

## **An International Political Economy Theory of Democratic Transition**

**Tyson Roberts**

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Note to WGAPE:

I look forward to your feedback. This is my first attempt at a formal model, so I welcome any technical suggestions on that. I would also like to know your thoughts on how well the model relates to reality. I welcome suggestions on how to make it more realistic without making it too much more complicated (suggestions to make it both more realistic and simpler would be particularly welcome). Finally, assuming the model seems to have some validity, I'm thinking of trying to test it empirically, and would welcome suggestions on that. I'm thinking to maybe do a survival model, and interact "era" (pretty much 70s, 80s, and 1990+, although not exactly) with political and economic strategy.

## **Introduction**

In this paper, I propose a model of democratic transition for capital-scarce states, such as the majority of countries in sub-Saharan Africa.<sup>1</sup> One insight of this model is that political transitions in capital-scarce countries depend not only on domestic factors such as the influence of interest groups and the costs of conflict, which are emphasized in previous models, but also on international factors such as international interest rates, international commodity prices, and the preferences of international financiers. As countries become more dependent on external financial flows (e.g., as they become more deeply indebted), domestic political actors become more constrained by international factors. To properly understand the phenomenon of the democratic wave in Africa and other capital-scarce countries, it is critical that a model place the state in the context of the international political economy.

Previous theories of political transition (e.g. Acemoglu and Robinson 2001, Boix 2003) emphasize divisions within a society, and generally assume that the salient division in a society is between the rich and the poor, that the rich are a minority, and that dictatorships are led by or aligned with the rich in order to protect their assets. They assume that the rich gain control of the government by means of military coups, thus implying that the military is aligned with the rich. Finally, they assume that the critical policy decision is the level of taxation on capital, by means of which wealth can be redistributed from the rich to the poor.

However, a number of these assumptions do not hold true for sub-Saharan Africa. Most African countries do not include a significant capital-owning social class; capital is often owned by foreigners or the government (Bates 1994, p. 20). The salient policy decision to increase investment is therefore not the level of taxation on private domestic capital, but rather whether to increase investment through statist policies (i.e. public investment by the state, including the

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<sup>1</sup> The model has been developed through case studies of six West African countries (Benin, Burkina Faso, Ghana, Mali, Niger, and Togo).

establishment of public enterprises), or capitalist policies designed to attract private foreign investment (which may include but is not limited to lowering taxes on foreign-owned capital).

The use of one investment approach does not necessarily preclude the other. A government could both establish public enterprises and set policies to attract foreign investors. However, one approach generally undercuts the other. Governments that establish public enterprises want to offer them protection from foreign competition (many are state monopolies), and private investors (all else being equal) prefer not to go where anti-competitive policies favor public enterprises. In some cases, investment between the two is a zero-sum game. In the 1970s, many governments nationalized foreign-owned firms and assets, thus converting foreign direct investment (FDI) into public enterprises. In the 1990s, many governments privatized public enterprises by selling them, in part or in their entirety, to foreign investors, thus converting public enterprises into FDI. Although few, if any, governments pursue a pure approach, they can be described as having chosen a set of policies that falls somewhere on the spectrum between exclusively state-owned enterprises and exclusively private investment.<sup>2</sup> To simplify matters, I will characterize the decision as one between statist policies (which, when combined with patronage-driven political systems, tends to lead to an inward-oriented development approach (Quinn 2002 p. 2)) and capitalist policies.<sup>3</sup>

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<sup>2</sup> To provide some illustrations of the two approaches, neither of which are “pure” but clearly lay at one or the other end of the spectrum: Two examples of the statist approach are Zaire and Zambia. In Zambia, the public enterprises accounted for 61 percent of gross fixed capital formation in 1981 and 23 percent of GDP from the mid-1970s through the mid-1980s. In Zaire (which Crawford Young called “a perverted capitalist state” – it espoused capitalist ideology while nationalizing and redistributing much of the economy), public enterprises constituted 39 percent of total GNP in 1979-80. Two examples of the liberal approach are Botswana and Kenya. Kenya’s public enterprises constituted 17 percent of gross fixed capital formation from 1978 to 1979, and 8 percent of GDP from 1970 to 1973. In Botswana the public sector accounted for 8 percent of gross fixed-capital formation and 7 percent of GDP. (Quinn 2002 p. 64-65 and 100-101).

<sup>3</sup> An alternative dichotomy is ISI versus liberal policies, but I have chosen to focus on statist versus capitalist for a number of reasons. Bruton (1998) cites studies that suggest strong ISI policies were rarely if ever tried in Africa from 1963-1985; according to the World Bank, most African countries were not particularly inward or outward oriented during this period. Others do think that some African countries pursued ISI policies; Waterbury (1999) notes that there are two forms of ISI policies – state socialist, which relies on public enterprises, transfers wealth from rural to urban, and restricts FDI (he includes certain periods of Ghana, Guinea, and Tanzania in this category), and state capitalist, which encourages both FDI and the local private sector and doesn’t emphasize redistributive policies (he includes certain periods of Kenya and Nigerian in this category). State capitalist ISI policies

Tax policies on domestic capital are therefore relatively unimportant in these countries. A significant share of government revenue comes from an “effective tax”<sup>4</sup> on exports of natural resources, agricultural or minerals and oil. Thus, the government does not raise revenue by taxing the capital of the wealthy minority. Instead, the government raises a large share of its revenue by effectively taxing the produce of the agricultural (predominantly poor) majority.<sup>5</sup> The government does not increase investment by lowering taxes on capital held by a domestic minority and thus encouraging local private investment (domestic capital is scarce such that even eliminating a tax on capital altogether would likely result in little domestic investment, at least not quickly enough to satisfy the governments in these countries). Instead, the government increases local investment by increasing effective taxes on exports (produced by the majority agriculturalists or the government-owned mineral and oil resources) and investing in public enterprises. Low-income countries also rely on foreign aid and subsidized loans to increase public investment, and/or foreign direct investment by private international capital owners. Thus, government decisions are made with an eye not only on domestic players, but also on international players, including private foreign investors, international financial institutions such

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differ from liberal economic policies in at least two ways – ISI policies protect FDI with tariffs and import restrictions from foreign competition, and do establish public enterprises in certain key industries. Nonetheless, for this paper the capitalist category includes both liberal and state capitalist policies, because the key distinction for this model is whether or not FDI is encouraged, and the level of redistribution from agriculture to urban public enterprises. The model is flexible enough to include public enterprises with the capitalist policy, but for simplicity, I will assume that there are no public enterprises under capitalist policies when I do my analysis. The model could also accommodate a state-led export-oriented industrialization policy under the statist policy, by increasing export revenues due to industrial exports. There are no such cases in Africa, however.

<sup>4</sup> The “tax” on agriculture exports is a margin between the producer price paid to farmers and the world market price at which the crops are sold by a government agency. Originally, the goal of state marketing boards was to stabilize prices for farmers, so that theoretically the producer price could be higher at times than the world market price, but the system quickly evolved into a revenue-generating operation for the government in order to transfer funds from agriculture to investment in urban areas. I call it an effective tax rather than a tax because, in government accounts, receipts from public enterprises, including industrial enterprises and export marketing boards, and mining revenues are categorized as non-tax revenues (Rimmer 1984, p. 164). In addition to the implicit tax of marketing boards there can also be export duties, which are included in the “taxes on international trade” category.

<sup>5</sup> Another major source of income is rents from mineral or oil exports, but these resources are generally owned by the government and so do not depend on policies to take the wealth from a particular domestic interest group. Other sources of government revenues have a similar pattern of diverting income from a large group to a small group that supports the regime. For example, import licenses are awarded to supporters, resulting in profits for supporters at the expense of consumers at large. Loans at below-market interest rates are awarded to supporters, thus depriving the public at large from credit. Internal price controls on food benefit urban residents at the expense of the agricultural majority. Rather than design a model that incorporates all of these policies, I will focus on the policy of diverting agricultural export revenues to public enterprises.

as the IMF and World Bank, and foreign governments such as the US and France. Explaining democratic transition with a model limited to domestic actors therefore omits a crucial part of the story. Although demanded locally, the political liberalization of the third wave of democratization in Africa usually took place only in conjunction with international pressure (Bates 1994).

