Do parties facing electoral competition substitute away from foreign aid?

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Abstract: This paper extends the Grossman and Helpman (1996) model of elections and special interests by including foreign aid in order to examine the incentives of a government facing electoral competition for accepting foreign aid. Rich and poor individuals vote in elections based on the government and opposition party’s policy platforms. The rich group can forge political connections by making monetary contributions to political parties and thereby potentially countering conditional foreign aid. Similar to Grossman and Helpman (1996) I find that the party with the higher probability of winning receives more contributions and is asked to deviate more from its preferred policy. In addition I find that parties deviate more from their preferred policy under unconditional foreign aid but that this may no longer be true with conditional foreign aid. Moreover, if conditionality is high enough it may raise incentives for a contributing group to alter election probabilities in order to get that group’s policy endorsement implemented.

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1 Introduction

Foreign aid is a multibillion-dollar industry. In 2010, net disbursements of Official Development Assistance (ODA) from the member countries of the Organisation for Economic Cooperation and Development's Development Assistance Committee (OECD DAC) reached $128.5 billion, of which almost $91 billion was in bilateral aid\(^1\). Yet the effectiveness of development assistance is, at best, mixed (Easterly, Levine, and Roodman 2003). Poor performance of foreign aid initiatives have been attributed to the cumbersome logistics of the aid process itself, conditionality, donor competition, donor inflicted transaction costs, and the recipient country's lack of ownership to mention a few. Foreign aid is associated with corruption in recipient countries (Alesina and Weder 2002; Boone 1996) and decisions about who gets bilateral foreign aid is largely driven by political considerations of donor countries rather than poverty-targeting (Alesina and Dollar 2000). However, the foreign aid system is a bilateral process and literature is largely silent on the political motivations of recipient countries in accepting foreign aid. A substantial portion of foreign aid is conditioned on policies, programs, regimes, purchases of equipment and consultancy services from donor countries. How the recipient government responds to such conditionality depends largely on the political realities in the recipient country.

The purpose of this paper is to present a model that examines the recipient government’s incentives for accepting foreign aid in a political economy framework. Foreign aid packages often stipulate policy conditionality that ultimately affects businesses and the general public in the recipient country. Political parties in countries with democratically elected governments may worry about how voter valuations of these policies translates to their (re)election probabilities. This paper asks whether recipient governments substitute foreign aid with financing from business sources when donors tie aid to policies that may cost the party electoral votes.

Businesses as an economic group can capture rents for themselves by manipulating policy. This may create economic inefficiencies and, together with the ability to manipulate policy, can weaken political institutions. For developing countries that are precisely in the crucial phase of building institutions, this is an even greater cause for alarm. To the extent that institutions are endogenous, powerful economic groups may choose to eschew weak institutions

such as low tax rates, underinvestment in rule of law and minimal corporate governance, despite the presence of democratic regimes. Such tendencies may persist even when international development organisations or aid donors try to help develop institutional capacity through foreign aid and other forms of assistances. Consider for instance trade protection. While both bilateral and multilateral donors ask a country to adopt trade liberalisation, there may be groups within the country that lobby for some form of protection or favouritism. When the policy objectives of all involved parties are aligned, there is apparently no need of additional rent-seeking activity. However, if it is a situation of pure conflict, the level of rent-seeking activity may actually increase.

In the model a donor gives either conditional or unconditional foreign aid to the government of a country with two economic groups: the rich and the poor. The policy instrument is the tax rate for the rich, although we could think about other policies such as labor laws or investment in social infrastructure. Tax revenues are distributed equally among the poor. Under conditional foreign aid the donor gives more foreign aid for a higher tax rate to encourage revenue generation by the recipient government. Thus the policy objective of the donor is more aligned with the poor, but in conflict with the rich economic group. There is a two-party democracy, and each party declares its policy before elections. Policy announcements are binding, and the policy outcome in effect gets decided by probabilistic voting. Both rich and poor individuals have preferences over the tax rates and a random preference parameter over the parties. This ensures that the equilibrium tax rate isn’t only 0 or the maximum rate, depending on which group forms the majority. The rich can also form political alliances by making monetary contributions to either or both parties, and so to a certain extent can ‘counter’ conditional foreign aid. Parties use these contributions to supplement tax revenue and foreign aid and they spend directly on the poor. The objective in modelling an electoral democracy is to examine whether policy manipulations occur despite a regime that empowers those without political influence.

As long as there are no added benefits to the rich from altering the election probabilities, that is when the lobby pursues an influence motive, I find that the rich group contributes to both parties and they manipulate the tax rate most under unconditional foreign aid. They also contribute more to the party with the higher probability of winning, causing it to deviate more
from its preferred policy. With conditional foreign aid, this holds under certain conditions. If the amount of aid is very high, and furthermore conditionality is also high, then the optimal tax policy chosen by the government will be higher than the case without aid or campaign finance. However, this is exactly the scenario where it might be more profitable to the rich to form a bigger political alliance with the opposition. So under these circumstances the rich will pursue an electoral motive by contributing more to the opposition to try and increase its election probabilities. If the marginal benefit of doing so is greater than the marginal cost, and if the party can use these contributions more effectively than foreign aid to gain the vote of the poor, then the rich will contribute more to the opposition even though initially it had a lower probability of winning. This is also the scenario where the government will want to substitute away from conditional foreign aid and towards campaign contributions to boost its probability of winning. The policy outcome in equilibrium will affect the amount of aid transfers, and the tax policy and aid amount will eventually affect the growth prospects of the country.

The rest of the paper is organized as follows: in the next section I discuss the relevant literature. Section 3 presents the models, with a detailed description of the players and the game. I solve for the equilibrium in the following three sections, where each section adds a layer of complexity by adding a player. In Section 4, I solve for the equilibrium with only the political parties and the rich and poor individuals, but with no campaign finance. Section 5 presents the results when a foreign aid donor is added to the game. In Section 6, I allow the rich to lobby with political contributions, examining both the influence and electoral motives. Section 7 concludes, and the Appendix presents the equilibrium with political parties, individual voters and the rich lobby making political contributions, but with no foreign aid donor.

2 Literature review: Politics, business and foreign aid

This section examines three strands of literature relevant to the model. First, I review some studies on political budget cycles in developing countries to demonstrate how the fiscal behavior of political parties changes in face of electoral competition. Next I explore the business and politics nexus. Finally, I look at how foreign aid can shape policy and also contribute to rent-seeking behavior.

2 This is exactly the finding in Grossman and Helpman (1996) on which the model in this paper is based.
2.1 Political Budget Cycles

Political budget cycles occur when the government uses expansionary fiscal or monetary policy instruments around elections to promote their chances of winning elections. Schuknecht (2000) presents a brief review of the underlying theory. The empirical finding is that the main instrument for expansionary fiscal policies around election time is increased public spending rather than lower revenues. On the other hand, Shi and Svensson (2002) finds that expansionary fiscal policies involve both increased spending and lower revenues around elections, and that while political budget cycles exist for both developed and developing countries, they are larger in developing countries. Furthermore, they find that these electoral effects are particularly more pronounced in countries with weak institutional constraints on the incumbent's rent-seeking behavior. Block (2002) shows that election year public expenditure shifts towards more visible, current consumption and shifts away from public investment goods when elections are competitive. Using county level data over three election periods in Chile, Cerda and Vergara (2008) demonstrate that the larger the percentage of people receiving subsidies in a county, the higher the votes received by the incumbent. The studies above highlight two important facts: (i) governments change their policy around election times to maximize their probability of winning elections; (ii) they are strategic in terms of the nature of the spending, i.e., they shift to more salient and immediate gratification spending.

