

THE POLITICAL ECONOMY OF ECONOMIC SANCTIONS*

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Contents

Abstract	868
Keywords	868
1. Introduction	869
2. Economic effects of sanctions	872
3. The political determinants of sanctions policies in sender states	879
4. The political effects of sanctions on the target country	884
5. Single-rational actor and game theory approaches to sanctions	889
6. Empirical sanctions studies	892
7. Political institutions and sanctions	898
8. Conclusions and avenues for further research	903
References	905

* The authors thank Keith Hartley, Irfan Nooruddin and Todd Sandler for valuable comments. Derek Lowenberg provided technical assistance in preparation of the final manuscript. All errors remain the responsibility of the authors alone.

Abstract

International economic sanctions have become increasingly important as alternatives to military conflict since the end of the Cold War. This chapter surveys various approaches to the study of economic sanctions in both the economics and international relations literatures.

Sanctions may be imposed not to bring about maximum economic damage to the target, but for expressive or demonstrative purposes. Moreover, the political effects of sanctions on the target nation are sometimes perverse, generating increased levels of political resistance to the sanctioners' demands.

The economic impacts of trade sanctions on the target country are reflected in their terms-of-trade effects, which are larger in the case of multilateral sanctions than unilateral. Investment sanctions initially raise the rate of return to capital in the target country, but eventually the decrease in the inflow of new capital from abroad constrains the target's growth.

Using an interest group model of endogenous policy, the level of sanctions imposed is shown to depend on the relative influences of competing interest groups within the sanctioning country. In the target country, normally only those sanctions that have differential effects on supporters and opponents of the ruling regime will induce the regime to alter its objectionable policy.

Game-theoretic models suggest that the success of sanctions depends on conflict expectations and levels of commitment. Many sanctions strategies end at the threat stage, without sanctions being implemented. Consequently, empirical studies using data on actually applied sanctions may exhibit selection bias. In general, the processes generating sanctions and the processes determining their outcome are intrinsically linked. Empirical work on sanctions has attempted to address this problem through the use of simultaneous equations methods. The empirical literature has also investigated the role of political regime type, specifically, democracy or the absence thereof, in determining nations' proclivities to impose sanctions and the success of the sanctions.

Keywords

economic sanctions, trade policy, trade sanctions, financial sanctions, interest groups, endogenous policy, game theory

JEL classification: F13, D72, D74

1. Introduction

International economic sanctions are often favored by nation states or by international organizations as a means of projecting power or influencing another government's behavior without resorting to military conflict. The utility of sanctions as an instrument of foreign policy is attested to both by their longevity as a staple of international diplomacy and by their growing popularity since the end of the Cold War. Historically, economic sanctions, which date back at least to the Megarian decree of Athens in 435 B.C., were used by Napoleon in the Continental System commencing in 1806, by Thomas Jefferson in the Embargo Act of 1807, and by the League of Nations against Italy in 1935. In recent times, the most encyclopedic taxonomy of sanctions episodes is that of [Hufbauer et al. \(1990\)](#), hereafter *HSE*, which records 116 cases since 1914. Following the collapse of the Soviet empire in 1990, there has been an acceleration of sanctioning activity that reflects their growing use by international organizations as well as by the one remaining world hegemon, the United States.¹

The study of sanctions is, in essence, a part of the broader study of the mechanisms by which policy preferences in one nation or group of nations are transmitted to another, target, nation. How does a sender state, short of military intervention, bring about policy change in a target state? Clearly, economic pressure is one channel through which influence might be brought to bear on the international stage, others being diplomatic suasion and non-economic or cultural embargoes. Economic sanctions include trade sanctions, i.e., restrictions on imports from or exports to the target country; investment sanctions, which include restrictions on capital flows to the target or, in some cases, mandatory disinvestment; and more narrowly-targeted, so-called "smart", sanctions, such as freezing the offshore assets of individual members of the target nation's ruling elite, or travel bans on government officials and party cadres. In all cases, economic sanctions are supposed to work by imposing some kind of pain on the target country, and particularly on its ruling regime, which then alters its policies in order to comply with the sender's demands and thereby avoid further sanctions damage.²

¹ From 1945 to 1990, the UN Security Council imposed mandatory multilateral sanctions only against Rhodesia, and a much less-inclusive arms embargo against South Africa. During the 1990s, however, the Security Council implemented sanctions on no fewer than 13 occasions. The United States alone applied sanctions against 35 countries from 1993 to 1996 [[Kaempfer and Lowenberg \(1999\)](#), [United Kingdom Parliament \(1999\)](#)].

