alpha$, where α is determined exogenously. When in power, a party has the power to introduce its preferred policy, as well as to revoke the preferred policy of its opponent. Alternatively, the two parties can choose to "cooperate" by leaving both policies intact regardless of the party in power. de Figueiredo demonstrates that such norms of cooperation, if they are to be enforced by trigger strategies, become more easily sustained as α approaches 0.5. Intuitively, the threat of punishment by trigger strategies poses a more powerful deterrent to opportunistic behavior when a party (the threatened party) recognizes that its opponent is more likely to be in a position to deliver on the threat; symmetrically, a party can more credibly threaten its opponent for defection from the cooperative norm when it (the threatening party) has a greater likelihood of attaining power.

[3] We use the term "public investment" loosely here. In Acemoglu and Robinson (2000), for example, the incumbent's prospective "investment" involves granting entry to an agent with superior technology.

In this sense, the politically destabilizing effects of public investment are assumed rather than derived. In the next section, we derive a result in the spirit of Acemoglu-Robinson but using a simple model in which the politically destabilizing effects of public investment arise endogenously. In our model in section II, there exists asymmetric information between an incumbent ruler and the public about the cost of a prospective public investment—the ruler observes the cost while the public does not. As a result, when public investment is undertaken but accompanied by high levels of government spending, the public grows suspicious that the incumbent ruler has lined his own pockets rather than faced high actual investment costs. In settings marked by high levels of political competition (in particular, where the public must incur only a small cost in order to dismiss the incumbent), the public is quick to act on these suspicions and punish the incumbent for good measure. Anticipating this, the incumbent ruler is cowed into inaction when the actual cost of public investment is high (even though it may still be small in relation to the benefit).

Echoing Acemoglu and Robinson, we emphasize the theme that political competition—based on the threat of political turnover—can introduce a tradeoff between benefits related to allocative considerations and costs related to aggregate welfare considerations. In our model, the allocative benefits arise from the fact that increased political competition disciplines an incumbent from claiming too much of the economic pie for himself. Specifically, increased political competition forces an incumbent to limit government spending whenever public investment is undertaken, so that when investment *does* take place, a larger share of aggregate surplus accrues to the public. However, because an incumbent who faces a high risk of public sanction will only undertake a

public investment when it is possible to do so *and* still keep government spending down, public investment is less likely to take place, and this lowers the expected level of aggregate surplus.

Let us turn now to a second interpretation of political competition, which focuses less on the process of political turnover and more on the extent to which *political authority is decentralized*. (We do not pursue this interpretation in this paper, as there exists a fairly large literature on it). According to this interpretation, political competition is more intense when political authority is in the hands of a larger number of agents at any given point in time. Thus, this is a view of political competition that can be more easily reconciled in a static setting, as with static models of Cournot or Bertrand competition between firms.

The potential benefits of this second form of political competition are indeed largely akin to the potential benefits of competition between firms in a market for goods or services: in this case, political decentralization creates competition on the supply side of a "market for governance," generating equilibrium outcomes that favor the demand side of that market, or the public at large. As the literature on federalism has forcefully argued, competition between authorities representing distinct political jurisdictions creates opportunities for authorities representing "efficient" political jurisdictions (e.g., those exhibiting limited corruption and sound economic policy) to attract mobile resources away from authorities representing inefficient jurisdictions, which induces authorities in each jurisdiction to become more politically efficient (for a recent overview of this literature, see the Symposium on Fiscal Federalism in the *Journal of Economic Perspectives*, Fall 1997).

But as is the case with competition between firms, competition between political authorities can generate economic costs whenever externalities are present. A prominent theoretical framework that has been used to illustrate this point is the common pool model of fiscal policy. In this type of model, decentralization of political authority places public spending decisions in the hands of fiscal authorities who compare the marginal benefits of public spending against only a fraction of the social marginal costs—the reason is that the benefits of public spending are concentrated (e.g., within a particular jurisdiction, or a particular interest group), while the costs are spread out across the whole of society. This leads, in equilibrium, to a particular version of the tragedy of the commons, where the tragedy in this case takes the form of a depleted pool of public saving (see Persson and Tabellini (2000), Drazen (2000), and references therein).[4]

Inter-jurisdictional competition to attract mobile resources may also be prone to unique frictions that render the pure "market for policy" view incomplete. As Rodden and Rose-Ackerman (1997) argue, for example, local officials may often face electoral incentives to ignore the threats of the mobile and instead make pacts with coalitions of less mobile constituents. In instances where the political clout of the immobile reflects their tighter collusion rather than their greater numbers—as is often the case with oligarchic landed interests, for example—the distortionary effects may be quite severe.

[4] A prominent set of issues, addressed by *dynamic* models of the common pool problem, concerns the existence of multiple equilibria and the possibility of path-dependency. In the model of Mondino, Sturzenegger, and Tommasi (1998), for example, sustainable consumption (via norms of cooperation) is only triggered when the common pool of resources has become sufficiently depleted, creating a situation in which the economy is destined to recurrent inflation-stabilization cycles. In contrast, Aizenmann (1998) provides a model in which sustainable consumption is more easily achieved in settings characterized by high levels of initial wealth—creating the potential for stable and path-dependent equilibria.

