

Viability of Conditional Assistance Programs with Endogenous Lobby Formation

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Abstract

Conditional assistance programs generate conflicting relationships between international financial institutions (IFIs) and member countries. The political dynamic of the country adds to the conflict and usually results from opposing interests between the government and special interests groups contrary to reforms. The experience of IFIs with conditionality in the 1990s led them to allow countries more latitude in the design of their reform programs. Conditionality and ownership are not always relevant. A reformist government does not need conditionality and it is useless if it does not want to reform. The usefulness becomes apparent in intermediate situations. A government that faces opposition may use conditionality and the help of pro-reform lobbies as a lever to counteract anti-reform groups and succeed in implementing reforms.

1 Introduction

Conditional assistance programs consist of financial and technical help that International Financial Institutions (IFI) provide to member countries in the face of major macroeconomic and structural disequilibrium. These programs require the interaction of two parties: an assistance-providing IFI and an assistance-receiving member country. The relationship is regulated in general by the charter of the IFI and in particular by the terms and conditions of each particular agreement. The process as a whole, however,

is influenced by the domestic political dynamic in the receiving country. To study the IFI-country relationship is important to analyze the behavior of the different players involved. First we will briefly analyze the evolution of the IFIs approach to conditional lending. Then we will consider the domestic political dynamic in the assistance receiving country. And finally we will see how these elements interact.

I. The Evolution of Conditional Lending over time

Perhaps the two best known International Financial Institutions (IFIs) are the International Monetary Fund (IMF) and the World Bank (WB). They were created in July 1944 as a result of the Bretton Woods Conference. At the time of their creation, “their purposes were clearly delineated: financial stabilization for the one and postwar reconstruction and economic development for the other.”¹ Article I of the Articles of Agreement sets out the Fund’s main responsibilities: promote international monetary cooperation; facilitate the expansion and balanced growth of international trade; promote exchange stability; assist in the establishment of a multilateral system of payments; and make its resources available (under adequate safeguards) to members experiencing balance of payments difficulties. The Bank, on the other hand, must assist in the reconstruction and development of territories of members by facilitating the investment of capital for productive purposes; promote private foreign investment by means of guarantees or participations in loans and other investments made by private investors; promote the long-range balanced growth of international trade and the maintenance of equilibrium in balances of payments; arrange the loans made or guaranteed so that the more useful and urgent projects will be dealt with first; and conduct its operations with due regard to the effect of international investment on business conditions in the territories of members.

Both institutions impose conditions on the countries that receive financial help. Conditional lending did not change much for three decades. However, the oil crises of the 1970s and the debt crisis of the 1980s forced the Bank to move into structural adjustment lending.² This trend was intensified in the 1990s following the wave of economic restructuring undertaken by countries in Latin America, Eastern Europe, Russia and the members of the former Soviet Union, and Asia. "During the eleven years from 1979 through 1989, the world economy evolved in seemingly small but ultimately dramatic and profound ways. From a starting point at which the state was viewed as holding a

¹Broughton, James M., (2001), Chapter 20, p. 997.

²Salop, Joanne in Williamson (2001).

primary responsibility for controlling economic development, the ‘third world’ gradually diminished and even rejected that role in favor of privatization and reliance on market incentives."³ The Fund also added structural reform as a condition for lending. The habitual conditions imposed by the Fund on its lending continued as before. The need for economic adjustment leading to sound and sustainable macroeconomic policies was greater than ever. However, macroeconomic adjustment alone proved insufficient to solve the structural problems that affected newer borrowers. Throughout the 1980s, the Fund supplemented its requirements of monetary and fiscal discipline with demands for structural reform, as a way to fully integrate those reforms in the design of the adjustment programs. "Although that process took hold only partially and only rather late in the decade, it did eventually succeed in encouraging and helping many countries to liberalize their economic policies."⁴

The Fund and the Bank have a long history of collaboration. The first formal agreement to coordinate their activities goes back to 1966. All subsequent agreements are based on that one. When the activities of the Fund and the Bank began to overlap in the 1980s it was necessary to clarify the role of each institution and delineate the primary responsibility of each one. All this led to the so called Concordat on Fund-Bank Collaboration of 1989 that established areas of primary responsibility, areas of common interests and mechanisms for consultations and resolution of potential disputes regarding the advice to give to member countries.

The nature of conditional lending also changed. The experience gained in the 1990s convinced both institutions to redefine the concept of conditionality. Instead of imposing a predetermined solution on countries to solve their macroeconomic or structural programs, and risking a future policy reversal, they allowed countries more latitude in the design of their own programs. The concept of conditionality was complemented with that of ownership. This new concept is based in three basic principles: a) the country must maintain a stable macroeconomic framework throughout the duration of the loan; b) although countries are encouraged to design their own reform programs, these programs have to be implemented in a manner satisfactory to the IFI; and c) countries also have to implement all the other policies and institutional actions that are considered critical for a successful execution and completion of the reform program.