² As [Kirshner \(1997, p. 42\)](#) observes, the conventional view of how sanctions work is that, by inflicting damage on the target country, its ruling elite and core support groups, the sanctions will prompt the leadership to choose to change its objectionable policy in response to a straightforward cost-benefit calculus. It is assumed, in effect, that there is a rough proportionality between economic deprivation and political change in the target country – "the more value-deprivation, the more political disintegration" [[Galtung \(1967, p. 388\)](#)]. In the words of [Mack and Khan \(2000, p. 281\)](#), "[o]ne of the core assumptions of traditional sanctions theory is that the pain inflicted by sanctions on citizens of target states will cause them to pressure their government into making the changes demanded by the sanctioning body."

Although welfare-reducing in aggregate, sanctions, like any other restriction on the flow of goods or factors between countries, have redistributive effects in both sanctioning and target countries. These redistributive effects are important in determining both the nature of the sanctions imposed by the senders and the impact of the sanctions on the target. In regard to the latter, an important distinction needs to be made between the economic impact and the political impact. While there is no doubt that embargoes or restrictions on flows of goods and capital impose welfare costs on the target economy, or specifically on identifiable groups within the economy, there is considerable uncertainty as to how such costs are supposed to translate into policy change in the target, especially policy change in the direction desired by the sanctioner. *Galtung (1967)* was one of the earliest sanctions scholars to note that sanctions are often followed by increased levels of political integration in the target country, the so-called rally-around-the-flag effect that has captured the attention of many contributors to the sanctions literature. Thus *Mayall (1984, p. 631)* writes that sanctions “frequently have perverse effects, creating out of the siege mentality a sense of national cohesion and determination to triumph in adversity that was previously lacking. . . .” In such situations it is not uncommon for sanctions to increase popular support for the ruling regime in the target country [*Mack and Khan (2000, p. 282)*]. Moreover, as *Galtung (1967)* observes, sanctions can be counterproductive by giving rise to a new elite in the target nation that benefits from international isolation. For example, *Selden (1999)* notes that, in the long run, sanctions often foster the development of domestic industries in the target country, thus reducing the target’s dependence on the outside world and the ability of sanctioners to influence the target’s behavior through economic coercion.³

As far as the nature of the sanctions themselves are concerned, *Galtung (1967)* as well as several other theorists [*Renwick (1981)*, *Leyton-Brown (1987)*, *Lundborg (1987)*, *Tsebelis (1990)*] have pointed out that sanctions are often imposed not for instrumental purposes, i.e., not to create the maximum pain for the target or to induce the target to comply with the sanctioner’s demands, but for expressive or demonstrative purposes. For example, governments may impose sanctions in order to satisfy domestic groups within the sanctioning nations desirous of being seen to be “doing something” about the target’s behavior without necessarily incurring a significant cost in the process. Alternatively, sanctions might be implemented as a signal of resolve or to establish a reputation in the eyes of foreign allies and enemies alike.⁴

³ On the unintended long run consequences of sanctions, see also *Doxey (1980, 1996)*.

⁴ *Renwick (1981, p. 85)* argues that, in many cases in which sanctions have been applied, “demonstration of disapproval appears to have been the main purpose.” A government may consider sanctions useful if they serve to “declare its position to internal and external publics or help win support at home or abroad” [*Renwick (1981, p. 85)*]. Similarly, *Leyton-Brown (1987, p. 305)* maintains that sanctions typically are not designed primarily to achieve compliance, but to “send a message both to the target nation and to one’s own domestic population,” where that message may be outrage, firmness, or solidarity. *Tsebelis (1990)* concurs that sanctions are often imposed to send a signal, especially to smaller nations, that a certain behavior will not be tolerated, rather than to accomplish a particular policy goal.

The importance of expressive sanctions raises a prickly conundrum for the sanctions literature, namely, how to judge whether a particular sanctions episode was successful in attaining its goals and, more importantly, whether sanctions in general actually work. The answer, of course, depends on what is meant by “work”. Of the 116 episodes documented by HSE, 34 percent are rated by the authors as successful in achieving their political objectives. For some scholars, with an eye to the expressive motives for sanctions, such judgment is too harsh. Thus Baldwin (1985) offers a broad conceptualization of sanctions success, arguing that even if sanctions do not coerce the target into changing its objectionable policy they nevertheless can be an effective projection of influence by attaching costs to the target’s behavior or by enhancing the sanctioner’s international reputation.⁵ Pape (1997, p. 97), by contrast, applies a much stricter definition of success, arguing that sanctions can only be deemed successful if the target country concedes to a significant part of the sanctioner’s demands in the absence of any other internal or external pressures for change, i.e., there must be no other more-credible explanation for the target’s change in behavior. Pape disputes HSE’s finding, pointing out that, in almost all of the supposedly successful cases, there were other factors, such as military intervention, that contributed to the favorable outcome. According to Pape’s definition of success, sanctions *by themselves* brought about political compliance in less than five percent of the episodes in the HSE database [Pape (1997, p. 93)].⁶