For a model of the trade-off between local informational advantages of decentralization and the possibility of capture by local elite, see Bardhan and Mookherjee (forthcoming).[5]

Besley and Case (1995) also consider the potential costs and benefits associated with inter-jurisdictional competition, but depart from the federalism literature's focus on competition to attract mobile resources. They consider a multi-jurisdictional model with heterogeneous elected officials. In their model, agents are *immobile*, but can deduce information about their local officials' "types" by observing the behavior of officials in neighboring jurisdictions. This leads to a situation in which local officials engage in "yardstick competition," whereby each recognizes that his performance will be judged in relation to the performance of others. This form of competition can yield benefits to the people by providing predatory officials with an incentive to "hide their true colors" (in Besley and Case, they do this by exercising restraint in taxation). However, in situations where this charade is anticipated to prove too costly, predatory officials may choose to abandon their hopes of reelection in order to grab all that they can from the public at once—in this sense, the potential costs of yardstick competition are akin to the potential costs of ignoring incumbents' "power between elections," described earlier.

[5] The literature on corruption has yielded an example of how decentralization of authority can also bring the tradeoff between allocative benefits and aggregate welfare costs that we earlier linked to political competition based on political turnover. However, the mechanism generating the tradeoff in this context is entirely different. Rasmusen and Ramsayer (1994) consider a setting in which decentralization of authority over the granting of private interest statutes reduces the bribes that self-interested legislators can secure in return for granting the statutes (an allocative benefit), but also causes the statutes to be granted too permissively (an aggregate welfare cost). In their model, decentralization sets the stage for a coordination failure between the legislators, where each legislator's dominant strategy is to grant any statute in exchange for any nonzero bribe, even when doing so generates much larger social costs. Intuitively, each legislator fears that if he does not accept the bribe (however small), another legislator will do so and he will be left with nothing. This stands in contrast to the autocratic setting, where a single ruler would appropriate all of the social value of statutes granted but also internalize the full social costs, leading to efficient choices from an aggregate welfare standpoint.

A third interpretation of political competition, which we later refer to as *electoral politics*, focuses on conflict between parties and elites to win public support. This interpretation of political competition is certainly related to both the first and second interpretations of political competition—which associate political competition with, respectively, opportunities for political turnover, and decentralization of political authority. As an example, consider the approach used by Skilling and Zeckhauser (2002) to measure the intensity of this third form of political competition. They construct a "political competition index" equal to one minus a Herfindahl index for the major political parties in a country, the latter being just a market concentration index applied to party politics. But to measure political concentration, they base their political "market share" measures on the proportion of *time* that a party was in power between 1960 and 1997—which is clearly related to the first interpretation of political competition based on political turnover.

For the sake of drawing a working distinction between the three forms of political competition that we have so far introduced, let us think of electoral politics as competition between essentially identical agents to *acquire* political power, rather than competition between those already in power and those who wish to attain power (the "accountability for incumbents" interpretation), or competition between those already in power (the "decentralization of authority" interpretation). In addition, we may note that the first two forms of political competition can exist even in the absence of well-defined parties or elites, while the third form focuses on their particular interaction.

Our focus in section III is on this third form, on electoral politics and its role in determining the political feasibility of long-term investments. Our discussion is partly

motivated by the common, but seldom formalized, perception that competition between parties and elites can often lead to what has been termed *competitive populism,* involving the use of money-power to seek short term political advantage at the expense of decisive political actions benefiting the long term.[6] We discuss the sustainability of *long-term* investments in the shadow of electoral politics. Again using a very simple modeling approach, we formalize two stories in which electoral politics can act to preclude long term investments whose *time horizons of uncertainty extend across elections*—in other words, investments that are sufficiently long-term such that there exists at least one election between the date of investment and the date of maturity. Here, we draw from the theoretical literature on the economics of reform, including Fernandez and Rodrik (1991), which has addressed obstacles to long-term investment (of which reforms constitute one example) based on time-inconsistency of preferences. The question we address is: why might certain long-term investments be rendered politically infeasible by electoral politics *even when* political parties have the power to make binding commitments to policy?

[6] To our knowledge, competitive populism has not been formally modeled as such. However, the model of Dixit and Londregan (1995) comes closest. Dixit and Londregan consider a setting in which agents at large are *ex ante* identical, but where agents from one particular sector of the economy have an opportunity to change sectors in order to achieve productivity gains. To relocate, these agents must incur upfront moving costs that will be more than offset by their post-relocation productivity gains—thus, in the absence of political distortions, they would make the efficient decision to relocate. However, the decision to relocate or not must be made before two competing political parties announce their policy platforms. When the agents choose to relocate, each party's dominant strategy at the margin is to redistribute wealth away from the relocated agents and towards other agents whose votes are up for grabs, until the *ex post* distribution of wealth is again uniform across all agents at large. Anticipating that they will therefore be unable to recoup their upfront moving costs, the agents facing the opportunity to relocate choose rationally to pass on the opportunity.

The rest of the paper is organized as follows. Section II examines some of the costs and benefits of political competition in the sense of accountability for incumbents. Section III does the same for political competition as electoral politics; subsection A showing the problems associated with long-term investments that hinge on redistributive schemes between the gainers and losers, illustrated with the political economy of protectionism, and subsection B showing a case where even investments that meet the approval of an *ex ante* majority can still be politically infeasible. Section IV concludes.