The concept of ownership also implies the involvement of interested parties in the formulation of the reform program. As part of the domestic dialog, IFIs advice govern-

³Broughton, James M., (2000).

⁴Broughton, James M., (2000), p. 27.

ments to consult with and engage the participation of key stakeholders in the country in the process of formulating the country's development strategy.⁵ This does not necessarily mean influence in the design or implementation of the program itself, but at least to take into account the opinions of interested parties, especially of those who might suffer losses from the reforms.

The primary and formal relationship exists between the IFI and the member country. However, it is fairly common for staff members to maintain contacts with different social groups (e.g. unions, business associations, NGO, etc.) during the design of assistance programs or even on routine missions to evaluate the macroeconomic performance of the country. IFIs however cannot "interfere in the political affairs of any member; nor shall they be influenced in their decisions by the political character of the member or members concerned. Only economic considerations shall be relevant to their decisions, and these considerations shall be weighed impartially in order to achieve the purposes stated in Article I."⁶

II. Domestic Political Dynamic

In a neoclassical setting a country facing a macroeconomic or structural disequilibrium would simply choose the set of available policies that would maximize aggregate welfare and implement them. In a political-economy setting things are not so simple. Politicians do not only care about aggregate welfare and macroeconomic equilibrium. They have selfish motivations, namely obtaining and maintaining power. They also have to deal with different interest groups (IG) that try to influence government policies to benefit their particular interests. This heterogeneity of interests creates a conflict that is typically resolved through the domestic political process. Politics is not simple either. Voters will not simply choose the "best" candidate and elect him or her. Politicians have to woo them. They need to convince the electorate that they are the best option. And for this they need financial resources. This is why political activity is costly. The resources may come from various avenues: individual contributions by unorganized citizens with defined political preferences but little or no power, social or political organization willing to promote an specific agenda, or interested groups trying to obtain economic profits from their contributions. The activity of these interest groups has an important effect on the political process. Prospective and incumbent officials care about the general well-being, but they also want to access office or remain in it

⁵The World Bank Operational Manual. Operational Policies. p. 2.

⁶IBRD, Articles of Agreement IV, section 10.

for their own selfish reasons. The resources received from individual citizens, and to some extent from social and political groups, supposedly finance the procurement of general welfare. Another important portion of the funds comes from interested parties. These political or economic groups can be a big or small constituency, but they have clear ideas about what they want from the political process. They are willing to help the incumbent or the challenger financially, but this help comes at a price. This price usually takes the form of legislation or regulations that promote or protect the interests of the lobby. The legislation or regulation, once enacted, usually creates distortions in the economy. It benefits the interested parties but hurts the society as a whole. An often cited example of this sort of groups are import-competing lobbies. Other groups affected by these policies may want to counteract forming lobbies which purpose is to eliminate distortionary policies (e.g. export taxes or import subsidies.)

III. IFIs and Government interaction.

An appropriate combination of conditionality and ownership may be useful in helping solve this conflict of interests. Governments typically do not change policies unless there is an acute economic imbalance or there is a change in their perception of the relative importance of aggregate welfare versus political support. In this sense conditionality and ownership produce different results depending on the government's attitude. A government that does not see the need for reform will not be influenced by conditional lending. They will probably sign an agreement, take the money and fail to implement any reforms. On the other hand, a reform-minded government who is able to design its own reform program probably will not need conditionality. The usefulness of conditionality may become apparent in situations in which the choices are not clear cut. A government may be decided to implement domestic reforms but face strong opposition from entrenched interest groups. In this particular case a combination of conditionality and ownership may help overcome this obstacle. A government that realizes the need for reform but faces the opposition of pro-status quo lobbies may enlist the help of potential interest groups that will benefit from reform. The government-designed program (ownership), the financial help of the pro-reform group, and the financial assistance provided by the IFI (subject to conditionality) may help solve the conflict of interests and result in successful reforms. Alternatively, if the government is not entirely persuaded of the need for reform the IFI may exercise its influence to convince the authorities to give more weight to less distortionary policies (those promoted by pro-reform lobbies) and less weight to distortionary policies (those promoted by anti-reform groups.)

The purpose of this paper is to show how such a situation can be modeled, and how the combination of external conditionality, ownership, and domestic political pressure can lead to successful reforms.

The existing literature covers this problem only partially. Drazen (2002) explores the relationship between conditionality and ownership. Mayer and Mourmouras (2005) show that under certain conditions conditional lending will fail. However, they only consider the possibility of one anti-reform lobby, which existence is exogenously determined. The process of lobby formation in this paper is endogenous as shown by Mitra (1999) and Krishna and Mitra (2004). The results obtained are different from those predicted by the Mayer and Mourmouras model.