2.2 The Business-Politics Nexus

I now turn to the literature highlighting the connection between business and politics. If businesses can provide any electoral benefits, then political parties in turn should be willing to make favorable policy concessions for them. The link between politicians and businesses is prevalent across the world and is borne out by both academic literature and anecdotal evidence. Extensive research on how firms lobby members of congress exists in the US, such as Ansolabehere, Snyder and Tripathy (2000) and Kim (2008), while de Figueiredo (2002) provides an introduction to the rationale behind political lobbying based on co-published studies. Similar studies in other countries are not available mainly due to data scarcity or the fact that direct political giving is illegal. Studies in other countries, such as those by Faccio (2006) and Fisman (2001), focus instead on the political connections of businesses. Connectedness could take the form of businessmen being related to important political figures or the director of a company
being a cabinet member. These links benefit both the business and the politician: politicians get resources and information that help them get elected to office, and businesses receive rents from political connections.

It is important, however, to understand the bidirectional nature of such links. First, politicians may form ties with businesses or use businesses to launch political careers. They aim to divert resources from the business to themselves or to their political parties. Dinc (2005), Khwaja and Mian (2005), and Sukhtankar (Sukhtankar 2012) present empirical evidence consistent with this motive.

On the other hand, businessmen may enter politics or use their political connection to influence policy or divert resources to firms. Faccio, Masulis and McConnell (2006) find that politically connected firms show worse fiscal performance than non-connected firms but are more likely to get bailed out, especially when the IMF or World Bank provide financial assistance. In an event study of politicians joining boards of businesses and large shareholders and directors entering politics, Faccio (2006) shows that corporate value increases only when businessmen enter politics. Moreover, the stock price of the firm increases more if the business person is elected a prime minister rather than a member of parliament, or if it is a shareholder rather than a director who enters politics.

2.3 Foreign Aid and Rent-Seeking

I discuss some of the relevant aid literature next. Svensson (2000) and Economides, Kalyvitis and Philippopoulou (2004) model rent-seeking induced by foreign aid transfers to the recipient country. In both papers foreign aid can be used for investment in public infrastructure or appropriated by competing economic entities and thus such transfers induce rent-seeking activities. Svensson (2000) also finds some empirical evidence supporting the hypothesis that foreign aid and windfalls are on average associated with higher corruption in countries with a higher likelihood of greater social group competition. Economides, Kalyvitis and Philippopoulou (2004) present a more detailed model with firms employing individuals who benefit from investments in public infrastructure. Domestic taxes and foreign aid finance infrastructure investments, and individuals have access to the government’s budget constraint. Some of the foreign aid transfers can also be appropriated by individuals, giving rise to the rent-seeking motive. They find some support for the hypothesis that foreign aid has a direct positive
effect on growth but that this effect can be dampened by indirect rent-seeking activities and this effect is more pronounced in countries with large public sectors. However, neither paper addresses electoral competition or the policy conditionality that is associated with most bilateral aid today. While Svensson (2000) allows that rent-seeking can be in the form of policy manipulation, he does not explicitly model this channel. In contrast to the papers mentioned above, the model I present takes account of both these factors.

One of the criticisms of foreign aid is that it reduces the need for domestic revenue collection, making the government less accountable to citizens. As a result donors have become keener to have recipient governments take ownership stakes in foreign aid financed projects. In this regard Gupta, Clements, Pivovarsky and Tiongson (2003) find that foreign aid composition matters. Concessional loans are associated with higher domestic resource mobilisation, whereas grants have a small dampening effect. In presence of high levels of corruption, the decrease in revenues however completely offsets the increase in grants.

Finally, there is a body of literature that argues that sound institutions are important for growth. Donors have responded accordingly by pledging to reward countries if they have better institutions or if they are reform-minded. Mugo and Ward (2007) find that in the 1973 to 2002 period foreign aid flows into a cross-section of countries are positively associated with contemporaneous and future improvements in economic institutions. This is consistent with aid rewarding good institutions and being conditioned on reform. The effect is strongest for improvements in monetary policy and business environment, and the effect is present for bilateral aid but not for multilateral aid.

The literature on business and politics shows that political parties can divert resources from businesses when facing elections, and that businesses receive rents from political connections. These rents or kickbacks can be in the form of policies favourable to the politically connected businesses. If donors condition foreign aid on sound policies in order to enhance aid effectiveness, but businesses driven by special interests have the ability to manipulate policies, then it is important to understand how governments respond to conditionality. This paper examines precisely this donor-politics-business relationship to examine how rent-seeking through policy manipulation affects foreign aid levels.
3 Model

I examine a democracy with two political parties, based on the Grossman and Helpman (1996)\textsuperscript{3} model of electoral competition with special interest politics. Whereas GH (1996) have informed and uninformed voters this paper distinguishes between rich and poor voters, and gives specific functional forms to their utility functions. In addition, the policy instrument is the tax rate. Finally, there is one additional player – the foreign aid donor. A description of the players and the game follows.

3.1 Voters

Each voter $i$ can be one of two types, $j = p, r$, where $p$ denotes the poor and $r$, the rich. The income of the poor is normalized to zero, so $y_p = 0$, and their utility is linear in income and other monetary benefits. The rich have income $y_r$ and their utility is $\log(y_r)$. The population size is $N$, which can be normalized to 1. The proportion of rich and poor in the economy are $\pi$ and $1 - \pi$ respectively.

The policy instrument is the tax rate $\tau_k$ chosen by party $k$ applied to the income of the rich, and the tax revenue is redistributed equally among the poor voters. Thus, after taxation and redistribution the income of the rich is $(1 - \tau_k)y_r$ and the income of the poor is $\frac{\pi \tau_k y_r}{1 - \pi}$. While literature makes a distinction between lump-sum taxation and distortionary tax rates, the set-up of the present model allows us to abstract from this problem. Typically, a distortionary tax rate would impart a substitution effect (on top of the income effect also present in lump-sum taxation) and cause the entity facing the tax to reduce its income generating activity, or to switch at least part of the production activity from the formal sector to the informal sector. In this model, the income of the rich group facing the tax is fixed, so I mute the option to substitute away from the income generating activity. As will be explained subsequently, the rich do react by forming a lobby that makes political contributions to each party based on the latter’s proclaimed tax rates. The model allows us instead to focus on the extent of this rent-seeking activity and its effects.

\textsuperscript{3} From here on I will refer to the Grossman and Helpman (1996) paper as GH (1996).
The poor are also the sole beneficiary of foreign aid, $F$, and monetary payoffs from political connections, $C_k$. The utility functions of the rich and poor individuals are thus:

$$u^r = \log(1 - \tau_k) y_r$$

and

$$u^p = \frac{\pi \tau_k y_r}{1 - \pi} + \frac{F}{1 - \pi} + \frac{\eta C_k}{1 - \pi},$$

where the parameter $\eta > 1$ indicates that campaign spending obtained through party $k$’s political connections with special interests groups is more effective than foreign aid or tax redistribution. Rich voters prefer lower tax rates while poor voters prefer higher tax rates. The political parties can also gain the loyalty of poor voters through spending financed by foreign aid or business connections. These need not be monetary handouts, and can take the form of food aid, health and education spending, loans, and paved roads in villages or other forms of visible expenditures that can be consumed immediately\(^4\). While foreign aid isn’t used entirely for these purposes a large part of a poor country’s development budget can constitute of foreign aid.