II. Accountability for Incumbents and Public Investment

As we noted in the previous section, increased accountability for incumbents would appear to carry at least one unambiguous benefit for constituent welfare: to the extent that incumbent rulers have a personal interest in maintaining power, their incentives to respond to the public's wishes are stronger when the public can more easily strip them of their power.

As a starting point, let us consider a simple example in which the public's ability to hold an incumbent leader accountable carries only this unambiguous consequence. Consider an economy with two agents: an incumbent ruler, and a representative constituent (henceforth, "the public"). The economy enters each period of an infinitely repeated game with a fixed and perishable wealth endowment of size 1. The incumbent has autocratic control rights over this pool of public wealth, and is free to choose how much of it to consume for himself versus how much of it to leave for the public's consumption; we let x_t denote the incumbent's consumption of public wealth in period t,

where $x_t \leq 1$. Assume that the utilities of both the incumbent and the public are strictly increasing in consumption.

Now, suppose that the public has the following accountability mechanism at its disposal: by incurring a cost equal to γ, it can dispose of the incumbent at period's end *and* reclaim the public funds x_t that the incumbent has channeled away for himself. If the incumbent is removed from office, his payoff from the period is zero, and he is replaced by an identical ruler in the following period. We may therefore think of the parameter γ as a measure of the ruler's accountability to the public.

It is plain to see that the equilibrium of this simple game involves the incumbent ruler consuming $x_t = \gamma$ and the public consuming $1 - \gamma$ in every period; the incumbent is retained indefinitely, but his consumption is exactly bounded by the public's cost of holding him accountable for overindulging on public funds. The parameter γ only affects allocative outcomes in equilibrium: when the public can more easily hold the incumbent accountable (when γ is smaller), it retains a larger share of the economy's rents.

Although this example is provided as the simplest possible starting point for the discussion below, two assumptions must be addressed. First, by assuming that the public can reclaim x_t whenever it chooses to replace an incumbent, we are implicitly assuming that expropriated assets are fungible. In the process, we are ruling out scenarios in which an incumbent "goes for broke" by robbing the entirety of the economy's wealth in a given period in anticipation of fleeing his post (e.g., by channeling most or all of the public treasury to offshore accounts and then seeking foreign asylum). If we were to allow for this possibility, it can be easily shown that the incumbent's per period utility would be bounded from above by not just the parameter γ, but by the maximum of γ and $1 - \beta$,

where β is the incumbent's intertemporal discount factor.[7] This consideration does not add to our present discussion, so we have chosen to abstract from it.

Second, in order to draw a stark contrast between the allocative effects of the parameter γ and the efficiency effects described next—when public investment is introduced—we have assumed that there are no deadweight losses from consumption by the state. Relaxing this assumption would of course lend an efficiency-enhancing effect to reductions in the size of the parameter γ. We ignore this mechanism in order to bring the allocation-efficiency tradeoff into starker contrast.

Public Investment and Information Asymmetry

Now suppose that, in addition to choosing how to allocate each period's endowment of public funds between himself and the public, the incumbent must also choose whether or not to undertake an investment that yields a benefit to the public. The prospective return on this investment is public knowledge, but its cost is only known to the incumbent. In particular, suppose that investment yields the public a certain utility gain of G, but carries a stochastic cost g_t, where g_t is assumed to be uniformly distributed over the interval $[g_L, g_H]$.

The timing of the stage game is as follows:

[7] The incumbent must be allowed to consume at least 1 - β if he is to be discouraged from fleeing his post with the maximum one-time payoff.

1) The ruler observes the true value of g_t, and chooses whether or not to undertake the public investment. He then chooses how to allocate the economy's remaining wealth between himself and a refund to the public.
2) The public observes whether or not investment has taken place, as well as the size of its refund, but not the actual cost of investment (and therefore not the ruler's actual consumption if investment has taken place).
3) The public chooses whether or not to retain the ruler.

Continuing to let x_t denote the ruler's gross public expenditures (including possible investment costs), the utility of the ruler is now given by

$$V = \begin{cases} x_t - g_t & \text{if investment has taken place} \\ x_t & \text{if not,} \end{cases} \qquad (1)$$

whereas the utility of the public is given by

$$U = \begin{cases} 1 + G - x_t & \text{if investment has taken place} \\ 1 - x_t & \text{if not} \end{cases} \qquad (2)$$

If the public chooses to remove the incumbent at time 3, it learns the true cost g_t of the public investment, and is in addition able to reclaim any amount that the incumbent ruler has skimmed off the top beyond the actual cost of the investment.

Equilibrium

The key addition that we have now introduced to the baseline example is not the public investment opportunity *per se*, but rather the asymmetric information that surrounds the cost of the investment. Suppose that there was no information asymmetry, and that the cost of the investment was public knowledge. In this case, it is clear that the public would replace the ruler if and only if $x_t \geq g + \gamma$. In addition, the cost parameter g would have no efficiency implications: the incumbent would be always willing to undertake efficient investments, as his private payoff would be independent of g.