2 Conditional Assistance with Multiple Lobbies

The generic conflict of interest presented in the introduction can be made more concrete by way of an example. Suppose there is an open economy. This economy is small enough so that it cannot influence the world capital markets. Instead it takes the world interest rate as given. We can distinguish several types of agents. Some, perhaps by virtue of the size of their endowments, have enough to finance their consumption and retain a surplus. The rest of the agents are in the opposite situation and have to borrow. If this economy is open agents will have no problem borrowing or lending in the world capital markets at the prevailing interest rate. This is tantamount to a competitive situation in which actors only make normal profits. But some of those with excess funds may find this situation to be not completely beneficial. Any government policy that would restrict borrowing from abroad would automatically benefit lenders by giving them some measure of control over the market. This group of lenders therefore will find that organizing themselves and lobbying for some restriction on foreign borrowing (a tax or a quota) will benefit them as a group. One way to achieve this is to “bribe” the government so that it passes legislation imposing the restriction. Governments care about aggregate welfare but they also need financial resources for their political activities, so it is highly likely that with enough political pressure and financial resources lenders will succeed in introducing regulations in their benefit. A portion of the borrowers may have the power and the resources to organize into a lobby and fight the tax. They can collect resource from the prospective members and make financial offers to the government. If they organize they have the possibility of influencing the government to reduce or eliminate the tax.

Their benefit will be lower or no taxes on borrowing and the costs will be the creation of an organization to collect and enforce contributions from its members. As long as the former is greater than the latter, the lobby will form and it will challenge the lenders group. The rest of the members of the population may be borrowers or lenders. But the key issue is that they are so small that even if they were able to organize themselves they would not have enough power or resources to influence the government. This group is likely to remain unorganized.

The implications of a group being able to influence the government to impose taxes on the rest of the society are important for the domestic economy. Taxes are known to introduce inefficiencies. The fewer of them and the lower they are, the less distorted the economy will be. There may also be implications for long run growth. An undistorted economy has the potential to produce more and grow more. Also low and uniform taxes may create a favorable climate for FDI (higher returns), which can increase growth further.

Now we need to translate this example into a model, which is the task of the next subsection.

2.1 The Model

Consider a small open economy that lasts for two periods. There is only one good that is consumed in both periods. We assume that all agents have the same preferences that can be represented by an isoelastic utility function. The only difference between agents is their endowments $Y_t^O \leq Y_t^P \leq Y_t^U, t = 1, 2$, where O represents members of an organized lobby, P represents members of a potential lobby, and U represents agents that are unorganized⁷, and t is the time period. The mass of the population $O + P + U$ is normalized to 1.

The consumer's problem is to maximize his lifetime utility function

$$U_1^i = u^i(Q_1^i) + \beta u^i(Q_2^i), 0 < \beta < 1, i = O, P, U \quad (1)$$

where u^i is the period utility function, Q_t^i is consumption of individuals i in period $t = 1, 2$; and β is the subjective discount factor or time-preference factor (impatience). We assume that u^i is strictly concave so that $u'(Q^i) > 0$, and $u''(Q^i) < 0$. Additionally

⁷These agents may remain unorganized probably because organization costs are too high relative to the potential benefits of lobby formation.

we impose the condition $\lim_{Q_t^i \rightarrow 0} u'(Q_t^i) = \infty$ to ensure that individuals always desire at least a little consumption in every period.

The consumer must face a lifetime budget constraint equal to

$$Q_1^i + \frac{Q_2^i}{1+r} = Y_1^i + \frac{Y_2^i}{1+r} \equiv W^i \quad (2)$$

where $Y_t^i, t = 1, 2$ are the endowments in each period, W^i is the wealth of individual i , and r is the real interest rate for borrowing or lending in the world capital market at date 1. We assume that the consumer bases his or her decisions on perfect foresight of the future. The maximization problem yields the intertemporal Euler equation.

$$\frac{\beta u'(Q_2^i)}{u'(Q_1^i)} = \frac{1}{(1+r)} \quad (3)$$

where the LHS represents the marginal rate of substitution of present consumption for future consumption, and the RHS represents the price of future consumption in terms of present consumption.

If we assume a period utility function of the form $u^i = \ln Q_t^i$ the expressions for the demand functions are:

$$Q_1(r, Y) = \frac{W^i}{(1+\beta)} = d_1(r, Y) \text{ and } Q_2(r, Y) = \frac{\beta(1+r)W^i}{(1+\beta)} = d_2(r, Y)$$

The only price in the economy is r and is determined in world capital markets.