In GH (1996), the variable $C_k$ denotes campaign finance. The interpretation in this model is equivalent, except that I note that campaign contributions in many countries are illegal, or the limits are set very low and actual campaign expenditure almost always exceed these limits. Empirical evidence points to the fact that politicians use their business connections to appropriate money for running their election campaigns ((Sukhtankar 2012)).

Voters have preferences over the tax policy, but are also subject to party and candidate specific biases. An individual $i$ from group $j$ will vote for party $A$ if

$$u^j(\tau_A) \geq u^j(\tau_B) + \sigma^j + \delta$$

$$\Rightarrow \sigma^j \geq u^j(\tau_A) - u^j(\tau_B) - \delta,$$

where $\sigma^j$ is the ideological bias towards a party based on the latter’s fixed policy platforms, and $\delta$ is a candidate bias common to the entire population. The random variable $\sigma^j$ is distributed uniformly with density $\varphi^j$ in the interval $\left[-\frac{1}{2\varphi^j}, \frac{1}{2\varphi^j}\right]$. Thus $\sigma^j < 0$ indicates an ideological bias towards party $A$ and $\delta < 0$ indicates a population-wide shock biased towards the candidate

\(^4\) Thompson (2009) reports in the online magazine NACLA that El Salvador’s incumbent ARENA party sent email advertisements to El Salvadorians working in the US offering a discounted return airfare of $330 in order to vote for ARENA candidate Rodrigo Àvila.
in party $A$. The probability that party $A$ wins the election depends on the realization of the party and candidate shocks. Given the distribution $\varphi^p$, the probability that party $A$ wins is given by

$$p_A = \pi \int \frac{u^p(\tau_A) - u^p(\tau_B)}{2\varphi} \varphi d\sigma^r + (1-\pi) \int \frac{u^p(\tau_A) - u^p(\tau_B)}{2\varphi} \varphi d\sigma^p$$

$$\Rightarrow p_A = \frac{1}{2} - \delta \left[ \pi \varphi^r + (1-\pi) \varphi^p \right] + \pi \varphi^r \left[ u^r(\tau_A) - u^r(\tau_B) \right] + (1-\pi) \varphi^p \left[ u^p(\tau_A) - u^p(\tau_B) \right]$$

(1)

Party $B$’s probability of winning is therefore $p_B = 1 - p_A$.

It is also worth noting that the poor may be agnostic about the non-tax sources of spending on them. They can merely observe the effective amount spent, and do not necessarily distinguish between foreign aid and campaign finance. As evident from the utility function of the poor voters, they are however cognizant that taxes collected from the rich will be redistributed to them.

3.2 Political parties

There are two political parties, $k = A, B$ and each tries to win the elections by choosing a tax rate $\tau_k$ to maximize its probability of winning, $p_k$. The parties are aware that rich voters are sensitive to policy platforms and that the poor voters are sensitive to redistribution through taxation, foreign aid and campaign spendings. While the parties can’t observe the political leanings of any individual voter, they know that these tendencies are drawn from uniform distributions with density $\varphi^j$ in the interval $\left[ -\frac{1}{2\varphi^j}, \frac{1}{2\varphi^j} \right]$ for each group $j$. Note from the vote share equation in (1) that there are no strategic interactions between the two parties since an individual’s utility from voting for party $A$’s tax rate, and the same is true for party $B$. Thus each party’s vote maximization problem reduces to

$$\text{Max} \left\{ \varphi^r u^r(\tau_k) + (1-\pi) \varphi^p u^p(\tau_k) \right\}, \text{ for } k = A, B$$

(2)

The vote share, which in the two-party case is equal to the probability of winning, represents the proportion of legislature that each party controls. Typically in democracies the number of seats, or electoral votes in the US, is the determinant of the degree of control over the
legislature. Since the model has only one region, the vote share $p_k$ is a reasonable indication of the probability of implementing the policy by party $k$.

The legislature meets to set policy after elections are held. I abstract from the commitment problem by assuming that each party tries to implement its declared policy. Therefore the probability that party $k$’s tax rate will be implemented is increasing in party $k$’s vote share. For the remainder of the paper, party $A$ will denote the incumbent government and party $B$, the opposition.

### 3.3 Interest group of the rich

The rich form a single interest group that tries to maximize its expected payoff by lobbying or forming political connections with each party to ensure the lowest possible tax rate. Electoral outcomes are uncertain due to ideological and party biases, and so the rich try to influence the policy platforms of both parties before policies are announced and voting takes place. The interest group of the rich offers a linear policy contingent contributions schedule $C_k(\tau_k) = \pi c_k(\tau_k)$ to each party $k = A, B$, where $c_k(\tau_k)$ is the individual contribution and $C_k(\tau_k)$ is the collective contribution of the rich. In addition, campaign contributions to a party $k$ are decreasing in the party’s declared tax policy, $\tau_k$, or $\frac{\partial C_k(\tau_k)}{\partial \tau_k} < 0$. Thus the lobby offers larger contributions for lower tax rates. Denoting the aggregate utility of the rich by $W_r(\tau_k) = \pi \log[(1 - \tau_k) p_r]$ and given each party's probability of winning, the lobby's expected payoff of contributing to each party is:

$$V_r = p_A W_r(\tau_A) + (1 - p_A) W_r(\tau_B) - C_A(\tau_A) - C_B(\tau_B)$$  \hfill (3)

The rich know that their tax income is redistributed to the poor, and that the poor, given their candidate and ideological biases, vote for the party that redistributes more. The rich lobby can offer campaign contributions to each party to help the party gather more poor votes, but campaign contributions are more effective, with campaign effectiveness factor $\eta > 1$. Thus for the same amount of money, spending on poor from campaign contributions or business connections yields more poor votes than redistributed tax dollars. There can be a number of reasons for this. Tax collection is itself costly, and the government may be able to spend it in certain ways owing to its accountability to the public. Campaign spending on the other hand is
more discretionary and less subject to scrutiny. Indeed in developing countries where the official contributions limit is very small, most of these “contributions” comes in the form of business-politician connections and such transfers normally cannot be directly observed. In Bangladesh, the percentage of businessmen in the parliament jumped from around 25 per cent in the 1970’s to 50-60 per cent in the period 1991-2001. Furthermore, an anonymous interview with a former Cabinet Minister reveals that political parties can approach successful businessmen to stand for elections in seats that are easily winnable to gain access to large monetary donations that can be distributed as election financing to other candidates who have a higher chance of winning but lack the necessary funds. In China, thirty-eight of the top 100 business tycoons listed in China’s equivalent of Forbes in 2006 have a seat in the country’s top national legislature or top political advisory body and this is seen as a means of influencing policy and eliciting government favors such as obtaining land which is state-owned property.

Campaign contributions are also more effective than foreign aid. This may be due to the tying status, fungibility or even the administrative cost of aid. Especially in the case of conditional aid, one may also argue that part of the foreign assistance could be used to implement or improve tax collection or redistribution schemes.

Following GH(1996), I distinguish between the influence and electoral motives of the lobby. Under the influence motive, the lobby only attempts to influence each party’s adopted policy and does not change either party’s probability of winning. When the lobby pursues an electoral motive, it attempts to change the election probabilities of each party. As will be discussed later, whether the lobby pursues the influence motive or the electoral motive depends on the relative benefits of each strategy.

