THE POLITICAL ECONOMY OF
TRADE SANCTIONS: THE CASE OF CUBA

Carlos Seiglie

In any discussion of the effects of economic sanctions it should be clear that sanctions are *potentially* harmful or costly to not only the target nation, but also the sanctioning countries. The *potential* harm will be dependent on the degree of substitution in trade and capital markets, i.e., on "fungibility." Even if sanctions impose harm on the target nation they may not alter the policy which motivated the sanctions. Some have argued that sanctions might even backfire because they can serve to increase support for the regime if the population "rallies around the flag." Therefore, the effectiveness of sanctions as an instrument to invoke change is constrained by the openness of the international goods and capital markets, as well as by the political markets in both the sanctioning and target nations. Consequently, any analysis of the effectiveness and usefulness of the U.S. embargo on Cuba should take these factors into account.

This paper aims to do so by extending a model by Kaempfer and Lowenberg (1988) to account for transnational responses which results in a country being in both an *internal* and *external* political equilibrium. This is developed by applying this more generalized model to the case of U.S. sanctions towards Cuba. I argue that the embargo against Cuba is ineffective because it cannot be sufficiently tight to cause political change in Cuba. For example, even though Cuba has been denied access to U.S. capital markets for three decades it still is one of the most heavily indebted countries in Latin America. It is estimated that at the end of 1995, Cuba owed $10.5 billion in

hard-currency debt. Of this total, $4.5 billion was owed to the Paris Club comprised of official government creditors, $2.9 billion to the London Club composed of commercial bank creditors and $2.4 billion in the form of trade credits. It should be noted that these figures would be much higher if not for the fact that Cuba has not paid on its debt obligations for the past 10 years and as a result has not been borrowing in the international capital markets. In addition to these figures, which support the fact that Cuba has had ample access to world capital markets during the period of the U.S. embargo, we must note that Cuba's debt to the former Soviet Union (assumed by Russia) has been estimated to be in the range of $6 to $34 billion.

In fact, if embargoes or sanctions were an effective tool in reducing the income of rulers or citizens of a country we should observe that historically countries would invest in "sanction preventing" measures or some type of "insurance" to protect against the harm from these. The reason that there is no need to do so is because if sanctions increase the damage to the economy of the sanctioned country, the willingness to pay by individuals in the country for the scarcer commodities increases and therefore, creates an incentive on the part of other sovereign countries to not participate in the sanctions. In other words, sanctions create rents and these rents induce other nations to circumvent the sanctions and supply the target country with the scarcer commodities. As they supply the target country, these rents are dissipated and the previous harm is reduced. In the short run, it

requires tighter and more costly measures by the sanctioning leader to continue to impose harm, but this again increases the target country's willingness to pay and potential rents that other nations can capture. Eventually, the political market imposes a level of sanctions which has little effect and are just purely for the domestic consumption of political groups who receive utility from the sanctions per se. These sanctions will have no relationship to the level of sanctions required to influence the "offending" policy of the target country. In other words, the level of sanctions a country imposes is not related in any systematic way to some "optimal" level.

MARKET FOR SANCTIONS IN THE UNITED STATES

Although for concreteness we concentrate on Cuba, an analysis of the influence that lobbies have on foreign policy in general is straightforward using the framework presented. This influence by pressure groups is readily seen in the U.S. policy towards Haiti (the Congressional Black Caucus playing a dominant role), Ireland and Israel. In order to illustrate how the level of sanctions towards Cuba is established, several groups in the U.S. affected by sanctions on Cuba are highlighted.

The first group is the organized Cuban-American community which is denoted by O. The most powerful of these political lobbies is the Cuban-American National Foundation. This lobby is reminiscent of the China lobby of the 1950's which blocked changes in the United States' China policy until President Nixon's opening towards China.

The second group is the unorganized Cuban-American community, U. Note that the Cuban-American population is less then 4/10 of one percent of the U.S. population which implies that its electoral influence outside of Florida is very small.

The third are business groups, both domestic and foreign subsidiaries, who are in favor of sanctions (because they benefit) and which are denoted by B, and finally a group opposed to sanctions (because they lose or they ideologically support the regime), denoted by C. This latter group can be viewed as consumers of the products from Cuba who now are

forced to pay a higher price for Cuban imports (e.g., cigars) or vacations and supporters who share the ideology of the regime.