To see the implications of information asymmetry surrounding g_t on both the equilibrium distribution of rents and the incumbent's incentives to undertake public investment, let us start at the end of the stage game, when the public must choose whether or not to remove the incumbent. Note that the presence of information asymmetry is relevant to the equilibrium if and only if public investment takes place—when there is no public investment, the public is able to deduce the exact consumption of the ruler. Suppose that investment has taken place.

In equilibrium, the public will choose to remove the incumbent if and only if the public's refund falls below some threshold level. At the same time, the ruler will choose to undertake the public investment if and only if the cost of investment g_t falls below some threshold level $g^* < G$, where g^* is the endogenously-determined maximum level of g_t under which the ruler can offer the public a large enough refund to keep his job while still remaining at least as well off as he would be in the absence of investment. The ruler's payoff in the presence of investment is therefore equal to

$$V = g^* - g_t, \tag{3}$$

while the public's payoff is equal to

$$U = 1 + G - g^*. \tag{4}$$

From equations (3) and (4), we see that the ruler always "implicitly reports" an investment cost of $g_t = g^*$ by offering a refund of $1 - g^*$ to the public. This is intuitive, since the incumbent has no incentive to offer the public a larger post-investment refund than is necessary to avoid sanction, and by definition, costs larger than g^* make investment irrational for the ruler.

Turning to the public's decision to remove or retain the incumbent, the public recognizes at time 3 that the incumbent will have chosen to invest at time 1 if and only if g_t lies below g^*. It will therefore choose to remove the incumbent if and only if

$$\mathrm{E}[(g^* - g_t) \mid g_t \leq g^*] \geq \gamma, \tag{5}$$

where the LHS of equation (5) is the public's expected payoff from sanctioning the incumbent (the expected difference between the purported cost of the public investment and the actual cost, conditional on the latter being smaller than the former). Given our assumptions about the distribution of g_t, the level of g^* that leaves the public indifferent between removing and retaining the incumbent is

$$g^* = 2\gamma + g_L. \quad (6)$$

Inserting equation (6) into equation (3) and (4), we see that reductions in the public's cost of sanctioning an incumbent (decreases in γ) cause a shift in post-investment rents away from the incumbent and towards the public, resulting from decreases in g^*. However, because an incumbent will choose to undertake public investment if and only if $g_t \leq g^*$, the public's ability to keep a tighter rein on the incumbent also decreases the likelihood of the public investment being undertaken in the first place.

The intuition behind the investment-stifling effects of increased accountability for incumbents is straightforward. When the public can sanction incumbents at a low cost, it is quick to act on suspicions of fiscal misconduct. Anticipating this, incumbents choose rationally to pass up high cost investment opportunities (even if the cost is still small in relation to the benefit) in order to avoid raising those suspicions of fiscal misconduct. In essence, an incumbent who knows that he can be sanctioned on a whim is cowed into inaction.

Note that the incumbent's incentives for investment depend only on the characteristics of the cost distribution (in particular, the lower bound of the distribution g_L) and the public's cost of sanction γ, and are therefore independent of the benefit from investment G. It is for this reason that the public's ability to sanction incumbent leaders at a low cost can backfire, particularly when the benefit from investment G is high in relation to typical investment costs. Clearly, there always exists a high enough level of G

for which the public could make itself better off it could credibly commit to *never* sanction incumbents, conditional on investment taking place.

III. Electoral Politics and Long-Term Investment

In an influential paper, Fernandez and Rodrik (1991) demonstrated that *ex ante* uncertainty about the identities of the eventual "winners" and "losers" of a prospective economic reform can lead to non-adoption of the reform by majority vote, even when (i) all agents are risk-neutral and (ii) it is common knowledge that a pure majority would stand to benefit from the reform *ex post*. The core intuition from their model is quite simple, and is easiest to illustrate through an example. Suppose that a third of the agents in an economy stands to gain $6 per capita from a prospective reform, while each agent from the remaining two-thirds of the population stands to gain $3 with probability one-half and lose $6 with probability one-half. The reform therefore promises to bring a net gain in social welfare—namely, an increase in per capita wealth of (1/3)$6 + (1/3)$3 – (1/3)$6 = $1. In addition, it is clear that a majority (two-thirds) will eventually benefit from the reform. However, since agents who face uncertain gains from the reform (who also constitute two-thirds of the population) attach a negative expected value to the reform, or (1/2)$3 – (1/2)$6 = – $1.5, they will defeat the reform as a pure majority.

Efficient outcomes could potentially be achieved in the Fernandez-Rodrik framework through the introduction of either one of two mechanisms. The first would involve delegation of authority—namely, taking the investment decision out of the hands of the majority and instead placing it in the hands of a third party *who internalizes its*

aggregate welfare implications. It is clear, for example, that an autocrat who has the power to impose a tax rate of $t > 0$ would choose to adopt reform in the example above, as his expected gain from doing so would be exactly $\$t$ per capita. In this sense, autocracy again provides a simple solution to efficiency concerns, even though it does so at the expense of allocative concerns.

Efficient outcomes might alternatively be achieved with the aid of redistributive transfers—under the assumption that investment promises to bring a net gain in aggregate welfare, there always exists a rent sharing arrangement that promises to leave everyone in the economy better off. Thus, if commitments could be made at the *ex ante* stage to institute the appropriate transfers from the gainers to the losers *ex post*, the public at large would itself internalize the aggregate welfare implications of the investment decision.