3.4 Foreign aid donor

The donor is either a multilateral or bilateral aid agency that gives foreign aid, \( F \), to the recipient government for development expenditure on the poor. Such expenditure includes food and fuel subsidies or building hospitals, schools and roads for the poor people. Aid spending occurs only through the government and is not available to the opposition party running in the elections. This aspect of the model is meant to capture the advantage accruing to the incumbent

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party in having access to funds in excess of tax revenues for spending on the poor. While in reality countries use both tax receipts and foreign aid to also finance expenditure that benefit other populations in a country, such as financial and trade services for businesses and the middle-class, this paper abstracts from such spending.

Foreign aid can be conditional or unconditional with respect to tax. When there is no conditionality, the amount of foreign aid is a flat amount, with \( F(\tau) = \bar{F} \), regardless of the tax rate chosen by the government. Conditional aid means that the donor offers a foreign aid schedule, \( F(\tau) \), that is increasing and concave in the tax rate set by the government. The tax requirement is a simple case of policy conditionality that donors often impose to encourage the recipient government to raise its own revenue. The aim is to create a government and political system accountable to the public, to reduce aid dependency and to generate recipient country ownership of development agenda. In practice we see that donors are keener to have recipient governments take ownership of development projects by co-funding such projects with donors to address moral hazard problems.

3.5 Equilibrium

The timing of the games is as follows: the foreign donor offers its aid schedule to the recipient government. Both parties and the rich lobby observe this, and then the lobby offers its contributions schedules to each party. The contribution schedules are private information, observable only to the lobby and the party offered that schedule. The parties then choose their tax rates. Aid and campaign contributions are made, aid and campaign spendings are carried out. Voters observe policy platforms and spending and then they vote.

Since there are no strategic interactions between the two parties and each party’s optimization depends solely on the tax rate chosen by that party, we can solve the game outlined above by backward induction. The solution concept for the non-cooperative three stage game is the subgame perfect Nash equilibrium, as defined below.

**Definition:** An equilibrium consists of a policy pair \( \{\tau^e_A, \tau^e_B\} \) and a pair of contribution schedules \( \{C^e_A, C^e_B\} \) such that

(a) \( \tau^e_A \) maximizes \( p_A \) given \( \tau^e_B, C^e_A(\tau_A), C^e_B(\tau_B) \) and \( F(\tau_A) \);
(b) \( \tau^e_B \) maximizes \( p_B \) given \( \tau^e_A, C^e_A(\tau_A), C^e_B(\tau_B) \) and \( F(\tau_A) \);
(c) \( F(\tau_A) \) is continuous and differentiable and \( F(\tau_A) \geq 0 \) for \( \forall \tau_A \);

(d) each \( C_k(\tau_k) \) is continuous and differentiable and \( C_k(\tau_k) \geq 0 \) for \( \forall \tau_k \);

(e) for each lobby there are no other feasible contribution schedules \( \overline{C}_A(\tau_A) \) and \( \overline{C}_B(\tau_B) \) such that

\[
\overline{C}_A(\tau_A) = (1 - \overline{p}_A)W_r(\tau_A) - C_A(\tau_A) - C_A(\tau_A),
\]

\[
> \overline{p}_A W_r(\tau_A) + (1 - \overline{p}_A) W_r(\tau_A) - C_A(\tau_A) - C_A(\tau_A),
\]

where \( \overline{\tau}_A \) maximizes and \( \overline{\tau}_B \) minimizes

\[
\frac{1}{2} - \delta \left[ \pi \phi^r + (1 - \pi)\phi^p \right] + \pi \phi^r u^r(\tau_A) + (1 - \pi)\phi^p u^p(\tau_A)
\]

and \( \overline{p}_A = \frac{1}{2} - \delta \left[ \pi \phi^r + (1 - \pi)\phi^p \right] + \pi \phi^r \left[ u^r(\tau_A) - u^r(\tau_B) \right] + (1 - \pi)\phi^p \left[ u^p(\tau_A) - u^p(\tau_B) \right].

Having defined the equilibrium in the model, in the next few sections I will look at equilibrium policies adopted under different scenarios, as outlined below:

- Section 4: Basic model with no foreign aid or political connections.
- Section 5: Model with foreign aid.
- Section 6: Model with foreign aid and political connections.

The models in Sections 5 and 6 successively build on the basic model in Section 4 with only political parties and individual voters. The timing is identical in each scenario except that I remove, as appropriate, the players and their actions from the game as described.

### 4 Equilibrium in the Basic Model

I begin with the basic model of elections without foreign aid and political connections.

There are only two stages in this game. First the two parties choose their tax rates. Next, the voters observe the tax rate for each party and cast their vote according to their preferences.

Solving backwards, Parties \( A \) and \( B \) maximize their respective vote shares, which take into account the voter’s utility. Recall that each party’s objective function is given by (2), so that substituting in the utility functions of the rich and poor voters yields the following maximisation problem for each party:

\[
Max \left\{ \pi \phi^r \log \left[ (1 - \tau_k) y_r \right] + \phi^p \tau_k \pi y_r \right\}, \text{ for } k = A, B
\]
The first order condition (FOC) is:

$$-\frac{q_r'}{(1-\tau_k)} + q_p' y_r = 0,$$

where the first expression denotes the loss in rich voters and the second expression denotes the gain in poor voters. Therefore at the optimum, each party chooses a policy that balances the loss in rich voters with a gain in poor voters. As is evident from the FOC, policy setting in a single dimension in the two party case gives us policy convergence. However, the presence of ideological and candidate biases mean that the probability of winning is not necessarily the same. The following proposition characterizes the equilibrium in the basic model.

**Proposition 1:** The equilibrium policy chosen by the two parties are identical, and given by the first order condition:

$$\tau_k^* = \tau^0 = 1 - \frac{1}{y_r} \left( \frac{q_r'}{q_p'} \right), \text{ for } k = A, B \quad (5)$$

The group welfare of the rich and poor under each party's equilibrium tax policy are given by $W_r(\tau_A^*) = W_r(\tau_p^0)$ and $W_p(\tau_A^*) = W_p(\tau_p^0)$ respectively. Furthermore, if $\delta < 0$ then party $A$ is more popular and wins the election with probability $p_A^0 > p_B^0$, where $p_k^0$ is party $k$'s probability of winning the elections.

Equation (5) indicates that the equilibrium tax rate is increasing in the income level of the rich and the density of the poor voters’ ideological bias, and decreasing in the density of the rich voters’ ideological bias. If we further assume that $q_r' < q_p'$, the model guarantees a non-zero equilibrium tax rate. It is straightforward to see from (1) that if $\delta < 0$ and if we have policy convergence then $p_A^0 > \frac{1}{2} > p_B^0$, i.e., the government is the more popular party. Under policy convergence, we see that the welfare of the rich is the same regardless of which party gets elected. By the same token, this is true for the welfare of the poor as well. The main results do not change if instead I impose a lump-sum tax in the model, only the functional form is different.

**5 Equilibrium with Foreign Aid Only**

Now I introduce the foreign aid donor to the basic model. As described earlier, the donor channels foreign aid through the government (party $A$) and aid goes to the poor population as
development expenditure. First, the donor offers its foreign aid schedule to the government, which is observable to all players, and then the parties choose their policy platforms. The donor observes this and disburses the foreign aid, which the government spends ahead of elections. Voters observe the spending and the policy platforms and then vote. Party B’s optimisation remains unchanged from (4) but party A is able to increase its share of poor votes by supplementing its tax revenue with foreign aid spending. So the latter’s objective function now includes the foreign aid term:

$$\text{Max}_{\tau_A} \{ \varphi^{f} \log[(1 - \tau_A)\varphi^{p}] + \varphi^{p}(\tau_A, \pi, \tau_A) \} \tag{6}$$

In the case of unconditional aid, the donor offers a fixed amount, $F(\tau_A) = \bar{F}$, irrespective of the tax rate chosen by the government. The foreign aid term then drops out of party A’s objective function in (6), reducing to the same problem as in the previous section. Under conditional foreign aid however, the donor offers a foreign aid schedule that is increasing in the tax rate chosen by party A. Solving the game backward, we obtain the equilibrium policies described in Proposition 2.