Although most African states began with democratically elected regimes, nearly all quickly became single-party authoritarian regimes or were overthrown by military coups. Apart from a handful of arguable exceptions,<sup>6</sup> African states prior to 1989 remained authoritarian, except for a dozen that experienced “brief interludes of democratic rule between long periods of authoritarianism” (Bratton and van de Walle 1997, p. 69). Only recently have fully democratic regimes become relatively stable. In the early 1990s a wave of democracy washed over Africa; 30 of 54 “founding elections” were considered free and fair, and in eleven countries sitting presidents were voted out of office (Bratton 1998). Although turnover became less frequent in the second round of elections, by the end of 2000, 31 countries in Africa were still considered to have Free or Partly Free multiparty democracies (van de Walle 2002).<sup>7</sup> This paper builds on the common observation (Bates 1994, among others) that this drastic change cannot be attributed to a change in the domestic factors emphasized in previous models, such as reduced income inequality or increased wealth,<sup>8</sup> since these factors remained largely unchanged; until 1990, almost all of Africa was under authoritarian rule in spite of a relatively flat income distribution, and in spite of continued poverty, perhaps thirty of the region’s countries underwent democratic

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<sup>6</sup> Bratton and van de Walle (1997, p. 69) describe Botswana, the Gambia, Mauritius, Zimbabwe and (since 1980) Senegal as sustained multi-party democracies with reasonably free and fair elections, although all but Mauritius were ruled by a dominant party.

<sup>7</sup> In addition to the nine countries Freedom House rated Free and the 22 coded as Partly Free, there were also eight countries with multiparty electoral systems that were coded Not Free.

<sup>8</sup> The Acemoglu and Robinson (2001) model concludes that dictatorships survive where there is great inequality and democracies take root where there is less inequality. Huntington (1991) notes that democratization tends to break out in middle income countries with per capita income ranges from \$1000 to \$3000. Bates (1994) notes that only a handful of African countries fall in this category.

transition of some form. Instead, to understand the breakout of democracy in Africa, it is important to consider changes in the international economy.

In the model I propose, I offer an explanation why authoritarianism was the equilibrium strategy for the first three decades of independence and democracy became a sustainable strategy thirty years later. I argue that high prices for commodity exports and cheap debt enabled governments to buy support among an urban, state-employed minority, thus making authoritarianism and statist policies mutually reinforcing during the first two decades of African independence. With the fall in prices, rise in interest rates, and the introduction of loans conditional on economic reforms, authoritarian capitalism became the equilibrium strategy for most countries. Finally, when favorable terms became contingent on democratic reform, democratic capitalism became the equilibrium strategy, particularly for a country deeply in debt and not of strategic interest to major donor/lender countries. I argue that low interest rates in the 1970s made the reinforcing statism and authoritarianism the most stable strategy for governments to pursue during that time, these policies led to high debts, which, combined with the conditions of foreign lenders/donors, made democratic capitalism the most stable strategy in the 1990s because it can also be mutually reinforcing. Capitalist policies and the prospect of political stability are attractive to FDI, and FDI, by displacing the government as the source of employment, makes an authoritarian regime less viable, and, by providing to private citizens an opportunity to earn money that doesn't require capture of the government, makes the democratically elected government more stable.

In the next section, I develop a model that describes how governments in capital-scarce states make the joint decision of political regime type and economic policy, and demonstrates under what conditions governments would choose a given political/economic strategy. This

section has three parts. First I develop a basic model in which the government chooses its optimal economic and political strategy based on relative profit opportunities between state investment and agricultural export, and based on the costs of opposition among state employee and private workers. I then add to the model the ability of the government to borrow at market rates, and demonstrate how a rise in interest rates makes statist policies relatively less attractive because it reduces the ability of the government to finance state investments with debt. Finally I demonstrate how changes in the preferences of international donors and lenders can change the equilibrium strategy of governments from authoritarianism/statism to authoritarianism/capitalism or democracy/capitalism. In the third section, I demonstrate how the model illustrates the pattern of political and economic liberalization in six countries in West Africa.

## **The Model**

### **I. The Basic Model**

I propose a stylized country in which there are three types of domestic players: (1) the government (which primarily means the president but includes political supporters whose welfare depends on his holding office), (2) state employees,<sup>9</sup> i.e., blue and white collar workers in the public sector, which includes state owned enterprises (SOEs) and the military, and (3) private workers, i.e., farmers that produce cash crops for export<sup>10</sup> (using land and labor but not capital) and employees of FDI subsidiaries. Private workers are more numerous than state employees.

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<sup>9</sup> The terms public and state are used interchangeably for workers/employees, investment, and enterprises.

<sup>10</sup> Food crops in these countries are consumed either in the informal market, and so not taxed, or in some cases purchased in the formal market by the government in a system that is analogous to the export marketing boards; farmers are paid below market prices so that their wealth is effectively transferred to urban workers. Neither of these systems has much effect on investment levels and so they are ignored by the model.

The country exists within a world economy that buys the country's exports, infuses foreign direct investment, and, in later versions of the model, lends to the government.

The country exports agricultural goods grown by farmers. Imports are not included in the model.<sup>11</sup> Manufactured goods are produced inside the country, either by public enterprises or subsidiaries of multinational corporations (MNCs).<sup>12</sup> The crops are grown by the farmers, collected by a monopsony state marketing board, then exported at the world market price. The government takes this export revenue, pays a percentage (the producer price) to workers, and takes the rest as a tax, part of which it spends on the military and state enterprises. The government keeps the surplus from the effective export tax, and also taxes all profits from the state enterprises.

As is the case in previous models (Acemoglu and Robinson 2001, Boix 2003), the game begins with an authoritarian government. The game is played once.<sup>13</sup>

Play of the game is as follows (the game is diagrammed in a tree in Appendix 1):

1. Nature determines the value of agricultural exports (a product of yield levels and the world price)
2. The Government chooses both an economic strategy and a regime type.
  - a. The Government chooses either a statist or capitalist economic strategy. Capitalist policies mean that government spending all goes to the military and FDI is encouraged. Statist policies mean that, in addition to the military, the government invests in state enterprises and FDI is forbidden.
  - b. The government chooses to remain a dictatorship or to accept democracy, i.e. open the political system to real, multiparty competition.<sup>14</sup>

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<sup>11</sup> I ignore imports because they add a level of complexity that does not contribute to the theoretical insights of the model. Taxing imports (which many or most sub-Saharan African countries did) has the effect of increasing government revenues but also indicates an ISI economic strategy, so that I would need to consider four economic strategies (ISI capitalist, ISI statist, outward oriented capitalist, outward oriented statist) rather than two. Combining this with the two political strategies, this would result in eight possible joint strategies. If I consider ISI policies, I could also consider non-tariff import barriers, such as quotas and import licenses, which were also important tools used by sub-Saharan governments, and which did not generate revenues. An alternative to the assumption that there are no imports is the assertion that imports and tariff rates are held constant.

<sup>12</sup> Although a significant share of manufactured goods are imported in the empirical cases, a goal of most governments has been to produce manufactured goods inside the country.

<sup>13</sup> The game is played once because 1) everyone is oriented the short term – the government is concerned first with staying in office and second maximizing income (they need to distribute government funds in some way to stay in power; if they try to take the money and run they will likely end up dead<sup>13</sup>), and everyone else is concerned with meeting their immediate needs; 2) there is extreme uncertainty about the future, because changes in commodity prices, interest rates, etc. are out of everyone's hands, and so it is impossible to make calculations beyond the near term).

3. Public workers choose to oppose/overthrow the government or not.
4. Private workers choose to oppose/overthrow the government or not.

The set-up of a government over two groups of subordinate groups is inspired by Boix's (2003) three-class model (rich, middle, and poor) and by Weingast's (1997) model with a sovereign and two equal citizen groups. One difference from the Boix model is that, whereas the Boix model assumes that an authoritarian regime is one that represses both subordinate groups, and that co-opting one group will necessarily lead an authoritarian government to become (at least) a partial democracy, I assume that the only way an authoritarian government can maintain secure power is by co-opting one of the subordinate groups ("... it has long been recognized that although coercion is the ultimate basis of power, it is not a sufficient basis for governance. Domination by force alone is difficult to sustain" (Bates 1981, p. 82). One difference from the Weingast model is that, whereas the Weingast model assumes that the citizen groups can only depose the sovereign when both rebel, I assume that under an authoritarian regime, public workers alone (the military aligned with state workers) can depose the government, and under a democratic regime, the private workers alone (through elections) can depose the government (assuming, in both cases, that the groups can overcome their internal coordination challenges).

An assumption of the game is that the public workers, both public enterprise employees and military, move together. The reason is that the game assumes that if they move separately, the move would be ineffective. This is based on empirical data from the six countries that form the basis of this game (see Appendix 2).

The combined decisions of the worker groups lead to the following stylized outcomes:

Under an authoritarian regime,

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<sup>14</sup> For the purposes of this paper I define a democracy as a political institution in which the executive faces elections held with rules under which he will be deposed if the majority votes against him.

- If both groups acquiesce to the government, it will remain stable.
- If private workers attempt to overthrow the government without the public workers, this will result in low-level violence (the military will suppress the revolting workers).
- If the public workers rebel against the government but the private workers do not, this will result in a coup d'état. After such a coup, the next regime will also be authoritarian.
- If the public workers and private workers all rebel against the government, the result will be regime change, possibly to a democracy (either through a national conference provisional government that leads to elections, or a military caretaker government that leads to elections).