Each individual member of a group has the following utility function and solves the maximization problem:

$$\text{Max}_{S} \ U_1^i(Y_1^i, S)$$
$$\text{subject to } Y_1^i(S; A), \tag{1}$$

where Y denotes income, S the level of sanctions, A the level of the offending policy of the "sanctioned" nation, the subscript denotes country 1, and individual i is a member of group O, U, B, or C.

I allow for some individuals to value sanctions on "moral" grounds and therefore their utility function is dependent on S directly.

If $i \in O$, then it is assumed that $\dfrac{\partial Y_1^i}{\partial S} = 0$ and $\dfrac{\partial U_1^i}{\partial S} > 0$. (2a)

If $i \in U$, then it is assumed that $\dfrac{\partial Y_1^i}{\partial S} < 0$ and $\dfrac{\partial U_1^i}{\partial S} \geq 0$. (2b)

If $i \in B$, then it is assumed that $\dfrac{\partial Y_1^i}{\partial S} > 0$ and $\dfrac{\partial U_1^i}{\partial S} = 0$. (2c)

If $i \in C$, then it is assumed that $\dfrac{\partial Y_1^i}{\partial S} < 0$ and $\dfrac{\partial U_1^i}{\partial S} \leq 0$. (2d)

The interpretation of equation (2a) is that the organized Cuban-American community's level of income is unaffected by sanctions but that they value sanctions directly on "moral grounds." Equation (2b) states that the unorganized Cuban-American community's income is reduced by sanctions and that some members, but not all, may value sanctions on "moral grounds." The reason that U's income is reduced should be interpreted that sanctions requires them to send remittances and medicine to Cuba to support family members. Implicit in this assumption is that their utility function includes the utility of family members in Cuba, i.e., that they have altruistic preferences. I assume this is being captured by the reduction in utility as income falls in order to simplify the notation involved in explicitly introducing altruism in their preferences. Finally, equations (2c) and (2d) imply that firms producing commodities

and services similar to Cuba's are made better off by sanctions (e.g., the U.S. sugar cane producers) and therefore, they will support them; that consumers are made worse off indirectly by the higher transactions cost they must incur and that ideological sympathizers are directly made worse off since sanctions enters as an argument in their utility function.[1]

It is important to note that the Cold War environment helped increase the political support for sanctions. The reason is that the opposition's influence was diluted by groups who argued that the policy towards Cuba helped contain Soviet influence in Latin America and Cuba's promotion of revolution in the hemisphere. With the end of the Cold War, this group's argument that Cuba poses a threat to national security is no longer considered very plausible.

For the members of each group, the total change in utility from an incremental change in sanctions is

$$\frac{d\mathrm{U}_1^O}{d\mathrm{S}} = \frac{\partial U_1^O}{\partial \mathrm{S}} > 0, \tag{3a}$$

$$\frac{d\mathrm{U}_1^U}{d\mathrm{S}} = \frac{\partial U_1^U}{\partial \mathrm{Y}_1^i}\frac{\partial \mathrm{Y}_1^i}{\partial \mathrm{S}} + \frac{\partial U_1^U}{\partial \mathrm{S}} \begin{array}{c}<\\>\end{array} 0, \tag{3b}$$

$$\frac{d\mathrm{U}_1^B}{d\mathrm{S}} = \frac{\partial U_1^B}{\partial \mathrm{Y}_1^i}\frac{\partial \mathrm{Y}_1^i}{\partial \mathrm{S}} > 0, \tag{3c}$$

$$\frac{d\mathrm{U}_1^C}{d\mathrm{S}} = \frac{\partial U_1^C}{\partial \mathrm{Y}_1^i}\frac{\partial \mathrm{Y}_1^i}{\partial \mathrm{S}} < 0. \tag{3d}$$

If we group all those who gain from sanctions, their marginal willingness to pay for an incremental tightening of the embargo is:

$$P_S = D^i(S, A) = \sum_i \frac{d\mathrm{U}_1^i}{d\mathrm{S}} > 0, \tag{4}$$

with $\partial D^i/\partial S < 0$ and $\partial D^i/\partial A > 0$ and where $i \in$ O, B, and some members of U.