**Proposition 2:** Suppose $\delta < 0$.

**Case 1:** Then under unconditional foreign aid the equilibrium tax policies satisfy

$$\tau^{F}_k = \tau^0 = 1 - \frac{\varphi^{f}}{\varphi^{p}} \left( \frac{\pi_y}{\varphi^{p}} + F' \right), \text{ for } k = A, B \tag{7}$$

with $W_r(\hat{\tau}^{F}_A) = W_r(\hat{\tau}^{F}_B) = W_r(\tau^0)$. $W_p(\hat{\tau}^{F}_A) > W_p(\hat{\tau}^{F}_B), \text{ and the probability of winning is } \hat{p}^{F}_A > p^0_A$.

**Case 2:** Under conditional foreign aid the equilibrium tax policies satisfy

$$\hat{\tau}^{F}_A = 1 - \frac{\varphi^{f}}{\varphi^{p}} \left( \frac{\pi_y}{\varphi^{p}} + F' \right) \tag{8}$$

and $\hat{\tau}^{F}_B = \tau^0 = 1 - \frac{\varphi^{f}}{\varphi^{p}} \left( \frac{\pi_y}{\varphi^{p}} + F' \right) \tag{9}$

with $\hat{\tau}^{F}_A > \hat{\tau}^{F}_B$, $W_r(\hat{\tau}^{F}_A) < W_r(\tau^0)$, $W_p(\hat{\tau}^{F}_A) > W_p(\tau^0)$, and the probability of winning is $\hat{p}^{F}_A$ such that $p^0_A \leq \hat{p}^{F}_A < \bar{p}^{F}_A$.  

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With unconditional foreign aid, party $A$ chooses its tax rate independent of the amount of aid received. Receiving unconditional foreign aid does not alter its tradeoff between rich and poor votes in choosing a policy platform, and so the optimal tax rate is still $\tau^0$. Aid money helps gain extra poor votes without having to deviate from its optimal tax rate in the previous section, and ensures the government a higher probability of winning $\bar{p}^F_A$, than in the case without aid, $p^0_A$. If $\delta < 0$, then party $A$ wins the elections. Since the tax rate is the same as before but there is aid as well, the poor are better off while the welfare of the rich remains unchanged.

When the government receives conditional aid, it has to weigh the loss of rich voters against the gain in poor voters if it raises the tax rate to get more foreign aid. As such, for the same amount of aid, party $A$’s probability of winning is higher with unconditional aid than with conditional aid ($\bar{p}^F_A > \hat{p}^F_A$). At the same time, for the conditional aid to be incentive compatible for party $A$, the probability of winning with conditional aid should be at least as much as that without aid ($\hat{p}^F_A \geq p^0_A$). In that case the foreign aid donor is successful in making the government adopt a higher tax rate and deviate from its optimal policy, as can be seen from comparing equation (8) to equation (5). With the candidate bias favouring party $A$, it wins the elections and the rich are worse off with a higher tax rate.

Since the optimisation of party $B$ doesn’t change at all, its equilibrium tax policy doesn’t change from the case without foreign aid in Section 4. Both in the case of conditional and unconditional aid, party $B$’s equilibrium tax rate is $\tau^0$. The probability of winning is however lower than in the case without aid, and is lowest in the case of unconditional aid. If the amount of conditional aid is the same as in the case of unconditional aid, then the welfare of the poor is the same as in the previous case as party $B$'s equilibrium tax rate is the same. Welfare of the poor voters is higher than in the basic model without foreign aid.

Suppose instead that the donor offers a foreign aid schedule that is not incentive compatible for party $A$. This can be because conditionality ($F'$) is too high, or the amount of aid is too low, or both. In the first instance, we can see from equation (8) that receiving aid disbursements marked by high conditionality requires that the government adopts a high tax rate, risking a greater loss of rich voters. To offset this loss, the donor must offer a large amount of aid that can be used to get more poor votes. If the aid amount is low, however, the government
may not be able to strike this balance and its probability of winning might actually be less than if it didn’t accept any aid, even if it is the more popular party \((\delta < 0)\). With both high conditionality and little aid, the problem is more acute and the government may shy away from donor aid.

6 Model with Foreign Aid and Political Connections

In this section I examine the full model of electoral competition with both foreign aid and political connections to see how the interaction of the rich group and political parties alters policy platforms and the equilibrium outcome in general. The rich voters form a single interest group that lobbies the parties to alter their policy platforms in the lobby’s favour. The lobby offers each party campaign contributions that the parties can spend on the poor to gather their votes. If a party refuses the offer, then it maintains its optimal tax rate from the previous section. Thus the lobby must offer each party an incentive compatible campaign contributions schedule to ensure the party responds to the lobby and changes its policy platform. I follow GH (1996) and look at both an influence motive, where the lobby tries to change each party’s adopted policy and leaves election probabilities unaltered, and an electoral motive where the lobby finds it more beneficial to alter each party’s probability of winning.

Before launching on solving the full model, it bears mentioning that I discuss the case of electoral competition with political connections only in the Appendix. Without foreign aid, the equilibrium tax policy adopted by each party is

\[
\tau_k^{PC} = 1 - \frac{q^r}{y_q} \left( \frac{q^p}{q^r} \eta p_k^0 + 1 \right) \quad \text{for } k = A, B
\]  

(10)

With the rich lobby trying to influence the tax policy chosen by each party, the results are similar to those in Grossman and Helpman (1996) in that the rich contribute more to the party with the higher probability of winning and influences the more popular party to deviate more from the optimal tax rate obtained in the basic model.

6.1 Influence motive

Now I turn to the full model with foreign aid and political connections. First I explore the scenario where the rich lobby wants to influence policy but leaves the election probabilities unaltered. This could happen for instance where the election outcome is a foregone conclusion.
or the elections are very close, but where campaign contributions can successfully be used to ask parties to change their policies. The game, as mentioned before, unfolds as follows: First the donor offers a foreign aid schedule to the government. The rich lobby observes this and offers campaign contributions to both parties running for election. Each party then chooses its optimal tax policy, and the foreign aid donor and lobby disburse their respective funds. The government spends the foreign aid and both parties launch their campaigns using the lobby’s contributions. Both poor and rich voters observe the policy platforms chosen, and the poor voters observe the spending, and vote.