Under a democratic regime,

- If both groups acquiesce to the government, it will remain stable.
- If the private workers choose to overthrow and the public workers are uninvolved, this will result in a legal government change (i.e. the president will be voted out of office).
- If the public workers rebel against the government but the private workers approve of the government, this will result in a failed coup (i.e. private workers will demonstrate against the attempted coup, leading to an aborted coup or a brief coup followed by a return to the democratically elected government).
- If the public workers initiate a rebellion and are joined by private workers, the result will be a successful coup, leading to regime change to an authoritarian regime (which may be followed by elections).<sup>15</sup>

Control of the state provides the following benefits  $B$  (see Table 1 for a summary of definitions):

$$P(s) = (\text{Tax on}) \text{ Profit from public enterprise investment}^{16}$$

<sup>15</sup> State workers may not be willing to wait for the majority to vote the government out for two reasons. First, it might occur under a presidential system in which the voters do not have the opportunity to overthrow an unpopular government in an election, and the most efficient way to depose the government is therefore extralegally through a military coup. For example, the Limann government in Ghana was elected in September 1979, but after two years of high inflation and unemployment it was deposed in a popular coup led by J. J. Rawlings in December 1981. Second, it might occur because state employees may want to increase their bargaining power in capturing the benefits of government control. Similarly, elections are more likely to occur after private workers have joined a rebellion than if state employees act alone because, once private workers are mobilized, it is easier for them to make demands.

<sup>16</sup> Although public enterprises are commonly described as money-losers, this is not always the case. For example, Grosh (1991) finds that half of the public enterprises in Kenya performed well on measures of profitability. Public enterprises in the mineral extraction sector are particularly likely to be profitable, especially when prices are high; for example, in Niger, uranium mining was the source of two-fifths of the government's revenues by the 1980s (Rimmer 1984, p. 163). Other industries may have performed poorly but profits were not necessarily negative. For example, in the fiscal year 1970-71 the Ghana Holding Industrial Corporation, which included 29 factories in various industries, had profits of \$6 million on sales of \$25 million and issued a dividend to the government of \$1 million (Grayson 1973). In a 1985 study of a sample of 12 public enterprises in West Africa, 38% showed net profits and 62% net losses (Nellis 1994, p. 12). There are several instances where public enterprises were profitable for a time and then became unprofitable due to external shocks. For example, Niger's uranium-producing public enterprise was profitable during high prices in the 1970s, then began generating losses when uranium prices fell in the 1980s, and Benin's textile public enterprise was profitable for years until its major export market in Nigeria was suddenly closed off in 1983 (Nellis 1994, p. 14). The assumption that all profits go to the government are not far from reality; African governments tended to have high rates of taxation on public enterprise profits plus requirements to transfer a large portion of post-tax profits to the

$T(s)$  = Tax surplus after government expenses from effective export tax

Thus,  $B = P(s) + T(s)$

The government's payoff is

- $B$  if the government remains in power
- $0$  if the government loses power

To simplify the game, I assume that under capitalist policies, there is no investment in public enterprises (so all public spending goes to the military, which has zero profits); therefore, under capitalist policies,  $P(s)$  is 0 and  $T(s)$  is higher than under statist policies (because there is less government spending).

Payoff for public workers is wages from public employment  $W(s)$  minus the cost of rebelling, if they rebel, which are a share  $c(s)$ <sup>17</sup> of income (for example, lost wages for the time spent rebelling) plus benefits of controlling the state if they successfully overthrow the government  $B$ .<sup>18</sup> If they rebel with the help of the private workers, they share these benefits with the private workers, and only receive their share  $s$ . Therefore, state workers payoff is the following:

- $SS = W(s)$  if they don't rebel,
- $SU = W(s) * (1 - c(s))$  if an overthrow attempt is unsuccessful,
- $SO = W(s) * (1 - c(s)) + B$  if they successfully overthrow the government without the help of private workers
- $SW = W(s) * (1 - c(s)) + B * s$  if they overthrow the government with the help of private workers<sup>19</sup>

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government. In Mali, 90% of post-tax profits must be transferred to the government; in Niger, any accumulated profits of the development bank were reallocated by the government to poorly performing enterprises (Nellis 1994, p. 18)

<sup>17</sup> Treating costs as a percentage of income rather than an absolute figure is used by previous models such as Acemoglu and Robinson (2001) and has the benefit of reducing the incentive to rebel as income increases.

<sup>18</sup> The distribution of the benefits of controlling the government among all state employees can be considered to be an equal distribution among all members of the group, similar to the assumptions of Acemoglu and Robinson (2001), or, following the somewhat more realistic assumptions of Bueno de Mesquita et al (2003), state employees are led by elites and motivated by the possibility of being included in the future government's patron-client networks.

<sup>19</sup> The fact that public employees are forced to share the benefits of controlling the state when private employees are also rebelling implies that the ability of private employees to mobilize against the existing government enables them to demand a share of the benefits from the incoming government as well.

SS>SU; SO>SW>SU

The payoff for private workers is the agricultural payouts  $A(p)$  plus wages from private employment resulting from FDI  $W(f)$  minus the costs of rebelling, which are a portion  $c(p)$  of total earnings (for example, lost wages for the time spent rebelling) plus its share of the benefits of controlling the government if it successfully overthrows the government. Thus, private workers payoff is

- $PS = A(p) + W(f)$  if they don't rebel,
- $PU = [A(p) + W(f)] * (1 - c(p))$  if they rebel unsuccessfully,
- $PW = [A(p) + W(f)] * (1 - c(p)) + B * (1 - s)$  if they rebel successfully by cooperating with state workers, and
- $PD = [A(p) + W(f)] * (1 - c(p)) + B$  if they overthrow a democratic government through legal elections (benefits of controlling the government are not shared with state employees).<sup>20</sup>

PS>PU; PD>PW>PU

The level of FDI is determined in part by factors outside of the game, in part by the economic policy choice of the government (to simplify the game, I'll assume that FDI is zero under statist policies), and in part on the level of political stability resulting from the decisions of public and private workers whether or not to rebel against the government.<sup>21</sup> The level of FDI is indicated in the payoffs for private workers (e.g. PW3 or PD2). FDI is highest if there is stability or peaceful transition (1), lower if there is political unrest (e.g. low level violence or a failed coup) but the government remains in office (2), and lowest if there is both political unrest and an extralegal change of government (3).

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<sup>20</sup> The cost of overthrowing a government democratically may be lower than the cost of overthrowing the government by supporting a rebellion initiated by state workers. This is ignored, since PD is already greater than PW because the benefits of controlling the government are not shared with state employees.

<sup>21</sup> Investors invest at lower levels as uncertainty increases because investment has diminishing marginal returns, and at higher levels of risk investors expect a risk premium. If  $r_f$  = a risk-free return, investors will invest during stable times until marginal  $r = r_f$ , but during instable times they will invest until marginal  $r = r_f + \text{risk premium}$ . Thus, in unstable times investors will invest but will have a higher (marginal and average) rate of return.

**Table 1: Definitions**

X: Export revenues (product of exogenous world market price and endogenous yield=  $f_n(t)$ )

B: Benefits of controlling government [ $B= T(a) + P(s)$ ]

T(s): Tax revenues surplus [ $T(s)=(X*t - D*i)*(1-p)$ ]

P(s): (Tax on) Profits of state enterprises [ $P(s) = I(g) * (r-WACC)$ ]

W(s): Wages of state employees [ $w*(M + I(g))$ ]

W(f): Wages of FDI subsidiary employees [ $W(f) = w*I(f)$ ]

A(p) Agricultural payments to farmers, after taxes [ $A(p) = X*(1-t)$ ]

c(s): Cost of rebelling to state employees (% of income lost)

c(p): Cost of rebelling to private workers (% of income lost)

m: Percentage of government spending directed to military

p: share of tax revenues (after interest) spent on public spending (p1 for statist, p2 for capitalist)

M: Government spending on the military [ $M = m*p*(X*t - D*)$ ]

I(g): Investment level by the state ( $I(g) = p*(X*t - D*i)*(1-m) + L$ )

I(f): Investment level by foreign investors, i.e. FDI

L: New loans

t: Government tax on exports (%)

r: Average return on invested capital (ROIC) (%) (assumes diminishing marginal returns)

w: wage level (percentage of I(g), I(f), or M)

i: world interest rate (%)

D: Debt level inherited from previous government

s: share of government take that goes to public workers after joint overthrow of government

WACC: Weighted average cost of capital for state investment [ $(L/I(g))*i$ ].