For all those who lose from sanctions their marginal willingness to pay to forego an incremental tightening of the embargo is:

$$P_S = D^j(S, A) = -\sum_j \frac{d\mathrm{U}_1^j}{d\mathrm{S}} > 0, \tag{5}$$

with $\partial D^j/\partial S > 0$ and $\partial D^j/\partial A \geq 0$ and where $j \in$ C and some members of U.

Equating the demand for sanctions to the supply of opposition against sanctions leads to the political equilibrium level of sanctions in country 1. This is shown graphically in Figure 1. We depict this equilibrium at a level of sanctions of S where the initial demand for sanctions is D_1^i.

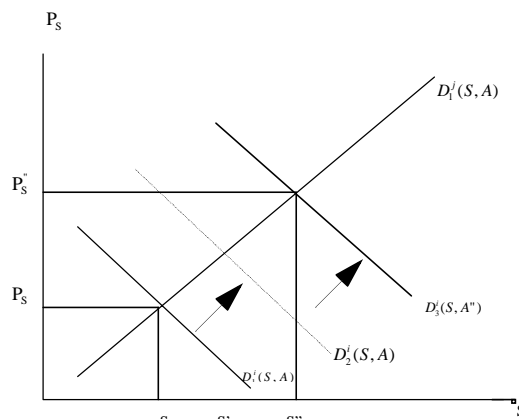

Figure 1: The Sanctioning Country -1

MARKET FOR LIMITED REFORMS IN CUBA

We can similarly derive the political equilibrium in the target country, Cuba. In this case the political conflict is over the level of a policy which we denote by A. This policy can be interpreted as the degree of openness of the political and economic system i.e., whether to maintain a state planned economy and one party rule (a high level of A) or to permit free market reforms and plurality in the political system (A = 0). Recently, Cuba seems to be interested in re-integrating into the world financial markets and has been engaging in debt-equity swaps with foreign corporations. For simplicity, we continue to denote the initial demand (support) for policy A in country 2 by

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1. In order to simplify the notation, it is assumed that some individuals have preferences over S, but more directly we should introduce as an argument the level of utility of certain groups on the island towards whom they feel an affinity.

D_1^i and opposition to the policy by D_1^i. These demands are derived when groups for and against the policy in country 2 solve the following maximization problem:

$$\underset{A}{\text{Max}}\ U_2^i(Y_2^i, A)$$

$$\text{subject to } Y_2^i(A; S),$$

(6)

where the subscript denotes an individual who is a member of country 2.

We continue to make similar assumptions regarding how policy A impacts on the income of country 2, Cuba, namely some groups benefit, $\partial Y_2^i / \partial A > 0$ (bureaucracy, communists, *maybe* small farmers) with others losing $\partial Y_2^i / \partial A < 0$. As for sanctions, they are assumed to have an adverse effect or no effect on the level of income of particular members of the different groups in Cuba. We could actually envision that sanctions may be preferred by some individuals if their income is increased, as is possibly the case if managers of state enterprises experience an increase in the terms of trade for their products. Similarly, this potential reduction in foreign competition in commodities and capital serve to increase *rents* which can be captured by some individuals. Introducing these considerations strengthen our results, but for simplicity we assume that in the aggregate total income is reduced. Figure 2 depicts the political equilibrium in country 2 at a level of the offending policy of A.

It is important to note that the political equilibrium depicted in Figures 1 and 2 are equilibrium at the domestic level of interactions. A Nash equilibrium at the international level is some (A^*, S^*) combination such that if we denote the country by k $D_k^i(A^*, S^*) = D_k^j(A^*, S^*)$, k=1, 2. In addition, no member of a group can do better in the domestic political market given the level of the policy chosen in the other country's political market.