Starting from the log utility function and replacing Q_2 by its equivalent from the budget constraint, we can express welfare as:

$$U_1 = \ln Q_1^i + \beta \ln [(1+r^\tau)(Y_1^i - Q_1^i) + Y_2^i]$$

Taking the derivative of U_1 with respect to r^τ yields:

$$\frac{dU_1}{dr^\tau} = \frac{\beta(Y_1^i - Q_1^i)}{Q_2^i} \geq 0 \quad \text{if } Y^i \geq Q^i \quad (4)$$

2.2 The effects of government policy on the welfare of groups

Let assume that the only policy instruments available to the government are taxes or subsidies on foreign borrowing and lending. A tax or a subsidy introduces a distortion

in the economy. We want to know which lobbies will benefit from a distortionary policy and which will gain from reforms.

Let assume, without loss of generality, that the members of the organized lobby have endowments such that $Y_1^O > Q_1^O$. This implies that they are lenders. They will benefit from any policy that restricts borrowing from abroad (i.e. taxes on foreign borrowing) since that will increase the interest rate at which they lend. Assume further that the lobby have succeeded in persuading the government to impose a tax τ on foreign borrowing. For members of the organized lobby the numerator in equation (4) is positive. The denominator is also positive. Therefore

$$\frac{dU_1^O}{dr^\tau} > 0$$

and this is why members of the organized lobby will try to influence the government to impose a tax on foreign borrowing. If one is already in place they will lobby to maintain or even increase it.

On the other hand members of the potential lobby have endowments such that $Y_1^P < Q_1^P$. This implies that they are borrowers. They will benefit from any policy that reduces taxes and therefore the interest they have to pay for borrowing from abroad. For members of the unorganized lobby we have

$$\frac{dU_1^P}{dr^\tau} < 0$$

The intuition is that a borrower is hurt by an increase in the interest rate and benefits from a decrease in it. Members of the potential lobby, once organized will seek to influence the government to reduce or eliminate taxes.

2.3 The process of lobby formation

With a tax on foreign borrowing in place, borrowers will have an incentive to organize themselves into a lobby. Once the lobby is formed it will try to influence the incumbent government to reduce or eliminate the tax. This influence is usually exercised by way of financial contributions (campaign contributions, contributions to the ruling party, bribes, etc.). We will show how the number of lobbies is endogenously determined. The government in this model behaves like in Grossman and Helpman (1994), caring about

political contributions (C) and aggregate welfare. As stated before taxes or subsidies are the only policy instruments available to the government. The interest rate cum tax can be expressed as:

$$r^\tau = r + \tau$$

Given these assumptions, we want to determine the political equilibrium of a three-stage non-cooperative game.

First Stage. In the first stage, agents with similar interests decide whether to contribute to finance the cost of forming a lobby. A lobby is an organization design to reduce the cost of lobbying activity, coordinate and enforce the collection of political contributions, and communicate the political requests of the group to the government.

Second Stage. In the second stage, lobbies choose their political contribution schedules that *truthfully* reveal their preferences, taking into account the objective function of the government. Each lobby takes the contribution schedules of the other lobbies as given.

Third Stage. In the third stage the government sets policies to maximize it's Political Support Function (PSF), which is a weighted sum of political contributions and overall social welfare.

The problem is solved by backward induction. An equilibrium in this game is the number of lobbies formed (n^0) and the interest rate cum tax on borrowing or lending on date one (r^τ).

In the third stage, the government solves the following problem:

$$\max_{r^\tau \in R} U^G(r^\tau) = \sum_{i \in \Lambda} C^i(r^\tau) + aU^A(r^\tau) \quad (5)$$

where Λ is the set of agents (O, P, U), $U^G(r^\tau)$ is the objective function of the government (PSF), $U^A(r^\tau) = \sum_{i \in \Lambda} U_1^i(r^\tau)$ is aggregate welfare, $C^i(r^\tau)$ is the contribution schedule of the i th lobby, and \mathbf{R} is the set of after tax interest rates from which the government can choose. The set \mathbf{R} is bounded between some minimum r_{\min}^τ and some maximum r_{\max}^τ . Following Grossman & Helpman (1994), attention will be focused on equilibria that lies in the interior of \mathbf{R} .

The parameter a in (5) is the weight the government attaches to aggregate welfare relative to political contributions. The higher is a , the less the government cares about political contributions and the higher is the importance it assigns on aggregate welfare.