It is possible for each of the government's four strategies to be an equilibrium strategy for some parameter values, based on the constraints below.<sup>22</sup>

1. The Statist/Authoritarian strategy is a possible equilibrium strategy if the inequalities (1) and (2) are true, or if (1), (2a) are true and (3a) is false. In the former case, the equilibrium strategy for state workers under statist policies is to acquiesce to the government no matter what private workers do; in the latter case, the equilibrium strategy of the private workers is to join a rebellion if the state workers start one, and the equilibrium strategy for state workers is to acquiesce to the government because their share of the benefits of controlling government are not enough to offset the costs of rebellion.<sup>23</sup> It is a unique equilibrium strategy if, in addition to one of these conditions, (3) is false; in this case, the dominant strategy of the private workers in a democracy is to vote out a statist government.

$$\begin{array}{ll}
 (1) B_s > B_c, & \\
 (2) SS_s > SO_s & (2a) SS_s > SW_s, \\
 (3) PS_s > PD_s & (3a) PS_s > PW_s
 \end{array}$$

Inequality (1) is true if the profits from public enterprises is larger than the relative gain in taxes from the capitalist policy (i.e. if  $P(s) > T(a)_c - T(a)_s$ ). Thus, all else equal, as public enterprises get more profitable, the statist economic policy becomes more attractive.

Inequality (2) is true if the benefits of government control are less than the costs of rebelling for the state employees (i.e. if  $B^*s < c(s)*W(s)$ ). Thus, high wages and high costs of rebellion make the statist, authoritarian regime more likely to avoid rebellion. If these factors are high enough, the government can effectively ignore the private workforce. Because statist governments spend more on state employees than capitalist governments, a statist government can collect higher taxes without facing overthrow, and so the statist/authoritarian strategy may be the equilibrium strategy event when public enterprises are not profitable.

<sup>22</sup> Because  $SO_s > PW_s$ , if (2) is true, (2a) is also true. Similarly, if (3) is true, (3a) is also true.

<sup>23</sup> The (1), (2a) true and (3a) false condition is an equilibrium because, if  $SO_s > SS_s > SW_s$ , state employees will only rebel if  $PS_s < PW_s$ , i.e. when private workers would not join in, because if the private workers do join the rebellion, the state workers will be forced to share the benefits controlling the government with them, which will be less than the benefits the state workers get without rebelling.

Inequality (3) is false if the gains from voting the government out of office by private workers are greater than the cost of opposing the government (i.e. if  $B > A(p)*c(p)$ ). This is more likely to be the case when payouts to farmers are low and the benefits of controlling the government are high.

2. The Statist/Democratic strategy is a possible equilibrium strategy if inequality (1) and (3) are true. In this case, the equilibrium strategy of private workers under statist policies is to approve of the government no matter what public workers do. If, in addition to these conditions, (2) is false, or (2a) is false and (3a) is false, then the Statist/Democratic strategy is a unique equilibrium. Under these conditions, the equilibrium strategy of state workers is to oppose the government.

Because profitable statist policies transfer wealth from private workers (thus reducing the opportunity cost of opposing the government) to state-owned enterprises (thus increasing both state employee wages and the gains from voting the government out of office), it is unlikely that (1) will be true at the same time that either (2) is false or (3) is true. Therefore, *governments with statist policies are unlikely to be democracies.*

3. The Capitalist/Authoritarian strategy is an equilibrium strategy if inequality (1) is false and (4) is true, or if (1) is false and (4a) and (5) are true. In the former case, the equilibrium strategy for state workers under capitalist policies is to acquiesce to the government no matter what private workers do; in the latter case, the equilibrium strategy of the private workers is to join a rebellion if the state workers start one, and the equilibrium strategy for state workers is to acquiesce to the government because their share of the benefits of controlling government are not enough to offset the costs of rebellion. It is a unique equilibrium if, in addition to either of these conditions, (6) is true; in this case, the dominant strategy of the private workers in a democracy is to vote out a capitalist government.

- (4)  $SS_c > SO_c$                       (4a)  $SS_c > SW_c$
- (5)  $PW3_c > PS3_c$
- (6)  $PD1_c > PS1_c$
- (7)  $PS2_c > PW3_c$

As discussed above, inequality (1) is false if the profits from public enterprises are less than the relative gain in taxes from the capitalist policy (i.e. if  $P(s) < T(a)_c - T(a)_s$ ).

Inequality (4) is true if the cost to the state employees<sup>24</sup> of rebelling is greater than the benefits of taking control of the government. In this case, an authoritarian regime can stay in power regardless of what private workers prefer. Thus, all else equal, high costs of rebelling among the military make an authoritarian capitalist government more secure. High spending on military wages makes the government more secure, and a large tax surplus (taxes minus spending) makes the government less secure in that it provides an incentive for coup plotters.

Inequality (5) is true under similar conditions to inequality (3); if the gains for private workers of joining a state-worker led overthrow of the government are greater than the cost of opposing the government. This is more likely to be the case when payouts to farmers are low, when wages from FDI are low, and/or the benefits of controlling the government are high.<sup>25</sup>

Inequality (6) is true if the cost to the private workers of organizing to vote the government out is less than the benefits of controlling the government. Thus, a capitalist government will tend to avoid facing the electorate if farmers are poorly paid, if there is a low level of wages from FDI, or if the cost of organizing a vote against the government is low.

4. The capitalist/democratic strategy is an equilibrium strategy if inequality (1) and (6) are false. In this case, the equilibrium strategy of private workers under capitalist policies is to approve of the government no matter what public workers do. It is a unique equilibrium if, in addition to these conditions, (4) and (5) are false and (4a) is true, or if (4a) is false and (7) are true. Under these conditions, the equilibrium strategy of state workers is to oppose the government.

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<sup>24</sup> Note that I'm assuming all state employees are military with a capitalist economic policy.

<sup>25</sup> As was the case in the Statist example, state employees may be deterred by the prospect of sharing control of the government with private workers if the private workers are likely to join a rebellion, and if gains to state employees of sharing control of the government are less than the utility of not rebelling.

The Capitalist/Democratic strategy is an equilibrium when profits from state enterprises are low relative to the gain in taxes from capitalist policy (i.e. (1) is false) and the cost of organizing to defeat the government electorally is higher than the benefits of controlling the government (i.e. (6) is false)<sup>26</sup>. The latter tends to be true when FDI is high, and both conditions tend to be true when export revenues are not diverted to state enterprises, when state enterprises are inefficient, and/or tax on agricultural payouts is low. Thus, in the right conditions, democracy and capitalism can be mutually reinforcing. However, a Capitalist/Authoritarian strategy enables the government to tax payout at a higher rate if it pays the state employees enough (i.e. if (4) is true).

To summarize some key conclusions from the basic model: As public enterprises become less profitable, the capitalist strategy becomes more attractive to the government relative to the statist strategy. A statist economic strategy is generally incompatible with democracy because it diverts income from the majority to a minority. All else equal, an authoritarian capitalist strategy is more attractive to the government than a democratic capitalist strategy because it allows for higher taxation on the income of private workers.<sup>27</sup> All else equal, high taxes or high public enterprise profits will generally encourage overthrow attempts because overthrowing the government is more attractive.<sup>28</sup> Finally, as the costs of rebellion fall, overthrow attempts become more likely, which puts a ceiling on tax levels, and thus reduces the payoffs to the government.

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<sup>26</sup> Even after the initial transition to democracy, voting out a sitting president in Africa is not a simple affair. It has happened rarely, and usually only due to term limits (and, in “semi-democracies,” the president often has the constitution changed to remove term limits). For example, although President Soglo of Benin was defeated before term limits ran out, Rawlings of Ghana, Kerekou of Benin, and Konare of Mali were re-elected easily and only stepped down due to term limits. In Burkina Faso and Togo (coded in most datasets as autocracies) the multi-party constitution was changed to allow the president to run for a 3<sup>rd</sup> term.

<sup>27</sup> Boix (2003, p. 213) presents statistical evidence that authoritarian regimes tend to have a higher level of rent appropriation than democracies.

<sup>28</sup> However, in some cases, high taxes on agricultural payouts will increase government stability because public workers will be less likely to rebel because they are deterred by the fact that aggravated private workers will join in a rebellion and demand a share of the benefits of government control.

## II. The Model with Market-determined Interest Rates

In this variation of the model I introduce inherited debt, international market interest rates, and international markets for new loans in order to demonstrate how payoffs are affected by the international economic environment.<sup>29</sup> Thus, at the beginning of the game, nature determines the potential value of agricultural exports (based on price and yield)<sup>30</sup> and the international interest rate. I also introduce the assumption that agricultural exports are partially determined endogenously by the tax rate; at higher tax rates, farmers will sell a smaller share of their crops to the government.<sup>31</sup>

As described above, a critical factor for the government in deciding whether or not to pursue a statist policy is the profitability of public enterprises. Because a significant portion of financing comes from borrowing, an important factor in the profitability of state enterprises is the interest rate at which the state borrows. As interest rates get higher, the profit opportunities of state enterprises are reduced.<sup>32</sup>

The interest rate  $i$  is based, for this variation of the model, on exogenous factors.<sup>33</sup> I will introduce conditional reductions in the interest rate in the next section.