Solving the game backward, the rich and poor individuals vote for the party that gives him or her the maximum utility, given the tax rate, foreign aid and campaign spending, and the realisation of the party and candidate shocks. Both parties know this, so in the second stage each party chooses a tax rate that maximizes its vote share of rich and poor voters, given the foreign aid schedule and political contributions schedule. Incorporating campaign contributions into the government’s objective function in (6) gives

$$\max_{\tau_A} \left\{ \varphi^r \log \left[ (1 - \tau_A) y_r \right] + \varphi^p \left( \varphi_r (\tau_r A) + F(\tau_A) + \eta C_A(\tau_A) \right) \right\}$$

(11)

Similarly, including campaign payments in the opposition party’s objective function in (4) yields

$$\max_{\tau_B} \left\{ \varphi^r \log \left[ (1 - \tau_B) y_r \right] + \varphi^p \left( \varphi_r (\tau_B B) + \eta C_B(\tau_B) \right) \right\}$$

(12)

Finally, in the first stage, the lobby must choose its campaign contribution schedules to maximize its expected utility given by (3):

$$p_A W_r(\tau_A) + (1 - p_A) W_r(\tau_B) - C_A(\tau_A) - C_B(\tau_B).$$

With an influence motive, the rich lobby knows that it must offer incentive compatible contribution functions to both parties such that the probability of winning for each party is the same as in the case of foreign aid only. In the remainder of the section I examine how the lobby determines the contributions amount it must offer to each party under unconditional aid, and then under conditional aid. Using these, I will then solve the lobby's maximisation problem to obtain the equilibrium tax rates chosen by each party for each case.
**Unconditional aid**

First I look at the case of unconditional aid. Denoting $p_k^u$ as party $k$’s probability of winning with unconditional foreign aid and campaign contributions, we must have $p_k^u = p_k^f$ for each party. So, a contribution schedule $C_A(\tau_A)$ to party $A$ should ensure a probability of winning of $p_A^u = \frac{1}{2} - \delta(p^r \varphi^r + (1 - \pi)p^F) \cdot \varphi^p F$, corresponding to party $A$'s objective function of 

$$\pi q^r \log\left(1 - \tau^0\right) + \varphi^p \left(\tau^0 \varphi^p + F\right)$$

in the case of unconditional aid from Section 5. Therefore the participation constraints for party $A$ under unconditional is:

$$p_A^u \geq p_A^f$$

$$\Rightarrow C_A(\tau_A) \geq \frac{\pi q^r}{\eta q^p} \log \left(\frac{(1 - \tau_A) y_A}{(1 - \tau^0) y_A}\right) + \frac{\pi y_A}{\eta} \left(\tau^0 - \tau_A\right)$$

(13)

The rich lobby must also offer a contribution schedule $C_B(\tau_B)$ to party $B$ such that the probability of winning under unconditional aid for party $B$ is given by $p_B^u = 1 - p_A^u$, corresponding to party $B$’s objective function, $\pi q^r \log\left(1 - \tau^0\right) + \varphi^p \left(\tau^0 \varphi^p + F\right)$. Therefore the participation constraint for party $B$ for unconditional aid is:

$$p_B^u \geq p_B^f$$

$$\Rightarrow C_B(\tau_B) \geq \frac{\pi q^r}{\eta q^p} \log \left(\frac{(1 - \tau_B) y_B}{(1 - \tau_A) y_B}\right) + \frac{\pi y_B}{\eta} \left(\tau^0 - \tau_B\right)$$

(14)

In keeping with the influence motive in GH (1996), I assume that the rich lobby will contribute only up to the point where it can match each party’s probability of winning without contributions, i.e. participation constraints (13) and (14) hold with equality. The optimisation for the rich lobby given in (3) can be broken into two composite maximisation problems, one for determining the optimal tax rate the lobby endorses for party $A$, and the other, for party $B$. With the influence motive where election probabilities are left unchanged from the case without campaign contributions, the participation constraints given by (13) and (14) are binding. So when the government receives unconditional foreign aid the lobby endorses the parties to choose the following tax rates:
\[ \tilde{\tau}_A'' = \arg \max_{\tau_A} \left\{ \tilde{\rho}_A(W_r(\tau_A) - C_A(\tau_A)) \right\} \]

\[ = \arg \max_{\tau_A} \left\{ \tilde{\rho}_A W_r(\tau_A) + \frac{\pi q^r}{\eta q^p} \log \left( (1 - \tau_A) y_r \right) + \frac{1}{\eta} \pi y, \tau_A \right\} \]

(15)

and

\[ \tilde{\tau}_B'' = \arg \max_{\tau_B} \left\{ (1 - \tilde{\rho}^F_B) W_r(\tau_B) - C_B(\tau_B) \right\} \]

\[ = \arg \max_{\tau_B} \left\{ (1 - \tilde{\rho}^F_B) W_r(\tau_B) + \frac{\pi q^r}{\eta q^p} \log \left( (1 - \tau_B) y_r \right) + \frac{1}{\eta} \pi y, \tau_B \right\} \]

(16)

**Conditional aid**

Similarly, when the donor offers conditional foreign aid the lobby must ensure \( \hat{p}_k^* = \hat{p}_k^F \) for each party, where \( \hat{p}_k^* \) denotes party \( k \)'s vote share with conditional foreign aid and campaign contributions. The lobby's contributions schedule to party \( A \) must guarantee

\[ \hat{p}_A^F = \frac{1}{2} - \delta \left[ \pi q^r + (1 - \pi) q^p \right] + \pi q^r \log \left( \frac{1 - \hat{\tau}_A}{1 - \hat{\tau}_B^F} \right) + q^p \left[ (\hat{\tau}_A - \hat{\tau}_B^F) \pi y, r + F(\hat{\tau}_A^F) \right] \]

corresponding to the objective function \( \pi q^r \log \left( (1 - \hat{\tau}_B) y_r \right) + q^p \left( \hat{\tau}_A - \hat{\tau}_B^F \right) \pi y, r + F(\hat{\tau}_A^F) \) in the previous section.

Ensuring \( \hat{p}_A^* \geq \hat{p}_A^F \) implies that the participation constraints for party \( A \) under conditional aid is:

\[ C_A(\tau_A) \geq \frac{\pi q^r}{\eta q^p} \log \left( \frac{1 - \hat{\tau}_A}{1 - \tau_A} y_r \right) + \frac{1}{\eta} \pi y, (\hat{\tau}_A - \tau_A) + F(\hat{\tau}_A^F) - F(\tau_A) \]

(17)

The rich lobby's contribution schedule \( C_B(\tau_B) \) to party \( B \) must ensure a winning probability of \( \hat{p}_B^* = 1 - \hat{p}_A^F \) for party \( B \) under conditional aid. Note this probability corresponds to the same objective function, \( \pi q^r \log \left( (1 - \tau_B^0) y_r \right) \pi q^p \tau_0 \pi y, r \), as in the case of unconditional aid explained above. Therefore the participation constraint for party \( B \) for both conditional and unconditional aid is the same as in (14).

As was the case above under the influence motive, the participation constraints (14) and (17) hold with equality. Thus with conditional foreign aid, the lobby’s preferred tax rates are:

\[ \hat{\tau}_A'' = \arg \max_{\tau_A} \left\{ \tilde{\rho}_A(W_r(\tau_A) - C_A(\tau_A)) \right\} \]
\[ \begin{align*}
&= \arg \max_{\tau_A} \left\{ \hat{\rho}^r_A W_r(\tau_A) + \frac{\pi q^r}{\eta q^r} \log(1 - \tau_A) y_r + \frac{1}{\eta} \left[ \pi y_r \tau_A + F(\tau_A) \right] \right\} \\
&= \arg \max_{\tau_b} \left\{ (1 - \hat{\rho}^r_A) W_r(\tau_b) - C_b(\tau_b) \right\} \\
&= \arg \max_{\tau_b} \left\{ (1 - \hat{\rho}^r_A) W_r(\tau_b) + \frac{\pi q^r}{\eta q^r} \log(1 - \tau_b) y_r + \frac{1}{\eta} \pi y_r \tau_b \right\} 
\end{align*} \]

and

\[ \begin{align*}
\hat{\tau}_b &= \arg \max_{\tau_b} \left\{ (1 - \hat{\rho}^r_A) W_r(\tau_b) - C_b(\tau_b) \right\} \\
&= \arg \max_{\tau_b} \left\{ (1 - \hat{\rho}^r_A) W_r(\tau_b) + \frac{\pi q^r}{\eta q^r} \log(1 - \tau_b) y_r + \frac{1}{\eta} \pi y_r \tau_b \right\}
\end{align*} \]

**Equilibrium**

The resulting equilibria when the rich lobby tries to influence policy for both unconditional and conditional foreign aid are summed up in the two propositions that follow.