The truthful contribution schedule of each lobby $i \in \Lambda$ is given by

$$C^i(r^\tau) = \max(0, U_1^i(r^\tau) - b^i) \quad (6)$$

where the net welfare anchors for the different lobbies b^i s are determined in equilibrium. As in Grossman and Helpman, we focus on equilibria where lobbies make positive contributions. In the neighborhood of the equilibrium

$$C^i(r^\tau) = U_1^i(r^\tau) - b^i \quad (7)$$

Substituting (7) into (5), we have

$$\max_{\mathbf{r} \in \mathbf{R}} U^G(r^\tau) = \left[\sum_{i \in \Lambda} (U_1^i(r^\tau) - b^i) + aU^A(r^\tau) \right] \implies \max_{\mathbf{r} \in \mathbf{R}} \left[\sum_{i \in \Lambda} U_1^i(r^\tau) + aU^A(r^\tau) \right] \quad (8)$$

We go back to the first stage and analyze the conditions under which potential (pro-reform) lobbies may form, taking the existing lobbies as organized. Let F^i be the fixed cost of lobby formation for the i th group. Fixed costs can be heterogenous because groups differ in their organizational abilities. Also, groups that have formed associations for other purposes may find it cheaper to organize for political purposes than other groups. Organization costs may also be lower for groups that are more geographically concentrated.

Let $\tilde{U}_{i,j}^K$ denote equilibrium gross welfare of the k th sector when both the incumbent and challenger lobbies are in place. Let \tilde{U}_i^K denote equilibrium gross welfare of the k th sector when only the incumbent lobby is in place. Also, let \tilde{C} be the equilibrium level of contributions by a representative lobby.

Taking the anti-reform lobby as organized, let the members of other group decide whether to form a lobby or remain unorganized. Nash interaction among group members is assumed in their contribution decisions towards the provision of the fixed cost of lobby formation. However, once the lobby is formed, the lobby machinery can enforce perfect coordination among the members of the group in the collection of political contributions. There are three possibilities:

Case (a): The benefit to any one individual within the potential lobby exceeds the cost of forming the lobby. In this case, contributing to the full financing of the fixed cost

F^i is the only Nash Equilibrium outcome. The lobby is always formed.

$$\left[\tilde{U}_{O,P}^P - \tilde{U}_O^P - \tilde{C} \right] / m > F^i \quad (9)$$

where m is the number of members in the group.

Case (b): The cost of lobby formation exceeds the benefits to any one individual but is less than the total benefit to the lobby.

$$\tilde{U}_{O,P}^P - \tilde{U}_O^P - \tilde{C} > F^i > \left[\tilde{U}_{O,P}^P - \tilde{U}_O^P - \tilde{C}(n) \right] / m \quad (10)$$

In this case, there are two possible Nash Equilibrium outcomes: either there is no contribution to the lobby formation, or the fixed cost F_i is fully financed. If we assume pre-play communication can take place then we can use communication based refinements such as coalition proof Nash, strong Nash and Pareto-dominance, and therefore group coordination becomes the likely outcome.⁸

Case (c): If the total benefit of lobby formation is less than the total fixed cost, then The Nash Equilibrium outcome is not providing the lobby.⁹

$$\tilde{U}_{O,P}^P - \tilde{U}_O^P - \tilde{C} < F^i \quad (11)$$

From the analysis of the above three cases, the conclusion that emerges is that a lobby is formed under the following condition:

$$\tilde{U}_{O,P}^P - \tilde{U}_O^P - \tilde{C} > F^i$$

We are interested in knowing how a reduction in the tax, and consequently in the interest rate, affects the welfare of the potential lobby. First we need to analyzed how the net benefit of lobby formation is determined, and then asses the impact of changes (reduction) in the interest rate on aggregate welfare and the net benefit of the potential lobby. Let **NB** represent net benefit from lobby formation. **NB** is net of political contributions, but gross of fixed costs. This net benefit is given by

$$\mathbf{NB}(r^\tau) = \tilde{U}_{O,P}^P(r^\tau) - \tilde{U}_O^P(r^\tau) - \tilde{C}^P(r^\tau) \quad (12)$$

⁸See B. Douglas Bernheim et al. (1987), and Aumann (1959).

⁹If the cost of lobby formation is too high relative to the potential benefits we are in the case of those groups that remain unorganized.

With truthful contributions, the equilibrium contribution level by a potential group when organized is given by

$$\tilde{C}(r^\tau) = \tilde{U}^P(r^\tau) - \tilde{b}^P(r^\tau) \quad (13)$$

where $\tilde{b}^P(r^\tau) = \tilde{U}^P(r^\tau) - \tilde{C}(r^\tau)$ is the (net of contributions) welfare or payoff anchor (determined in equilibrium) of the contribution schedule of a potential lobby when organized.