To illustrate this notion of two-level equilibrium, i.e., domestic and international, let us assume we are
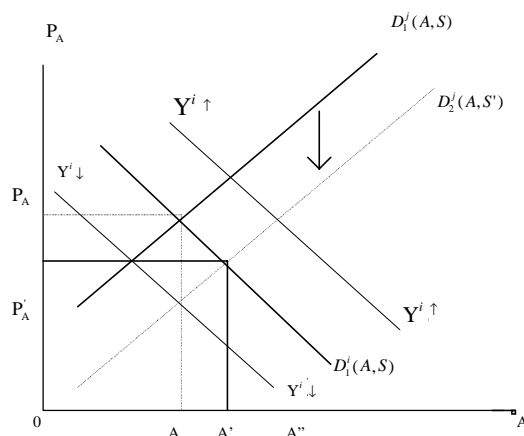

Figure 2: The Sanctioning Country -1

initially in a Nash equilibrium at S in country 1 and A in country 2. Then assume that a group in favor of sanctions in the U.S. is able to exert more influence politically, e.g., by better controlling free-riding by group members. Then demand shifts outwards to D_2^i from D_1^i. The new level of sanctions imposed by country 1 would rise to S'. But this would not be a Nash equilibrium at the international level. Country 2 which previously had a policy of A has suffered a reduction in income. This leads to a fall in the willingness to pay of group j as indicated to D_2^j. Now there are two potential effects on group i, namely their income can fall or it can rise because they may capture additional rents. If their income falls their willingness to pay falls and the new demand curve is labeled $Y^i \downarrow$. In this case the domestic equilibrium level of the policy continues to be A. If this group's income actually rose, then demand would increase to that labeled $Y^i \uparrow$ and the actual level of the offending policy will actually ***increase***. If we factor in a "rally around the flag" effect which reduces free-riding by members of group i then their demand can shift out even more as this group feels its sovereignty is being jeopardized and the domestic equilibrium level of the offending policy is even greater.[2] In any case we are not guaranteed that even if the income of group i

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2. Kaempfer and Lowenberg (1988) introduce a political effectiveness function, E, which is a function of S into the demand functions of each group, i.e., into P_A and P_S to incorporate this effect.

falls we will attain a movement towards the objective of A = 0, namely democratic reforms. Kaempfer and Lowenberg show that if the income of group i is reduced the optimal policy for a sanctioning country is to selectively use sanctions which hurt the prime beneficiaries of regimes to a much greater extent then it does group j, the internal opposition. Ideally, we would want the opposition's income to not be reduced at all.

Although this is a domestic equilibrium, Kaempfer and Lowenberg fail to consider that it is not an international equilibrium as earlier mentioned. To see how we arrive at this Nash equilibrium, let us assume that the sanctions actually increased the level of A to A". This would lead to a further shift in demand in country 1, the US to D_3^i and the equilibrium level of sanctions increased to S". In figure 1, I assume that the opposition against sanctions by the supporters of the regime (their demand curve D_1^j) is unchanged as A increases. It could be possible that the demand could shift in either direction. For example, the more hard-line policy could become an embarrassment and their willingness to support the regime falls, in which case sanctions would become tighter than S", i.e., the equilibrium is to the right of it. Conversely, this hard-line policy may evoke greater sympathy in which case the equilibrium would be to the left of S". The other possibility is that the two-level Nash equilibrium would entail a fall in income of supporters of

the regime in country 2, Cuba, and a resulting moderation in policy, i.e., a reduction in A. In this case, the demand for sanctions in country 1 falls and so would the level of sanctions. Eventually, the Nash equilibrium would be restored.

CONCLUSION

The basic conclusion from the application of this model to Cuba is that sanctions, including the embargo, have no relationship to some optimal policy which would lead the regime to open up the political process. In fact, it has been shown that the opposite effect can actually occur, i.e., the regime becomes more recalcitrant. I have not introduced a third country (the rest of the world) but doing so would strengthen this result further. This reinforcement comes from the fact that if the U.S. embargo raised rents, other countries have a strong incentive to not participate in the embargo and attempt to capture these rents, thereby rendering the embargo ineffective. The fact that we find no other nations participating in the embargo and continuing to have good relationships with Cuba is in fact a sign of the benefits they receive from the U.S. unilateral policy. Therefore, any request from the U.S. to other world nations to participate in the embargo will not be heeded. Furthermore, the failures of multinational embargoes in provoking change in Haiti and Iraq leaves little optimism that this policy instrument is effective.

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