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<sup>29</sup> It is more common to hear about African countries receiving bilateral aid from wealthy nations or loans from multilateral institutions such as the World Bank or IMF than to hear about market rate loans. However, African states, like all developing countries, are also affected by world interest rates. "The growth of the Eurodollar market and the OPEC price shocks of 1973-74 put in motion a period of rapid bank lending to the developing countries" (Sachs 1989, p. 7). African states, like other developing countries, took advantage of cheap petrodollar debt (van de Walle 1991).

<sup>30</sup> Nature determines the part of yield that is a result of factors such as rainfall.

<sup>31</sup> The rest could be smuggled to other countries. This was a common practice in Ghana when producer prices there were lower than in neighbors Togo and Cote d'Ivoire.

<sup>32</sup> High interest rates make borrowing more expensive for multinational corporations, but they can also make it relatively easier to raise equity (because lower yield on bonds makes investing in treasury bonds relatively less attractive than investing in stocks). I ignore the effect of interest rates on FDI.

<sup>33</sup> Loans comes from an aggregation of foreign lenders who lend at market rates (such as the Gulf states who recycled petrodollars in the late 1970s), and lenders who offer subsidized loans, i.e., international financial institutions such as the IMF and bilateral lenders/donors such as the US and France. The interest rate facing the state is a weighted average from loans and grants. Grants reduce the interest rate because the "interest rate" is effectively less than zero; the "repaid principal" is less than the "borrowed principal." Thus, a country with both grants and loans could face interest rates that are less than zero.

In addition to the interest rate, there are a number of other new exogenous factors. The state inherits an initial level of debt  $D$ , and at the beginning of the game earns a given amount of potential export revenue, which in conjunction with the government's strategy, determines total export revenue  $X$ .<sup>34</sup> After the agricultural payout to farmers, the first claim on export revenue is paying interest on the debt  $(D*i)$ .<sup>35</sup> The percentage of tax revenues (after interest) allocated to public spending is determined by the economic strategy – a statist policy means that a large proportion  $p1$  of tax revenues (after interest) is diverted toward public spending, a capitalist policy means that a smaller proportion  $p2$  is diverted. Public spending items are the military  $M$  and investment in public enterprises  $I(g)$ . I assume that a capitalist policy means that there is no (new) investment in public enterprises (i.e.  $I(g)_c=0$ , or  $p2=m$ ), and that the percentage of the budget spent on military spending is the same whether the government chooses capitalist or statist policies. Wages are a percentage ( $w$ ) of public spending (thus,  $W(s) = w*(M+I(g))$ ).<sup>36</sup>

There is a return on invested capital function  $roic$ ,<sup>37</sup> which declines as additional investment comes into the country. Thus, the first investment in the country will target the opportunity with the highest return (e.g., investment in mining precious metals), and subsequent investments will pursue the next highest return. To determine the level of borrowing, I assume that governments are rational profit maximizers, and so, if profitable investment opportunities remain after all of the revenues allocated to investment have been exhausted, the government

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<sup>34</sup> For example, for the simulations I assume that  $X = \text{World price} * (1-t)$ . Thus, output is maximized if the farmers aren't taxed at all and zero if the farmers are taxed completely (i.e. if  $t=1$ ), and tax revenue is maximized if  $t=2/3$ .

<sup>35</sup> I ignore repayment of principal, but this could easily be added to the model.

<sup>36</sup> Although wages tend to be higher in the private sector than in the public enterprises, at least for managers (Nellis 1994, p. 19), public enterprises tend to have more employees, which leads to higher employee costs. For simplicity I assume that all wage levels are the same.

<sup>37</sup> The rate of return tends to be lower for public enterprises than for private enterprises for a number of reasons, including the higher level of employment in public enterprises and the appointment of managers based on political factors rather than competence. However, I will assume that all profits of FDI are repatriated, and that the government does not tax FDI, so the rate of return for foreign investors does not directly enter the model.

will borrow to invest in public enterprises up to the point where the expected marginal return<sup>38</sup> on investment is equal to the interest rate.<sup>39</sup> (Alternatively, one could assume that lenders will only make loans to governments with investment opportunities that will enable them to repay the loan, i.e. those with profitable investment opportunities such as mineral resources.) The level of taxation on agricultural payouts will also be determined by a profit maximizing decision – the government begins by setting the tax rate at the level that will maximize revenues, and if the strategy is not an equilibrium strategy (i.e. such a tax rate will lead to overthrow) the government will lower the tax rate (or, equivalently, distribute the tax revenues to private workers) to avoid losing office.

Total government investment is thus the sum of new loans and the proportion of tax revenues, after interest and military expenditures, diverted toward investment ( $I(g) = L + p*(X*t - D*i) - M$ ). For simplicity, I also assume that there is no previous state investment and no foreign reserves.

The payoff for various players is therefore partially a function of the interest rates. As noted above, the level of investment ( $I(g)$ ) is determined in part by the interest rate  $i$ . High interest rates divert money from government spending to interest payments, and profits partially financed by new loans are determined by the level of investment multiplied by the difference between the weighted average rate of return  $r$  and the weighted average cost of capital  $WACC$ :  $P(s) = I(g)*(r - WACC)$ . The weighted average cost of capital is the share of investment coming from loans times the interest rate ( $WACC = (L/I(g))*i$ ). Wages for public employees depend on the level of government spending, which, as described above, depends in part on the interest rate:  $W(s) =$

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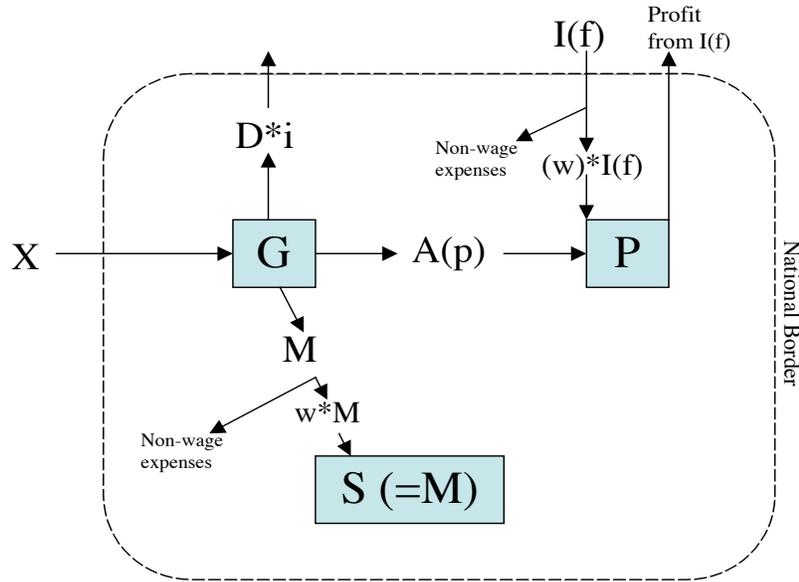
<sup>38</sup> Governments make investments based on *expected* return, and so an ex post loss does not indicate non-rationality. In the 1960s and 1970s, statist investment policies were recommended by leading economists. For example, W. Arthur Lewis, a prominent advocate of the government-led development strategy of industrialization, was a personal advisor to President Nkrumah of Ghana. Furthermore, government who receive subsidized loans and grants may have an interest rate that is below zero, so that even investments with negative ROI are economically profitable.

<sup>39</sup> Public enterprises in Africa depend heavily on commercial borrowing to finance new investments (Nellis 1994, p. 17).

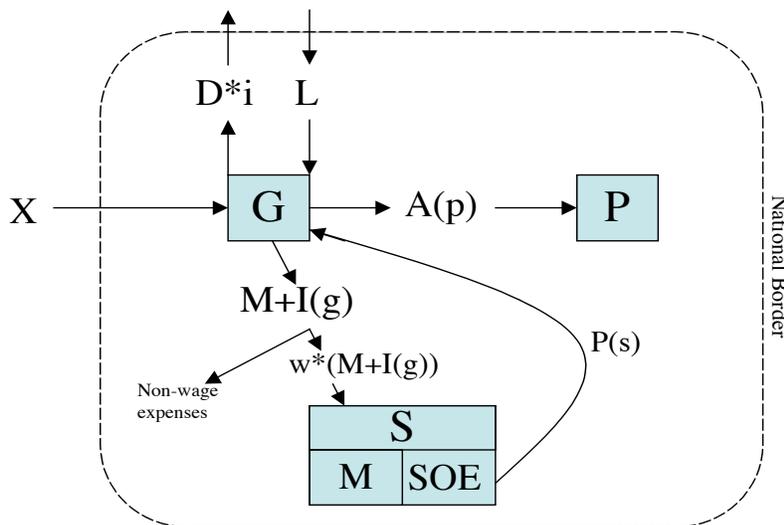
$w^*(I(g) + M)$ . The payoff for farmers is only affected by the interest rate if the government is forced to change the tax rate under certain conditions (see below). Figure 1 provides a visual depiction of the financial flows.