Truthful contributions mean that once a lobby is formed it will have to pay the government an amount that makes it indifferent between treating the lobby as organized or as unorganized, given the contributions of the other lobbies. The potential lobby has to compensate the government for the reduction in the organized lobby's welfare and changes in overall welfare do to its entry. The contribution of the potential lobby is given by:

$$\tilde{C}^P(r^\tau) = \tilde{U}_O^O(r^\tau) - \tilde{U}_{O,P}^O(r^\tau) + a \left[\tilde{U}_O^A(r^\tau) - \tilde{U}_{O,P}^A(r^\tau) \right] \quad (14)$$

Proposition 1 (*Krishna & Mitra*) *With a pre-existing lobby in place, the net benefit (gross of fixed costs) to the net borrowers from forming a lobby is the sum of the changes in welfare created in the organized, the potentially organized, and the unorganized groups (appropriately weighted) that results from the creation of the potential lobby.*

We can see this by substituting equation (14) into (12). The net benefit to the potential lobby from forming can be express as:

$$\begin{aligned} \mathbf{NB}(r^\tau) &= \tilde{U}_{O,P}^P(r^\tau) - \tilde{U}_O^P(r^\tau) - \left[\tilde{U}_O^O(r^\tau) - \tilde{U}_{O,P}^O(r^\tau) + a \left[\tilde{U}_O^A(r^\tau) - \tilde{U}_{O,P}^A(r^\tau) \right] \right] \\ &= (1 + a) \left[\tilde{U}_{O,P}^A(r^\tau) - \tilde{U}_O^A(r^\tau) \right] \end{aligned} \quad (15)$$

What equation (15) is telling us is that the net benefit of lobby formation can be expressed as the change in aggregate welfare due to the formation of the lobby. Note that the net benefit of lobby formation is positive if and only if forming the lobby improves aggregate welfare. The intuition is that the equilibrium contribution of the lobby has to compensate the government for the loss of welfare of both the existing lobby and the

existing unorganized groups that are harmed by the policies induced by the new lobby. This is a necessary but not sufficient condition, because **NB** also has to be greater than cost. This does not necessarily mean that lobby formation has to be Pareto improving. It only means that the members of the new lobby gain so much that they can compensate for all the losses created and still retain a benefit.

Having established the impact of the formation of the potential (pro-reform) lobby on welfare we want to go back to our question of how changes in the interest rate affect aggregate welfare and the **NB** of the potential lobby. This is a task we undertake in the following subsection.

2.4 The effects of changes in r on aggregate welfare

We first look at the effect of changes in r^τ on aggregate welfare. To assess this effect we start with equation (15) and decompose it to reflect the impact on the three sectors of the economy. We need to sign

$$\frac{d}{dr^\tau} \mathbf{NB}(r^\tau) = \frac{d}{dr^\tau} \left[\tilde{U}_{O,P}^P(r^\tau) - \tilde{U}_O^P(r^\tau) \right] - \left[\tilde{U}_O^O(r^\tau) - \tilde{U}_{O,P}^O(r^\tau) \right] - a \left[\tilde{U}_O^A(r^\tau) - \tilde{U}_{O,P}^A(r^\tau) \right] \quad (16)$$

Starting from equation (4)

$$\frac{dU_1}{dr^\tau} = \frac{\beta(Y_1^i - Q_1^i)}{Q_2^i} \geq 0 \quad \text{if} \quad Y^i \geq Q^i.$$

We assume for simplicity that β is the same for all groups. Given our assumption that the potential lobby is a net borrower we have that $\frac{dU_1}{dr^\tau} < 0$. The welfare of the potential lobby before the reform, and with only the incumbent lobby organized, can be expressed as $U_O^P = f(Y, r_1^\tau)$, where r_1^τ is the pre-reform interest rate cum tax. The welfare of the potential lobby after the reform, with both lobbies organized is $U_{O,P}^P = f(Y, r_2^\tau)$, where r_2^τ is the post-reform interest rate cum tax. If the potential lobby has been able to organize it must be the case that $r_1^\tau > r_2^\tau$. Also since U^P is decreasing in r^τ this implies that $\frac{d}{dr^\tau} \tilde{U}_{O,P}^P > \frac{d}{dr^\tau} \tilde{U}_O^P$, therefore the first term in equation (16) is positive.

The organized lobby is a net lender, therefore $\frac{dU_1}{dr^\tau} > 0$. The welfare of the incumbent lobby when it is the only one organized is $U_O^O = f(Y, r_1^\tau)$. When both the organized and potential lobby are present welfare is $U_{O,P}^O = f(Y, r_2^\tau)$. Given $r_1^\tau > r_2^\tau$ it must be the case that $\frac{d}{dr^\tau} \tilde{U}_O^O < \frac{d}{dr^\tau} \tilde{U}_{O,P}^O$, therefore the second term of equation (16) is negative.