In this section, we consider the manner in which electoral politics can pose obstacles to long-term investment even when (i) political elites *do* internalize the aggregate welfare implications of investment, and (ii) they also have the ability to make binding commitments to redistributive policy. The central theme is that electoral politics can pose a threat to long-term investments which feature uncertainty that extends across election cycles. More precisely, we consider investments that are sufficiently long term such that there exists an election *after* the investment is made but *before* the investment matures.

We begin by considering investments of the type considered by Fernandez and Rodrik—namely, investments that are disliked by a majority *ex ante* even though they are anticipated to benefit a majority *ex post*—and we ask whether redistributive schemes that allow all constituents to share in the net gains from investment can be made politically

feasible. We show that in the presence of electoral politics, the answer may be *no*. In our model of subsection A, it is precisely the *ex post* minority status of the losers, coupled with the fear among an *ex ante* majority that they will belong to this disenfranchised group in future rounds of electoral politics, that poses a barrier to investment. The nature of electoral politics therefore undercuts the state's ability to resolve problems of coordination failure among the public at large.

We then show that electoral politics can even thwart long-term investments that meet the approval of an *ex ante* majority. In particular, we demonstrate that such investments may prove politically infeasible whenever politicians have the ability to divest prematurely in order to finance short-term spending programs that are economically inferior but free of uncertainty. In our model of subsection B, the nature of electoral politics induces politicians to trade off long-term welfare considerations in order to offer guaranteed payouts to today's voters. Moreover, we show that the public may choose collectively to tolerate this behavior even when all agents are risk-neutral.

A. Electoral Politics and Time-inconsistency of Redistribution Schemes: An Application to Trade Reform

We now describe a simple story of electoral politics in the context of the types of investment opportunities considered by Fernandez and Rodrik. We frame the discussion in the language of trade reform, but our interest extends to other sorts of long-term "investment" opportunities that require promises of *ex post* redistribution in order to become feasible *ex ante*.

In this simple model, the confluence of uncertainty, majority rule, and political turnover create a situation in which protectionist policies are instituted due to a common fear among individuals who constitute a political majority *ex ante* that they will belong to an overlooked political minority *ex post*. This inconsistency between the interests of the *ex ante* versus *ex post* political majorities poses a simple problem of time inconsistency for competing political parties hoping to resolve a prisoners' dilemma-type equilibrium.

Consider the following two-period model. The economy is composed of two distinct types of agents, capitalists and workers. Let β denote the population share of workers, where we assume that $\beta \geq 0.5$. The economy is initially closed to trade. In the absence of trade, all agents—capitalists and workers alike—have a per-period wealth endowment equal to w. If the economy is instead opened to trade, capitalists can reinvest their endowments in order to earn $w_c > w$, but workers face uncertain returns depending on whether or not they become displaced. We assume that each individual worker is displaced with probability δ, and that a worker's payoff from open trade is given by

w_L with probability δ

w_H with probability $1 - \delta$,

where $w_L < w < w_H$. We assume that $\delta < 0.5$, so that a majority of workers stands to benefit from free trade. Finally, we assume that, if the economy is opened to trade in the first period, workers displaced in the first period remain displaced going into the second period.

At the start of each period, two vote-maximizing parties compete with one another to secure the favor of a pure majority of agents. In each election, each party runs on the basis of a policy vector $\{T, R\}$, where T denotes trade policy and R denotes redistribution policy. For simplicity, we restrict our attention to discreet policy choices; we assume that $T \in \{open, protect\}$, and $R \in \{redistribute, don't\ redistribute\}$. We make two additional restrictions on redistribution policy. First, the policy choice *redistribute* is assumed to generate full equity across agents. And second, due to the fact that the economy is initially closed (so that the initial wealth distribution is uniform across agents), redistribution policy only comes into play in period 2.

We restrict our attention to the parameter space defined by

$$\beta\left(\delta w_L + (1-\delta) w_H\right) + (1-\beta) w_c \;>\; w \tag{7}$$

$$\delta w_L + (1-\delta) w_H \;\leq\; w. \tag{8}$$

In words, opening the economy to trade promises to bring net social gains (equation (7)). However, the costs of becoming a displaced worker are sufficiently high that, as a group, all workers are opposed to free trade (equation (8)). Equations (7) and (8) therefore give us our first result, by construction: when individuals in the economy face different levels of uncertainty from free trade, a majority of individuals may oppose free trade even when a majority *within that* opposing majority stands to benefit from free trade—this is the Fernandez-Rodrik result.

Electoral Politics

We assume that the party that wins the election in a given period can consume an exogenously determined share *t* of production in that period. Therefore, both parties have an incentive to "maximize the size of the pie" by opening the economy to trade (equation 1). But due to the assumption that the population share of workers α is greater than one-half, each party's dominant strategy is to choose *protect* in both period 1 and period 2, creating a prisoners' dilemma-style equilibrium (period 2 redistribution policy is irrelevant in this case, as we have assumed that income levels are identical across agents in the closed economy).