**Figure 1: Diagram of Financial Flows for Statist and Capitalist Systems**

### Financial Flows under Capitalist System



### Financial Flows under Statist System



$$I(g)+M = p^*(X*t - D*i) + L$$

$$A(p)=X*(1-t)$$

The introduction of debt and the ability of the government to finance state enterprise investment makes the government's equilibrium strategy depend on the interest rate. For example, a statist strategy becomes more attractive at low interest rates, because it is more likely that profits can be generated through public investment. At higher interest rates, capitalist policies become relatively more attractive.

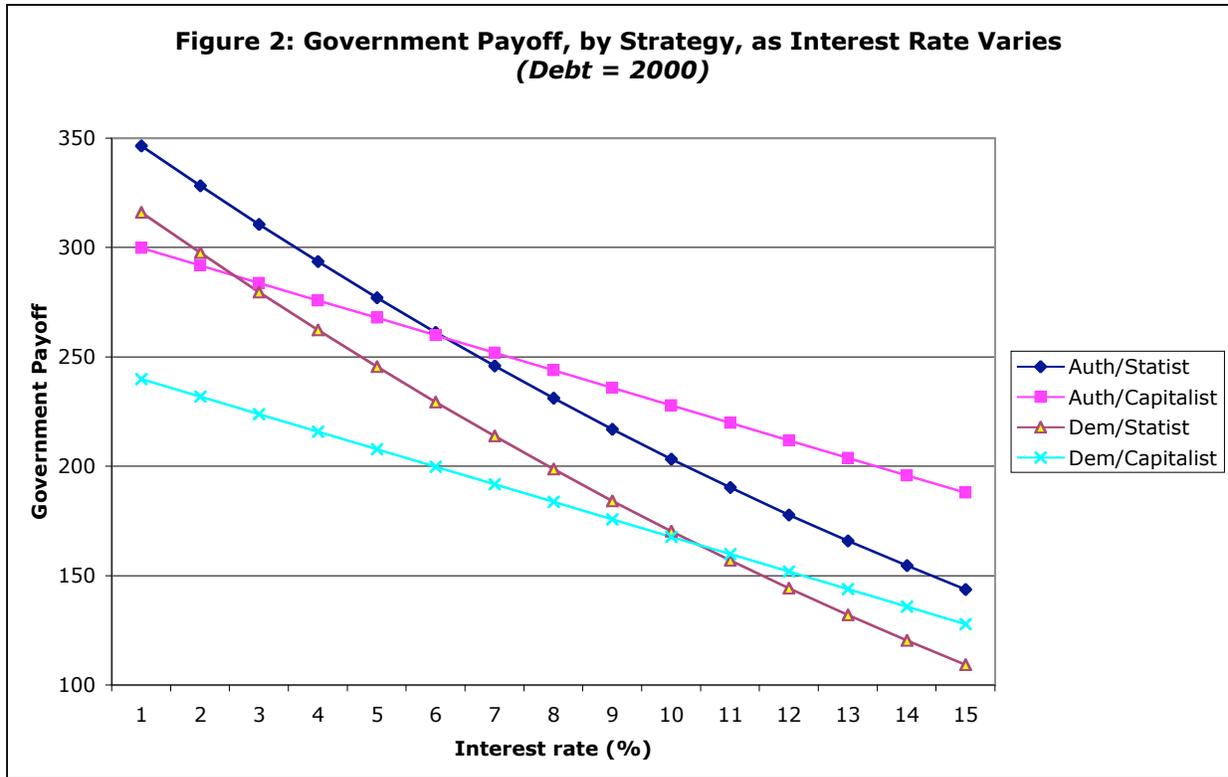
Specifically, inequality (1) is true when

$$\Leftrightarrow I(g)*(r-(L/I(g))*i) + t_s*A_s > t_c*A_c$$

Thus, below some interest rate  $i^*$ , the government will choose a capitalist economic policy. The viable tax rate depends in part on the government strategy chosen. Authoritarian regimes that spend heavily are more likely to avoid rebellion, but taxing agricultural above a certain level may invite rebellion due to the incentive of taking over the government. Democratic regimes that tax agriculture too high will lose office both because the opportunity costs are low, and because the incentive for government overthrow is high. Figure 2 demonstrates how statist policies are more attractive to the government at low interest rates, and how (for some parameter values) authoritarian regimes can be more lucrative than democratic regimes.<sup>40</sup> As a reminder: the government payoff is, for a capitalist regime, the surplus from the effective tax on exports (after interest payments and government spending on the military), and, for a statist regime, the surplus from the effective export tax (after interest and government spending) plus profits from state investment.

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<sup>40</sup> The parameter values and functions for this simulation are:  $X=2000*(1-t)^{0.5}$ , so tax revenues on the effective export tax are  $T=t*2000*(1-t)^{0.5}$  and the optimal tax rate is  $t=2/3$ ; where this results in government overthrow, the tax rate is reduced to  $t=2/5$ ; the marginal return on investment function begins at .25, and drops incrementally by .01 in a step function, with an investment capacity of 65 at each step;  $p1=.8$ ,  $p2=m=.6$ ,  $w=.85$ ,  $c(s)=.7$ ,  $c(p)=.35$ ,  $s=.6$ ,  $I(f1)=175$ .



The statist/authoritarian strategy is most attractive at low interest rates because profits from investment are high, and because the government can buy support among public workers and thus hold onto power even when taxes on agriculture payouts are high. The statist/democratic strategy, on the other hand, is less likely to be an equilibrium strategy at high tax rates on agriculture because high tax rates make government overthrow more attractive to private workers relative to supporting the government. In figure 2, a government that chooses the democratic/statist strategy must reduce the tax rate to a lower level in order to remain in power. Statist governments, borrowing to finance more state investment, are more likely to pass higher levels of debt to future governments.

Payoffs for governments pursuing a capitalist strategy are only affected by interest rates in that the government's payoff is reduced by the need to pay interest on debt, and thus

governments using such a strategy are less sensitive to changes in the interest rate. In Figure 2, at low interest rates the statist policies are more attractive than capitalist policies because state investment profit opportunities outweigh the gain in agricultural tax revenues from capitalist policies. However, even when profit opportunities for state investment are lower than assumed in this simulation, the authoritarian/statist policy can be more attractive than the authoritarian/capitalist strategy for some parameter values because more wages to public workers make the government able to tax private workers at a higher rate without inviting rebellion by public workers.

The introduction of market-based interest rates thus affects the government's decision of whether to pursue statist or capitalist policies by affecting the profitability of state investment. This in turn affects government's decision of pursuing authoritarian or capitalist policies. Higher levels of state investment (paid for by debt when interest rates are low enough) increase the level of support from public workers, thus making a (statist) authoritarian regime more attractive.

In other respects, the model is unchanged. Governments pursuing the authoritarian/capitalist strategy can tax agricultural payouts at a higher level than a democratic/capitalist strategy because they rely on support from public workers (i.e. the military) rather than private workers to hold on to power. In figure 2, a government that chooses the democratic/capitalist strategy must reduce the tax rate in order to remain in power, thus reducing the payoff for this strategy at all interest rates. At higher levels of FDI, a capitalist/democratic government is able to hold onto power more easily because the lost income from rebelling becomes larger relative to the benefits of taking control of the government.

An authoritarian regime can generally hold onto power as long as government funds are available to buy support from public workers. High tax rates on agricultural workers can even

make the government's hold on power more secure by making public workers less willing to mount a rebellion because they will be forced to share the benefits of controlling the government with disgruntled public workers. As the costs of rebellion for government workers get higher, public workers are less likely to rebel, and the government is more secure.

Democracy is only a unique equilibrium when the government is “bankrupt” and unable to buy support from public workers, i.e. when interest payments consume all tax revenues so that the government has no funds to pay state employees. The government could prevent this to some extent by raising taxes on exports, which would induce farmers to oppose the government, which would make democracy unattractive as well. However, the existence of foreign investment can provide wages for private workers, such that there would still be an opportunity cost (for some) of organizing against the government, thus providing the government with the possibility of remaining in power. Thus, in bankruptcy, Capitalism/Democracy can be a viable government strategy, whereas Statist/Democracy is not, nor are the Authoritarian strategies.

If, however, there is insufficient FDI, the government will not be able to avoid overthrow in the bankruptcy special case.