The welfare of the unorganized part of the population depends on whether they are net borrowers or lenders. We have two possible cases.

a) The unorganized part of the population is a net borrower. In this cases $\frac{dU_1}{dr^\tau} < 0$ and $\frac{d}{dr^\tau}\tilde{U}_O^A < \frac{d}{dr^\tau}\tilde{U}_{O,P}^A$ therefore the third term in equation is positive. Assuming that the mass $(P + A) > O$ and a is sufficiently close to one, we have that $\frac{d}{dr^\tau}\mathbf{NB}(r^\tau) > 0$.

b) The unorganized part of the population is a net lender. In this cases $\frac{dU_1}{dr^\tau} > 0$ and $\frac{d}{dr^\tau}\tilde{U}_O^A > \frac{d}{dr^\tau}\tilde{U}_{O,P}^A$ therefore the third term in equation is negative. Assuming that the mass $(O + A) > P$ and a is sufficiently close to one, we have that $\frac{d}{dr^\tau}\mathbf{NB}(r^\tau) < 0$.

We can summarize the results as follows: if the unorganized members of the population are net borrowers, as are the members of the potential lobby, a decrease in interest rate will increase aggregate welfare. If the unorganized members of the population are net lenders, as are the members of the incumbent lobby, a decrease in the interest rate will decrease welfare. The unorganized group does not have political power but it will support the lobby which interests are aligned with its own.

Lastly we want to see the effects of changes in the interest rate on the \mathbf{NB} of lobby formation of the potential lobby. The \mathbf{NB} of lobby formation of the potential lobby (equation 12) can be shown in Figure 1. \mathbf{NB} (gross of fixed costs) is decreasing in r^τ and is represented by the downward sloping $\mathbf{NB}(\mathbf{r})$ schedule in the graph. Given the fixed cost F , any interest rate $r^\tau \leq r_0$ will result in $\mathbf{NB} \geq F$, therefore the lobby will form. What the lobby wants from the political process is not only a reduction in the interest rate cum tax but also that the level of r^τ is no higher than r_0 . An increase in the interest rate cum tax beyond r_0 will render the potential lobby not viable.

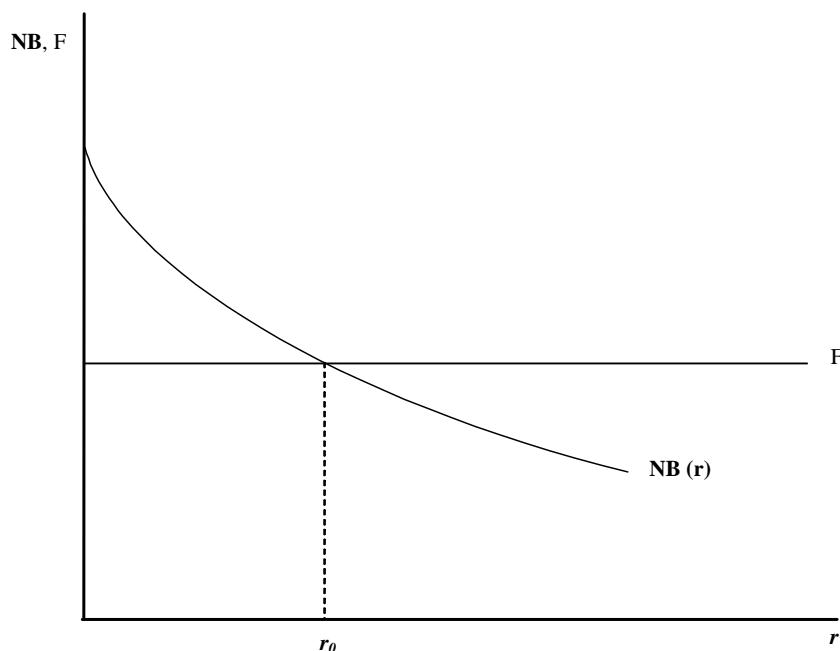


Figure 1

2.5 IFI Conditional Assistance and Government Policy

We have assumed throughout the paper that the only policy instrument available to the Government is taxation of foreign borrowing or lending. Taxes introduce inefficiencies in the economy that affect long term growth. An economy that grows at a slower pace has the potential of being less able to repay its debts in the future. This element of uncertainty may add a measure of risk premium to the interest rate paid by domestic agents on foreign loans. This will worsen the welfare of domestic borrowers. If the IFI and the government agree on a Conditional Assistance Program they can induce changes in the interest rate in two ways: a) a program backed by an IFI gives the country a "Seal of Approval." Experience shows that this type of agreements tend to reduce the risk premium charged by foreign lenders. b) The reform, if successful will induce the elimination of taxation on foreign borrowing.