**Proposition 3:** If the contributions from the rich lobby satisfy the participation constraints (13), (14) and (17) with equality, then the equilibrium policies found in (15), (16), (18) and (19) have the functional forms indicated below.

**Case 1:** Unconditional foreign aid

\[ \begin{align*}
\bar{\tau}_A &= 1 - \frac{q^r}{y q^p} \left( \frac{q^p}{q^r} \eta \rho^r_A + 1 \right) \\
\bar{\tau}_B &= 1 - \frac{q^r}{y q^p} \left( \frac{q^p}{q^r} \eta \hat{\rho}^r_A + 1 \right)
\end{align*} \]

**Case 2:** Conditional foreign aid

\[ \begin{align*}
\hat{\tau}_A &= 1 - \frac{q^r}{y q^p} \left( \frac{\pi y_r}{\pi y_r + F^r} \left( \frac{q^p}{q^r} \eta \rho^r_A + 1 \right) \right) \\
\hat{\tau}_B &= 1 - \frac{q^r}{y q^p} \left( \frac{q^p}{q^r} \eta \hat{\rho}^r_A + 1 \right)
\end{align*} \]

**Proposition 4:** Let \( \delta < 0 \) and the participation constraints (13), (14) and (17) bind.

**Case 1:** Then with unconditional foreign aid, \( \bar{\tau}_A < \bar{\tau}_B < \tau^0 \).

**Case 2:** But with conditional foreign aid \( \hat{\tau}_A < \hat{\tau}_B \) if and only if
\[
\begin{bmatrix}
\frac{\varphi^p}{\varphi^r} \eta \left(2\hat{p}_A^F - 1\right) \\
\frac{\varphi^p}{\varphi^r} \eta \left(1 - \hat{p}_A^F\right) + 1
\end{bmatrix}
\geq F'.
\]

(24)

Note from Proposition 3 that the tax policies chosen in equilibrium for the case of unconditional aid – equations (20) and (21) – are of the same functional form as when there is electoral competition with political connections only, given by equation (10). However, the probability that party A wins with unconditional aid is higher \(\left(\bar{p}_A^* = \bar{p}_A^F > p_A^0\right)^8\), and so the lobby contributes more to party A and elicits a lower tax rate than without aid \(\left(\bar{\tau}_A^* < \tau_A^C\right)\).

Proposition 4 also indicates that the tax rate chosen by party A is less than that chosen by party B in equilibrium. Recall that under the influence motive, the lobby does not alter the probabilities of winning from the case of foreign aid only, so party A still wins with probability \(\bar{p}_A^* = \bar{p}_A^F\).

Thus both with and without unconditional foreign aid, the tax policy adopted by the electoral winner (party A) is less than that chosen by the opposition (party B). In other words, the lobby asks the more popular party to deviate more from its policy.

Now I examine the equilibrium outcome with conditional foreign aid. With the lobby operating under the influence motive, the probability that each party wins is the same as with conditional aid only. However, since the foreign aid now requires the government to raise tax policy, the lobby must pay more in contributions to ask the government to lower its tax to the same level as without conditional aid. Thus as Proposition 4 tells us, with conditional foreign aid, it is no longer true that the lobby will necessarily ask the party with the higher vote to deviate more from its optimal policy.

When will we see the winning party adopt a lower tax rate? Proposition 4 states that when \(\hat{p}_A^F > \hat{p}_B^F\), then for \(\bar{\tau}_A^* < \bar{\tau}_B^*\) to hold condition (24) must also hold. This becomes more feasible as long as conditionality \((F')\) is low, the proportion of rich in the population \((\pi)\) is high, the income of the rich \((y_r)\) is high, and party A’s probability of winning \(\left(\hat{p}_A^F\right)\) is high. With low conditionality, the donor does not ask the government to raise its tax policy too much for any given amount of aid, making it easier for the lobby to counter modest increases in tax rates with contributions. Higher income levels and a higher proportion of the rich make it more critical to

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8 The equalities are due to the influence motive.
fend off higher tax rates, and enables the lobby to make larger campaign contributions when faced with the threat of higher taxes, thus making it possible to make the government deviate more from its optimal policy. A higher probability of winning the elections also makes it more worthwhile to make campaign contributions to the party that will have more representation in the legislature.

In reality, it may not be the case that all the aid components in a donor’s package is conditional or used for salient development expenditure as foreign assistance flows to many sectors and for different purposes. Some portion of aid can go into less salient forms of spending such as on institutions that the poor don’t observe, and so would not affect election probabilities. This suggests that the rich group does not need to counter the entire amount of foreign aid a country receives in order to influence the government policy, but only the portion that the poor can perceive as being spent on them. In this model the poor observe the entire amount $F(\tau)$, but we could easily introduce a parameter so that they see less than that. The essential results in the model would not change, and we would have an extra parameter for foreign aid salience affecting tax policy chosen under conditional aid.

Having characterized the equilibria under the different scenarios, we can now compare the tax policies chosen by the parties in each case. Proposition 5 presents the ordering of the tax policies in the different equilibria.

**Proposition 5:** Let $\delta < 0$ and the participation constraints (13), (14) and (17) bind. Then

$$\tau_A^C < \tau_C^C < \hat{\tau}_B^C < \tau_B^C < \tau^o = \tau_B^F = \hat{\tau}_B^F < \tau_A^F$$

A visual representation of Proposition 5 makes a discussion easier:

![Figure 1. Ordering of tax policies under different regimes](image)

In the basic model with no foreign aid or political connections, recall that both parties choose the same tax rate, $\left(\tau^o\right)$, in equilibrium. In the absence of campaign finance, foreign aid
doesn’t alter optimal policy decisions \( \left( \tau^0 = \tau^F_A = \tau^F_B \right) \) except in the case of the government’s optimal tax rate under conditional aid. In that case, the optimal tax rate chosen by the government (party A) actually increases as the donor intended \( \left( \hat{\tau}^F_A > \tau^0 \right) \) and the poor are better off while the welfare of the rich decreases. Although unconditional aid does not alter optimal policies, the poor are better off because of aid. When the rich are allowed to form political connections, they ask the party with the higher probability of winning to deviate farther from its (the party’s) preferred policy \( \left( \tau^C_A < \tau^C_B < \tau^0 \right) \). This is also true in the case of unconditional aid \( \left( \bar{\tau}^n_A < \bar{\tau}^n_B < \bar{\tau}^F_A = \bar{\tau}^F_B \right) \). However, with the higher probability of winning under unconditional aid, the lobby finds it profitable to ask the winning party to deviate even more \( \left( \bar{\tau}^n_A < \tau^C_A \right) \), and the opposition party to deviate less \( \left( \bar{\tau}^n_B > \tau^C_A \right) \).