### III. The Model with Conditional Interest Rates

In the previous version of the model, interest rates were set by market forces. In this version of the model, interest rates depend in part on the decisions of the government. After the government chooses a strategy, Lenders may choose to subsidize the interest rate. This models two periods of time following the debt crisis in the late 1970s-early 1980s. In the early 1980s, foreign lenders such as the IMF gave preferential (structural adjustment) loans to countries that

agreed to pursue capitalist economic reforms.<sup>41</sup> Later, in the late 1980s, foreign lenders including the IMF began to give preferential terms to countries that enacted democratic reforms.<sup>42</sup>

The introduction of preferential interest rates conditional on economic reform causes the government to switch from a statist to a capitalist strategy at a lower interest rate, because the subsidized interest rate makes the payoff to the government relatively higher. For example, in Figure 2, if the commercial interest rate is 5% and there is no conditional interest rate, the government would choose a statist policy. However, if the IMF offered a 2% loan in exchange for economic reforms (i.e. a change from statist to capitalist policies), the payoff for capitalist policies at the 2% interest rate is higher than the payoff for statist policies at the 5% interest rate, and so the government would agree to these conditions. This assumes that governments have a choice of whether or not to accept the structural adjustment conditions, and often these programs

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<sup>41</sup> The IMF and World Bank initiated policies that attached conditions of economic reforms in the early 1980s; the World Bank did not institutionalize systematic economic conditionality until 1986 (Quinn 2002, p. 198). Among the six countries I studied, the earliest was Togo (1983) and Ghana (1984). Countries that resisted structural adjustment during this period did not receive IMF loans until they agreed to the terms – for example, Benin negotiated fruitlessly from 1983-1989 before finally bowing to IMF conditionality. However, Stone (2004) finds that African countries with close ties to major donor countries are less likely to have the conditions of structural adjustment rigorously enforced, Vreeland (2005) finds this is true generally with a large-n study of 96 countries. The countries I have chosen are generally not vital interests to the major donor countries (except perhaps Togo to France), and so economic policy conditions seemed to be relatively well enforced. Kobrin (2005) finds that IMF obligations in 1991 had no statistically significant effect on FDI liberalization in the succeeding 10 years in developing countries, but this may be due to the weak enforcement of countries with ties to donor countries.

<sup>42</sup> The Cold War ended, and donors generally began to credibly link aid with democratic reform, around 1990. In 1993 the Development Assistance Committee (DAC) made policy linking aid and democracy official (although not all donor countries played along; France linked aid to movement toward democratic reform in a June 1990 speech by Mitterand at a Franco-African conference, but reversed course in November 1991 when he declared that France would not interfere in political affairs of African states. Autocrats that survived the year and a half policy window, such as Eyadema in Togo, were more likely to hold on to power). Three statistical studies find that the effect of aid had no effect on democracy (Knack 2004, looking at all regions, finds that aid has no statistical effect, both before and after 1990; Goldsmith 2001a and 2001b, looking at Africa, finds that aid has a positive effect, both before and after 1990). Dunning (2004) argues that the end of the Cold War aid policies in Africa should be placed in 1987 instead of 1990, since that is when the USSR withdrew from Africa, thus effectively ending the Cold War in Africa. He replicates the analysis of Goldsmith (2001b), including a dummy for alignment with the USSR to account for aid from non-Western sources. He finds that aid from Western sources has no statistical effect on democracy pre-1987, and a positive effect post-1987. He finds that alignment with the USSR has a negative effect on democracy pre-1987. This lends support for the common belief (Bates 1994, etc.) that donor pressure contributed to democratization post-Cold War. However, what I am positing is not that aid led to democracy, but that democracy led to an increase in aid (and also to favorable loans from the IMF and World Bank, which are not included in the aid measure). The empirical evidence lends support to this argument because countries more dependent on aid were more susceptible to this pressure. The US, for example, had an official policy starting in 1975 that US aid was conditional on human rights and civil liberties. During the Cold War, national security issues trumped civil rights, but this was no longer true when the USSR withdrew from Africa (as Dunning shows).

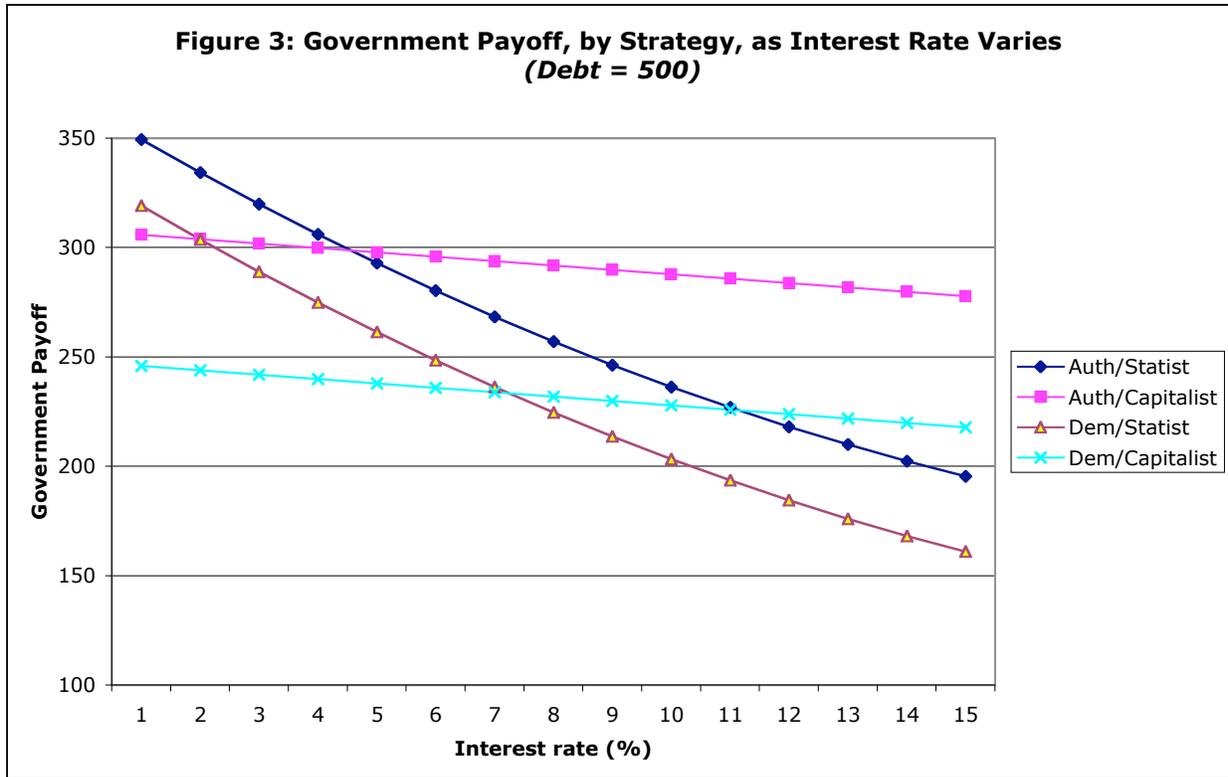
are described as if the government has no choice. However, several countries avoided structural adjustment conditionality for a period of time. For example, Benin resisted economic reform from 1983-1989 before finally bowing to IMF conditionality.<sup>43</sup>

When the reduced interest rate is conditional on both democratic and economic reform, the Democratic/Capitalist strategy becomes more attractive under a broader set of conditions. For example, in Figure 2, if the interest rate for an Authoritarian/Capitalist government is 15%, and the government is offered a 5% loan if it accepts democracy, the government can maximize its income by democratizing. For a government in bankruptcy, unable to pay salaries to the military, the government will be forced to yield to the demands for democratic transition in order to have a chance of holding onto power.

More generally, a government with high levels of debt is also more susceptible to conditionality requirements because its income (or its ability to hold onto power) is more sensitive to changes in the interest rate. Figure 3 shows the government payoffs for various strategies for a government that inherits a low level of debt. An offer of a lower interest rate in exchange for political reforms now provides little incentive to the government to democratize.

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<sup>43</sup> Vreeland (2003) offers two extreme examples – Uruguay in 1990, who didn't need an IMF structural loan and took one, and Tanzania in 1983, who did need an IMF loan and refused one, to demonstrate that although governments in debt are more likely to take an IMF loan, the decision is in the government's control. Vreeland argues that countries choose to accept an IMF conditional loan when they want to push through unpopular economic reforms.



### The Pattern of Economic and Democratic Reform in West Africa

The model predicts that, under conditions of low interest rates and high prices for exports, governments will tend to pursue the statist/authoritarian strategy. When interest rates rise (as they did in the late 1970s and early 1980s) and when lenders offer lower interest rates in exchange for economic reforms, governments will tend to pursue the capitalist/authoritarian strategy. When lenders offer lower interest rates for democratic reforms, governments will tend to democratize, particularly those who face economic hardships.

Below, I demonstrate how the predictions match the pattern of economic and political reform in six countries in West Africa. This match-up is not a test of the model, since the model was designed based on the experience of these six countries. Testing the model will require

applying its predictions to new cases. Rather, the goal of this section is to show how the parameters of the model capture key features of real cases.