Suppose, however, that each party has the opportunity to sign a legally binding contract with the public at time 0 which commits that party to (i) campaign on the trade policy *open* in period 1, and (ii) campaign on the policy vector {*open*, *redistribute*} in period 2. The signing of such a contract would appear to be mutually beneficial to both the contracting party as well as everyone in the economy: the contracting party would increase the economy's tax base relative to the status quo, while the public (both capitalists and workers) would give itself access to higher-than-status quo rents by voting for the contracting party in both periods. So where lies the problem?

The catch is that workers in period 1 would be willing to vote for *open* in period 1 if and only if *redistribute* was anticipated to be the policy instituted in period 2—and if they are rational, workers realize that this policy trajectory is time inconsistent. At time 1, looking forward, a majority of voters (namely, all workers) favor the policy *redistribute* in period 2 contingent on the policy *open* being chosen in period 1. But those who still favor the policy *redistribute* by the time elections actually roll around in

period 2 will have become a political minority, as workers who had feared becoming displaced *ex ante* but find that they have not been displaced *ex post* will no longer desire redistribution (recall that $\delta < 0.5$, so that displaced workers constitute an *ex post* political minority regardless of β, the overall population share of workers). As a result, any party campaigning on *redistribute* in period 2 is guaranteed of defeat, as is (by backwards induction) any party campaigning on *open* in period 1.

Note that the contractual arrangement described above between the public and a given party would be implementable if $\beta\delta \geq 0.5$, even if all of the other parameter restrictions still held, since displaced workers would then constitute a political majority favoring *redistribute* in period 2. Thus, somewhat ironically, it is precisely the fact that displaced workers are expected to constitute a political minority *ex post* that underpins the protectionist policy trajectory.

This model offers one possible explanation for why outright protectionism might emerge as the only politically feasible way of attracting the support of at-risk domestic workers. In the model, reparations to displaced workers take place over the long term, or more precisely, after domestic gains from trade have started to materialize. Political turnover necessitates that these reparations remain popular among a majority of voters if they are to be sustained, but the removal of uncertainty in the interim (associated with the identification of the actual winners and losers from trade) insures that this will not be the case. It is the fear of misfortune among an *ex ante* majority, coupled with the anticipated minority status of the losers *ex post*, that drives the result.

Finally, it is obvious that protectionism would never arise in the absence of political competition, as an autocrat would choose to open the economy to trade in order to maximize his tax base, ignoring the popular repercussions of that decision.

B. Electoral Politics and Short-Term Bias

This very simple model formalizes the dual ideas that, in the presence of uncertainty about the eventual private returns to long-term public investments (i) the nature of electoral politics may induce competitive populism among both political incumbents and political challengers, and (ii) the public may choose collectively to tolerate this behavior even if agents are individually risk-neutral. One of the key features that distinguishes this model from the one considered in section II is the new assumption that political challengers can make *binding commitments* to policy.

Consider a 2-period economy with a population of agents normalized to mass one. There is an incumbent ruler in period one, who has complete control over an amount K of public capital. Agents at large are *ex ante* identical. Production only takes place over the course of period 2, where every agent's period 2 output is given by

$$\begin{aligned} y_i &= ky && \text{with probability } \alpha \\ &= 0 && \text{with probability } 1-\alpha, \end{aligned} \tag{9}$$

where y is a positive constant, and $k \leq K$ denotes the amount of public investment undertaken by the incumbent ruler in period 1 Equation (9) can be interpreted to mean

that the public investment is risky, and is expected to raise either everyone's productivity with probability α or no one's productivity with probability $1 - \alpha$; alternatively, equation (9) can be interpreted to mean that the public investment is expected to benefit only a partial share α of the population, where the identities of the beneficiaries are not known *ex ante*—either interpretation is fine for our purposes here. Finally, suppose that the ruler is able to tax period 2 output at an exogenously determined rate of t for his own consumption.

Stable Autocracy

Let us start by assuming that the incumbent ruler is retained with certainty into period 2. The ruler seeks to maximize his undiscounted stream of income from office, namely

$$\pi_R = (K - k) + t(\alpha k y). \tag{10}$$

The linearity of equation (10) leads us to corner solutions: the ruler chooses $k = K$ if $t\alpha y \geq 1$, and $k = 0$ otherwise. In other words, provided that $\alpha y \geq 1$ (so that public investment is socially efficient), the ruler will make the socially efficient decision to invest if and only if he expects to command a sufficient share t of the returns. Throughout the remaining discussion, let us restrict our attention to the more interesting situations in which this pair of conditions holds. Under these conditions, the *expected* income of the representative agent is equal to

$$\pi_i^* = (1-t)(\alpha K y), \tag{11}$$

and aggregate social welfare is equal simply to $\alpha K y$.

Electoral Promises from a Political Challenger

Let us now assume that there exists a potential political challenger who, by incurring a cost of $c > 0$, can force an election between himself and the incumbent at the end of period 1. If the challenger chooses to engage the incumbent, a simple majority vote determines the winner of the election. We can therefore think of the parameter c as an inverse measure of political competition, if political competition is interpreted to measure the ease of bringing about political turnover. We assume that agents are risk-neutral, and simply vote for the candidate that offers them the highest income level.