With conditional aid and political connections however, the model no longer guarantees that the lobby asks the winning party to deviate more. From the inequality in (24) we see that higher conditionality makes it more difficult for the lobby to influence the government to choose a lower tax rate. Thus high conditionality can mitigate a lobby’s ability to manipulate the government’s policy platforms. On the other hand, it is precisely this situation where the lobby might benefit by switching from an influence motive to an electoral motive, as described in the next section.

6.2 The electoral motive

Grossman and Helpman (1996) also identify conditions under which the lobby will choose instead to pursue electoral motives, i.e., it will try to affect the probability of winning. This happens when the marginal benefit of contributing more to a party is more than the marginal cost. Under the electoral motive, the participation constraint is slack for the party for which this condition is true, but the participation constraint for the other party holds with equality.

The same principle applies in this paper. Consider the case where conditionality is so high that \( \hat{\tau}^n_A > \hat{\tau}^n_B \) and the marginal benefit of contributing to party B is larger than the marginal cost of the political contributions. Contributions to party B will increase, thus increasing its (and lowering party A’s) probability of winning. With a lower probability of winning party A will be
asked to deviate from its preferred policy less and thus the lobby needs to make a smaller contribution to maintain a binding participation constraint. Contributions to party $B$ on the other hand increase as does its probability of winning. In this case, if contributions schedules are observable by both parties then party $A$ has an incentive to turn away from foreign aid, especially if aid amounts are low and campaign contributions are more effective.

7 Discussion

In this paper I look at the recipient country’s motives to accept foreign aid or to substitute it with business contributions. When the rich economic group wants only to influence policy and not the election outcome, I find that unconditional aid distorts policy the most. Conditional foreign aid can discipline the government and make it more accountable to citizens, but it makes the opposition party deviate more from its optimal policy. The reason for this asymmetric result is that foreign aid is channelled only to the government. Consistent with Grossman and Helpman (1996), the rich make larger contributions to the party with the higher probability of winning and asks that party to deviate more from its optimal policy.

This however may not always be the case with conditional foreign aid. Excessive conditionality coupled with small amounts of foreign aid may lead to the government wanting to substitute away from foreign aid to less restrictive sources of finance. In the model this is the rich group, which may now have electoral motives since the opposition adopts a lower tax rate. It would be interesting to see if a recipient government has several foreign aid donors, it will accept aid from the donor with the least conditionality. If the government agenda does not include social, institutional and economic development, then such unconditional aid can undermine efforts from other donors who condition their aid towards such spending. China’s unconditional lending to African countries has triggered exactly these fears in Western donors.

Previous literature identified that foreign aid can be a source of rent-seeking in the recipient country as different groups compete for this resource directly. Using Grossman and Helpman’s (1996) framework, I show that rent-seeking can also occur when groups try to influence the policy dictated by foreign aid conditionality.

The policy instrument in the paper is the tax rate for the rich, but the policy may take other forms that translate to salient spending or policy tools (as opposed to current spending) for the poor. If donor policies are not aligned with incentives of the recipient country, then
conditional foreign aid is likely to be rejected, and more so by countries that are not as dependent
on aid. If donor policy is aligned with one social or economic group but not with another, there
is an incentive to engage in rent-seeking behavior. Assuming that policy conditionality set by
the donor is in accordance with the development needs (and goals) of the recipient country, such
rent-seeking can jeopardize the development trajectory of the recipient country. Thus donors
need to consider more than rewarding democracy with aid. The policy preferences of different
social groups within an economy need to be considered.

8 Appendix

A. The influence motive with Political Connections only

This is the GH (1996) model with the functional forms specified before. I extend the
basic model in Section 4 by allowing the rich group to form political connections by offering a
monetary contributions schedule, \( C_k(\tau_k) \) to each party \( k = A, B \). There is no foreign aid, so the
game then continues with each party observing the contributions schedule offered to them, their
choosing the tax rates and so on. Solving the game backwards, each party maximizes its
probability of winning by maximizing the following objective function:

\[
\max_{\tau_k} \left[ \pi \Phi \log \left( 1 - \frac{\tau_k}{\tau} \right) + \phi^\rho \left( \tau_k \sigma \rho + \eta C_k(\tau_k) \right) \right]
\]

The rich know that if they ask a party to deviate from the optimal policy \( \tau^0 \) (from
Section 4) then they must ensure a sufficient amount in campaign contributions so that the party's
probability of winning, \( p_k^0 \), does not decrease. Therefore participation constraint for each party
is:

\[
C_k(\tau_k) \geq \frac{\pi \Phi \log \left( \frac{1 - \tau^0}{1 - \tau_k} \right) + \phi^\rho \left( \tau_k \sigma \rho + \eta C_k(\tau_k) \right)}{\eta \Phi \log \left( \frac{1 - \tau^0}{1 - \tau_k} \right) + \phi^\rho \left( \tau_k \sigma \rho + \eta C_k(\tau_k) \right)}
\]

(25)

Since the rich have only an incentive motive, the constraint will hold with equality. The
rich lobby maximize its expected utility

\[
p^0_A W_A(\tau_A) + \left( 1 - p^0_A \right) W_A(\tau_B) - C_A(\tau_A) - C_B(\tau_B)
\]

The optimal tax rate for each party is then given by equation (10):
\[
\tau_k^{pc} = 1 - \frac{\varphi^r}{y_r \varphi^p} \left( \frac{\varphi^p}{\varphi^r} \eta p_k^0 + 1 \right).
\]

**B. The electoral motive**

With the electoral motive the rich group tries to alter the parties’ base probabilities of winning and the participation constraints may no longer hold with equality. In the case of unconditional foreign aid the rich chooses the contributions amount to maximize

\[
V_r = p_A W_r(\tau_A) + (1 - p_A) W_r(\tau_B) - C_A - C_B
\]

subject to

\[
C_A(\tau_A) \geq \frac{\pi \varphi^r}{\eta \varphi^p} \log \left( \frac{(1 - \tau^0) \psi_i}{(1 - \tau_A) \psi_i} \right) + \frac{\pi \varphi^r}{\eta} (\tau^0 - \tau_A)
\]

\[
C_B(\tau_B) \geq \frac{\pi \varphi^r}{\eta \varphi^p} \log \left( \frac{(1 - \tau^0) \psi_i}{(1 - \tau_B) \psi_i} \right) + \frac{\pi \varphi^r}{\eta} (\tau^0 - \tau_B)
\]

and

\[
p_A = \frac{1}{2} - \delta \left[ \pi \varphi^r + (1 - \pi) \varphi^p \right] + \varphi^p \left[ F + \eta (C_A - C_B) \right]
\]

The first order conditions are:

\[
\varphi^p \eta [W_r(\tau_A) - W_r(\tau_B)] = 1 - \lambda_A
\]

\[
\varphi^p \eta [W_r(\tau_B) - W_r(\tau_A)] = 1 - \lambda_B
\]

If the constraints hold with equality, then \(\lambda_A > 0\). Suppose \(\tau_A > \tau_B\) so that \(W_r(\tau_A) < W_r(\tau_B)\). This implies that \(\lambda_A > 1\) and \(\lambda_B = 0\). The participation constraint for party B is slack while that for party A holds with equality. The first order condition for party B is

\[
\varphi^p \eta [W_r(\tau_B) - W_r(\tau_A)] = 1
\]

where the LHS is the marginal benefit of contributing more and the RHS is the marginal cost. Whenever the marginal benefit of contributing more is more than the marginal cost, the rich group will want to push the electoral motive.
9 Reference


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