Figure 4 outlines the government choices for economic policy and political regime for the different lender preference periods.

**Figure 4: Government Strategies for 6 West African Countries, 1970-2000**

1970-1982	Statist	Capitalist
Authoritarian	Ghana,* Mali, Benin, Togo, Burkina Faso, Niger	
Democracy		

1983-1989	Statist	Capitalist
Authoritarian	Benin, Burkina Faso	Ghana, Mali, Togo, Niger
Democracy		

1990-2002	Statist	Capitalist
Authoritarian		Togo, Burkina Faso
Democracy		Ghana, Mali, Benin, Niger**

\* Except for short democratic period in 1979-1980

\*\*Except for period 1996-1999. In 1996 there was a coup, but by 1999 international pressure led to new elections

Most of these cases follow the general historical pattern expected. Prior to the debt crisis, all six chose the Statist/Authoritarian strategy. Following the debt crisis, with the introduction of structural adjustment conditionality, most switched to the Capitalist/Authoritarian strategy. Benin and Burkina Faso finally yielded in the late 1980s. When lenders introduced the condition of democratic reform for favorable loan conditions, most switched to the Capitalist/Democratic strategy. Governments that didn't follow the equilibrium strategy were commonly short-lived, and sometimes resulted in the death of the president. Only after the international context changed did democracy become a sustainable equilibrium strategy.

Governments led by long-standing dictators who yielded to international pressure to democratize were often able to hold onto power. Rawlings in Ghana, for example, changed his base of support from state employees to farmers during the Capitalist/Authoritarian period, and thus was able to win two elections after accepting democracy (Grosh 1994, p. 36). Kerekou in Benin, who had bankrupted his government by holding onto Statist policies since his 1972 coup, was forced to switch from a Statist/Authoritarian strategy to a Capitalist/Democratic strategy in 1989-90, and lost the first post-democracy election in a run-off, but was able to win the second and third elections. The strategy was not successful for Gen. Saibou of Niger, however. He remained ceremonial head of state during the transition period before being removed from office by the National Conference. This fate was preferable to that of President Traore of Mali, however, who threatened to crush state employee protestors that had taken to the streets. In 1991, the president and three of his associates were arrested by Lt. Col. Toure and received the death penalty. Toure became the head of state and led a transitional government until presidential elections in 1994.

Eyadema of Togo was able to avoid democratization in the 1990s for three reasons, all of which are reflected in the model: First, Togo's finances were not as bad as was the case for several of the other countries, and so it was able to pay public salaries to buy support (this is the argument emphasized by Seely 2000). Second, the costs to the military of overthrowing the government were very high – top officers were from the same ethnic group as the president, and had participated in his tactics of brutally suppressing opposition. If the government were to fall, the officers would suffer along with the president. "These military men were intensely loyal to Eyadema, and they feared a virtual pogrom if a national conference overturned" the Eyadema dictatorship (Heilbrunn 1997, p. 236). Third, loan conditionality was not as strong for Togo as it was for other countries because of its special relationship with France. Although in June 1990, Mitterand joined other major lenders and donors in linking bilateral aid to political reform, in November 1991 he declared France would not interfere in African states political decisions. "Within twenty-four hours of Mitterand's about-face, the Togolese army launched a coup" that returned Eyadema, who had begun negotiating a transition to democracy, to full power (Heilbrunn 1997, p.229). Another example occurred several years later: while the EU, US and multilateral lenders suspended all financial assistance after Amnesty International reported hundreds of people were extra-judicially executed during the 1998 presidential election, President Chirac visited Togo to offer support for the government against Amnesty International's allegations. This contrasts with France's attitude toward Benin; France was no longer willing to support Kerekou in 1990 (Decalo 1997).

Burkina Faso has also deviated somewhat from the pattern followed by the majority of countries. Like Benin, it resisted structural adjustment conditionality until the late 1980s. During this time, President Sankara (who had taken power in a coup in 1983) sought to delink the

country's economy from international capitalism and, although he was willing to accept foreign assistance, he was unwilling to accept aid on a conditional basis. The resulting economic crisis led to revolt among his military and trade union support base, and finally he was assassinated by his closest associate, Blaise Compaore.

Compaore yielded to the lenders' conditionality requirements, entered structural adjustment in 1991 and shifted to capitalist economic policies. As for democratic reform, Burkina Faso is a borderline case (Freedom House, for example, rates Togo "Not free" and Burkina Faso "Partly Free"). Although Compaore, president since a coup in 1987, has won all three elections since 1991 (the third after changing the constitution to remove the two-term limit), the legislature is freely elected and considered by experts to be an effective check on the president (Boudon 1997, CNTS data set). Like Eyadema in Togo, Compaore is to an extent shielded from the political demands of the international donor and lender community by its close relationship with France. France sided with Burkina Faso against what it saw as excessive demands by the World Bank, and in 1995 Compaore was the only foreign dignitary invited to Chirac's first Bastille Day celebration as president.

In some cases, governments pursued a non-equilibrium strategy, and the result was a very short-lived government. For example, the democratically-elected Limann government of Ghana pursued what essentially was a democratic/statist strategy. Although FDI was a stated objective, the government was unable to make the necessary policy changes under the threat of the military. If granted the benefit of favorable economic conditions, perhaps the government would have survived, but economic conditions deteriorated and the government fell to a popularly supported coup in 1981 after two years in office (under a parliamentary system, perhaps the government

could have been removed with elections). As described above, Sankara's government in Burkina Faso was also relatively short-lived (1983-1987).

The case of Niger demonstrates that in some cases, poor economic conditions are such that the government cannot avoid overthrow. In 1974, President Diori (who had held onto power in part thanks to his close relationship with France) had lost domestic support after a sustained drought and was overthrown by Lt. Col. Kountche, who became president and held office until his death in 1987 (at which time he was succeeded by Saibou). When the fall in uranium prices undermined Kountche's ability to successfully follow a statist strategy, Kountche switched to a capitalist strategy in the early 1980s. Following his death in 1987, Saibou attempted to continue with this strategy by creating a single party system, but after pressure from locals as well as international lenders and donors (led by France) in 1991, Saibou agreed to democratize. Because of economic difficulties, the transitional government faced serious domestic disruptions. Saibou's party's candidate lost the presidential election in 1993, and then the victorious president quickly lost popular support when the government tried to enact austerity measures. In 1996, the government fell to a coup; government leaders were placed under arrest. As a result of the coup, donors cut financial support, despite the new government's pledge to restore democracy. The new president was unable to buy support; there were strikes in the public sectors and army mutinies, and the president was assassinated by the presidential guard in 1999, followed by a return to democracy.

## **Conclusion**

In this paper, I argued that in capital-scarce countries, democratic transitions are driven by the international political economy. Because such countries rely on foreign finance, either

through loans and grants or FDI, these factors must be considered in order to understand under what conditions governments will choose a given economic and political strategy.

According to my model, when countries are in an international context of low interest rates and high prices for their exported commodities, they will tend to pursue a statist/authoritarian strategy, because this will maximize their income as well as stability through the purchase of support from state employees. One result of the statist economic strategy is the accumulation of debt, which is passed on to succeeding governments. As interest rates rise, the statist policy becomes less viable, and the capitalist policy becomes more attractive, because governments are no longer able to profitably borrow to finance investment. However, even when state enterprises do not generate a profit, statist policies may still be more attractive than capitalist policies because, by increasing support among state employees, they are better able to exploit private workers such as cash crop farmers.

The model could be augmented by considering the interaction between state and private employees to be simultaneous, or by making it a repeated game. The model does not consider how governments might benefit financially from FDI, and this could be explored either with additional beginning conditions or with a repeated game. For example, in a country that had previously pursued a statist policy, a later government (or the same government in a later year) would have a stock of state enterprises that it could sell for its own gain.

Added to the influence of market-based interest rates are the conditions imposed by foreign lenders/donors, which made first capitalist policies and then democratic reform an equilibrium strategy in a broader range of conditions. Countries that are highly in debt, and that do not have favored relationships with major donor/lender countries such as France or the US, are particularly susceptible to loan conditionality. Countries that are able to attract FDI are

particularly able to maintain a stable democracy because foreign investment replaces state investment to provide jobs for former- or non-state employees. However, for countries that do not receive sufficient FDI and continue to face economic hardships, such as has been the case in Niger in the 1990s, no viable strategy is available to the government, and frequent turnover is likely to occur.

The discussion in this paper has focused on interest rates because the context of international political economy is an important absence in previous models. However, other factors are also important. For example, as has been emphasized in previous models, high costs of rebellion will tend to make governments more stable, and exogenous economic shocks will tend to trigger a regime change because it changes the calculus of rebellion – when there is a recession, subjects have less to lose from a rebellion against the government.