First, suppose that the incumbent continues to behave as he would in the absence of a potential challenger, and therefore chooses $k = K$. Since (i) this is the socially optimal policy, and (ii) we have assumed that the tax rate is determined exogenously, the only way for the challenger to curry favor among the public is to (promise to) divest funds from the public investment in order finance transfers to selected groups—a practice we will call competitive populism. Specifically, let us assume that the challenger, if elected, has the ability to terminate the public investment before it matures and thereby recoup the funds that the incumbent had previously invested. In this case, the challenger can assure himself of electoral victory by promising *guaranteed* sums of infinitesimally

higher than π_i^* (equation 11) to exactly half of all agents in the economy. Note that since $\alpha y \geq 1$ (so that $k^* = K$ from the perspective of a social planner), this divestment is harmful to the economy as a whole, even though it meets the approval of a pure majority.

The feasibility of this tactic by the challenger hinges on two parameter conditions:

$$1 \geq 0.5(1-t)\alpha y \tag{12}$$

and

$$K\left(1-0.5(1-t)\alpha y\right) \geq c. \tag{13}$$

Equation (12) says that, if the challenger is to engage in competitive populism, the expected per capita benefit of the existing long-term investment (net of taxes) must be no higher than twice the per capita dollar cost of the investment—in other words, the expected per capita returns of the investment must be less than or equal to 200 percent. This is intuitive, as the challenger must (through divestment) acquire sufficient funds to finance transfers to exactly half of the population, while making that half of the population as least as well off as it would expect to be if the public investment was allowed to mature.

Note that the challenger's incentives to seek office are born entirely out of his opportunity to become the residual claimant on divested public funds (once the votes have been paid for), and are independent of the tax rate on matured public investments. Equation (13) simply says that this prospective short-term windfall must be larger than

the challenger's cost of entry c. In this sense, competitive populism is sustained by the short-term incentives of the public and politicians alike—for the public, the sure promise of short-term gains trumps the uncertain promise of collectively larger long-term gains, while for politicians, competitive populism presents a vehicle for trading off long term revenue opportunities for guarantees of popular support today.

Now let us consider the incumbent ruler's optimal response to this anticipated challenge. To begin, we need to specify whether the incumbent ruler's property rights over *noninvested* public funds are secure. Let us suppose that they are not, so that the challenger can access the entirety of K if he assumes office, regardless of how the incumbent has chosen to allocate K (otherwise, we would need to contend with the incumbent's incentives to "grab everything today," which are not germane to the mechanism we wish to highlight here). In this case, the incumbent's only viable option is to preemptively offer $2(K - c)$ in upfront transfers to half of the population—at a total cost of $(K - c)$—and to devote just the remaining c units of capital to public investment (recall that, since we have assumed that $t\alpha y \geq 1$, the incumbent prefers to devote the leftover funds to public investment rather appropriate them outright). As can be easily verified, this strategy acts to "price the challenger out of the market" at the margin, and thus to secure the incumbent's tenancy. However, achieving this job security comes at a significant social cost: in the new equilibrium, social welfare is equal to

$$\text{SW} = (K - c) + \alpha y c. \tag{14}$$

Comparing this figure to the previously derived social welfare level of $\alpha\gamma G$ under stable autocracy, it can be easily verified that the threat of political turnover (and the competitive populism induced by it) anticipates a loss in social welfare equal to

$$\text{SW LOSS} = (\alpha y - 1)(K - c). \tag{15}$$

We see that the social welfare cost of competitive populism is larger when c is lower (i.e., when political competition is more intense based on the political turnover interpretation of political competition), when the opportunity cost of engaging in competitive populism is higher (i.e., when the social returns to public investment, αy, are larger), and when the state initially has more resources K at its disposal (i.e., when there is more to be potentially lost, in absolute terms, from misguided public investments).

IV. Concluding Comments

In summary, political competition can introduce varied tradeoffs of economic costs and benefits. Our discussion in sections II and III focused more heavily on certain of its costs (which may lie closer to the peripheries of public perception) than on its more easily imagined benefits. We focused in particular on the role of political competition, both in the sense of accountability for incumbents and electoral politics, in defining the set of politically feasible public investments. Two themes emerged from our discussion. First, when information asymmetry about investment costs prevents the public from discerning productive from wasteful public spending, the public may be ill-served by its

ability to sanction incumbents at a low cost. Second, long-term investment opportunities may waste away under the shadow of electoral politics, even when competing elites would each appear to have both the incentive and the means to nurture such investments to maturity.

At a minimum, we hope to have provided a cautionary tale against simple generalizations about the economic consequences of political competition. We have demonstrated that an array of diverse factors—such as information asymmetry between the public and the state, distributional conflicts among the public at large, and the characteristics of public investment opportunities—can play a role in mapping political competition onto economic outcomes.

We now turn to a few of the issues that we ignored in our analysis. Our model of accountability for incumbents in section II treated the public as a representative agent, and in the process, ignored issues relating to heterogeneity and distributional conflicts among agents at large. In the presence of heterogeneous preferences over public investment, for example, incumbents would need to choose not just whether or not to engage in investment, but also which types of investments to pursue. Moreover, it is realistic to assume that agents in the real world differ not only with regard to their preferences over public investment, but also in their abilities to sanction incumbents effectively. It has been argued, for example, that the wide discrepancies that we observe in levels of patronage across special interest groups can be partly attributed to the fact that certain groups are better than others at coordinating the votes of their members in response to policy.[8]

[8] See Persson and Tabellini (2000), and chapters 7 and 8 in particular.