A decrease in the interest rate in this model is a change in the relative price of future consumption in terms of present consumption. This will benefit borrowers and hurt lenders. The members of the anti-reform lobby are lenders, therefore are going to be hurt by the reform and fight it. The members of the potential lobby are borrowers and

will benefit from a reduction in r^τ , therefore they will favor the reform. The country and the IFI can agree on a reform program with the right combination of conditionality (tax elimination) and ownership (domestic program design.) If the IFI, through the conditional program, succeeds in fostering the creation of a pro-reform lobby, the new lobby will be able to pay the government contributions at least as large as the ones paid by the anti-reform lobby. The government being indifferent to the source of the contributions, and since it has agreed with the IFI to reform the economy, will accept the contributions of the new lobby and implement the reform (eliminate the tax.) The anti-reform lobby will lose its source of revenue and will see its influence greatly reduced or may even disappear.

3 Conclusions

Conditional Assistance Programs provided by IFIs have the potential to help countries reform their economies. In order to be successful they need a domestic government that is convinced that reform is necessary, and is willing to design and implement its own program. The domestic political dynamic plays an important role in the reform process. If a reforming government faces the opposition of strong pro-status quo groups, reforms may be harder to implement. In this case the decision of the government needs to be supported by a domestic interest group that clearly benefits from the reform. We have shown that given the appropriate conditions these groups will form, and their actions will improve aggregate welfare. A domestically designed conditional assistance program, the welfare improving actions of pro-reform lobbies, and their political contributions may result in successful reform. A reformed economy will have less distortions and the potential to grow at higher rates. The changes in relative prices that result from the reform process may also turn the country into an attractive target for foreign direct investors.

4 References

1. Acemoglu, Daron, n/d, "Lecture Notes for Political Economy of Institutions and Development, 14.773: Part II, Introduction to the Theory of Voting and Political Agency", mimeo.

2. Aumann, Robert, 1959, "Acceptable Points in General Cooperative n-Person Games," in Contributions to the Theory of Games IV, Annals of Mathematics Study 40, edited by A. W. Tucker and R. D. Luce, Princeton University Press, pp. 287-324.
3. Bernheim, D.B, Whinston, M.D., 1986, "Menu auctions, resource allocation, and economic influence." Quarterly Journal of Economics, February 101 (1), pp. 1-31.
4. Bernheim, D.B, Peleg, B., Whinston, M.D., 1987, "Coalition-proof Nash equilibria." Journal of Economic Theory, June 42 (1), pp. 1-12.
5. Bhagwati, Jagdish N., 1980, "Lobbying and Welfare", Journal of Political Economy, 14, pp. 355-363.
6. Broughton, James M., 2001, Silent Revolution. The International Monetary Fund 1979-1989, (Washington D.C.: IMF)
7. Broughton, James M., 2000, "The IMF and the Silent Revolution. Global finance and development in the 1980s." (Washington, D.C.: IMF)
<http://www.imf.org/external/pubs/ft/silent/index.htm>
8. Drazen, Allan, 2002, "Conditionality and Ownership in IMF Lending: A Political Economy Approach", IMF Staff Papers N° 49 Special Issue, pp. 36-67.
9. Grossman, Gene M., and Elhanan Helpman, 1992, "Protection for Sale", National Bureau of Economic Research, Working Paper N° 4149.
10. Grossman, Gene M., and Elhanan Helpman, 1994, "Protection for Sale", The American Economic Review, Vol. 84, N° 4, pp. 833-850.
11. Krishna, Pravin, and Devashish Mitra, 2003, "Reciprocated unilateralism in trade policy: an Interest-Group Approach", National Bureau of Economic Research Working Paper 9631, (Cambridge, MA)
12. Krishna, Pravin, and Devashish Mitra, 2005, "Reciprocated unilateralism in trade policy", Journal of International Economics (65), pp. 461-487.
13. Mayer, Wolfgang, and Alex Mourmouras, 2005, "On the Viability of Conditional Assistance Programs" IMF Working Paper N° 05/121, (Washington D.C.: IMF)

14. Mitra, Devashish, 1999, "Endogenous Lobby Formation and Endogenous Protection: A Long-Run Model of Trade Policy Determination", *The American Economic Review*, Vol. 89, N° 5, pp. 1116-1134.
15. Williamson, John, 2001, "IMF Conditionality: How Much is 'Enough'? An Economic Forum, (Washington, D.C.: IMF)
<http://www.imf.org/external/np/tr/2001/tr011219.htm>
16. The World Bank, n/d, *The World Bank Operational Manual. Operational Policies.* (Washington D.C.: The World Bank Group)
<http://www.worldbank.org>
17. International Bank for Reconstruction and Development, n/d, *Articles of Agreement.*
<http://www.worldbank.org>