Although we considered distributional conflicts among the public at large in our models of electoral politics in section III, we treated political parties as if they were solitary agents. In the process, we ignored issues of conflict and coordination among heterogeneous factions *within* a party, which play a central role in the models of party competition proposed by Roemer (2001). Our discussion of electoral politics in section III also ignored the possibility of collusion *between* parties or political elites. It would be easy to extend our simple two-period models to an infinitely-repeated game setting in order to consider the sustainability of collusive norms based on trigger strategies.

We also ruled out the possibility of heterogeneity across politicians in both sections II and III; although we allowed politicians to differ in their policy platforms in section III, we continued to assume that they were *ex ante* identical. While the assumption of *ex ante* homogeneity among aspiring potential leaders is common in existing models of political competition[9], future theoretical research may do well to consider the implications of relaxing this assumption. For example, it might be interesting to expand the simple model that we presented in section II in order to account for the existence of "skilled" versus "unskilled" politicians, so that the cost of public investment would reflect the sum of a stochastic cost component selected by nature, and a politician-specific cost component dictated by his "type."

Finally, we did not address a potential benefit that we see arising from competition between political elites: namely, what might be termed increased awareness of the common people. To the extent that intensified competition provides political elites with stronger incentives to mobilize public support, it may also lead them in some

[9] The model of political yardstick competition by Besley and Case (1995) is a counterexample.

instances to establish strategic alliances with otherwise overlooked segments of the population. We think, for example, that the extension of franchise to the working class in nineteenth-century Europe may be partly understood on these grounds.

We conclude with an appeal for empirical research on this topic. While theoretical research can help us to identify some of the tradeoffs of economic costs and benefits associated with political competition, empirical research is needed to assess the implications of these tradeoffs. Problems of endogeneity do pose an especially formidable obstacle in this vein. Still, recent empirical work has made significant advances in identifying exogenous sources of variation across political institutions, and it seems well within our capability to frame empirically tractable questions about political competition. Our model of protectionism in section III might suggest, for example, that trade liberalization is more likely to prove politically feasible when trade policy and redistributive policy are controlled by officials who face longer periods of time between elections—a testable prediction. Such empirical assessments will do much to inform our predictions regarding the economic consequences of political competition.

References

Acemoglu, Daron and James Robinson (2000): "Political Losers as a Barrier to Economic Development," *American Economic Review Papers and Proceedings*, 90, pp. 126-130.

Acemoglu, Daron and James Robinson (2002): "Economic Backwardness in Political Perspective," NBER Working Paper no.8831.

Aizenman, Joshua (1998): "Fiscal Discipline in a Union," in Sturzenneger, Federico and Mariano Tommasi (eds.), *The Political Economy of Reform*, Cambridge, MA: *MIT Press*, 1998.

Bardhan, Pranab and Dilip Mookherjee (forthcoming): "Corruption and Decentralization of Infrastructure Delivery in Developing Countries", *Economic Journal*, forthcoming.

Besley, Timothy and Anne Case (1995): "Incumbent Behavior: Vote-Seeking, Tax-Setting, and Yardstick Competition," *American Economic Review*, 85:1, pp. 25-45.

de Figueiredo, Rui (2002): "Electoral Competition, Political Uncertainty, and Policy Insulation," *American Political Science Review*, 96:2, pp. 321-333.

Dixit, Avinash and John Londregan (1995): "Redistributive Politics and Economic Efficiency," *American Political Science Review*, 89:4, pp. 856-866.

Fernandez, Raquel and Dani Rodrik (1991): "Resistance to Reform: Status Quo Bias and the Presence of Individual Specific Uncertainty," *American Economic Review*, 81, pp. 1146-1155.

Mondino, Guillermo, Federico Sturzenegger, and Mariano Tommasi (1998): "Recurrent High Inflation and Stabilization: A Dynamic Game," in Sturzenneger, Federico and Mariano Tommasi (eds.), *The Political Economy of Reform*, Cambridge, MA: *MIT Press*, 1998.

Persson, Torsten, Gerard Roland, and Guido Tabellini (1997): "Separation of Powers and Political Accountability," *Quarterly Journal of Economics*, 112:4, pp. 1163-1202.

Persson, Torsten and Guido Tabellini (2000): *Political Economics: Explaining Economic Policy*, Cambridge, MA: MIT Press (2000).

Rasmusen, Mark and J. Mark Ramsayer (1994): "Cheap Bribes and the Corruption Ban: A Coordination Game Among Rational Legislators," *Public Choice*, 78:3-4, pp. 305-327.

Rodden, Jonathan and Susan Rose-Ackerman (1997): "Does Federalism Preserve Markets?" *Virginia Law Review*, 83:7, pp. 1521-1572.

Roemer, John (2001): *Political Competition*, Cambridge, MA: Harvard University Press.

Skilling, David and Richard Zeckhauser (2002): "Political Competition and Debt Trajectories in Japan and the OECD," *Japan in the World Economy*, 14, pp. 121-135.