The literature on economic sanctions, a province of both economists and political scientists, has tackled all of the issues discussed above and many others. Not surprisingly, given the nature of the topic, the approach normally used in the literature is that

⁵ Along similar lines, Rogers (1996) points out that simply because sanctions are usually unsuccessful in ending wars in progress does not mean that they are necessarily ineffective in attaining more modest goals. Verdier (2005) shows that sanctions can serve a useful informational function by helping to reveal an adversary’s level of resolve. Nossal (1989, p. 315) maintains that sanctions can be considered a failure only if we expect them to achieve changes in policies or conduct of target nations, whereas “[r]etributive punishment, by its very nature always ‘works.’” A sanction, after all, is intended to be a punishment inflicted on a deserving recipient, regardless of its subsequent effects [Hoffman (1967, p. 144)].

⁶ Askari et al. (2003) concur that sanctions are rarely effective in achieving their political goals. A close examination of many sanctions episodes that are widely considered to have been successful often reveals that the sanctions were not in fact the main cause of policy change in the target country. Thus, for example, in a recent case study, Dadak (2003) demonstrates that the sanctions against Yugoslavia in the 1990s, which many credited with bringing an end to Serbian aggression in the Balkans, were ineffective due to widespread smuggling of goods into Yugoslavia through Bulgaria. According to Dadak, it was the NATO bombing campaign of 1995 and consequent setbacks on the battlefield, not sanctions, that induced the Serbs to accede to the Dayton agreement that ended the fighting. On the other hand, some authors [e.g., Cortright and Lopez (2000), O’Sullivan (2003)] view the UN sanctions against Libya as a case of a successful policy outcome. Cortright and Lopez (2000, p. 204) conclude that, although sanctions alone normally do not dramatically alter the behavior of a target nation, sanctions nevertheless should be considered a success “if they had a positive, enduring impact on bargaining dynamics or if they helped isolate or weaken the power of an abusive regime.” Lopez and Cortright (2004) likewise point out that even if sanctions do not force a target government to change its objectionable policy, the sanctions may be effective tools of containment if they reduce the amount of resources available to the government. For example, in their opinion, the sanctions against Iraq, although ineffectual in getting Saddam Hussein to comply with UN resolutions, did play an important role in containing his ability to pursue aggressive policies toward his neighbors.

of political economy, and the present chapter follows in this tradition. The remainder of the chapter will be organized as follows. In Section 2 we briefly address the economic impacts of sanctions on the target country, focusing primarily on trade sanctions and disinvestment. In Section 3 we deal with the political origins of sanctions policies in sender states, characterizing sanctions as endogenous policy outcomes in the context of an interest group model of politics. Section 4 uses a similar interest group model to describe the political effects of sanctions within the target country, emphasizing the role of narrowly-targeted or selective sanctions. Section 5 considers single-rational actor and game-theoretic approaches to sanctions. Section 6 surveys the findings of empirical studies of sanctions, while Section 7 examines the impacts of political institutions, particularly regime type, on sanctions implementation and outcomes. Section 8 concludes with avenues for further research.

2. Economic effects of sanctions

We begin by considering the effects of trade sanctions. The extent of pre-sanctions trade between sanctioner and target is an important factor in determining the ease with which the target can find alternative sources of supply and alternative markets for its goods, and therefore in determining the terms-of-trade effects of the sanctions. A modeling device that is especially helpful in studying the effects of trade sanctions on relative prices of imports and exports is that of offer curves, used by Kaempfer and Lowenberg (1992b, 1999). Offer curves, or reciprocal demand curves, show the level of trade of imports for exports that some country would desire at various prices. By using offer curves to examine the consequences of trade sanctions, we can show not only the impact on the terms of trade for the relevant countries but we can also make inferences about the welfare effects of sanctions.

Figure 1 shows an initial offer curve equilibrium between a nation that is the potential target of multilateral economic sanctions, offer curve T , and its current trade partners comprising all other nations in the world, offer curve W . The horizontal axis measures quantities of the export good of country T , X_T , and the vertical axis shows quantities of country T 's import good, M_T . Any point along T 's offer curve shows some specific international trade equilibrium for country T , which is a welfare maximizing quantity of imports that would be acquired at the cost of a certain quantity of exports at some specific price ratio. That price ratio, or the terms of trade, is merely the ratio of exports to imports as represented by the slope of a ray from the origin to a point on the offer curve. Since, in general, as country T moves out from the origin along its offer curve it is able to buy more imports for a lower cost in terms of exports per import, i.e., its terms of trade improve, movement from the origin along a country's offer curve is welfare enhancing for that country.

Figure 1 also shows the composite offer curve for all other countries, W . This offer curve is essentially a composite of all world trade, net of the trade of the target country. As such, the world exports the good which the target country imports – the good on

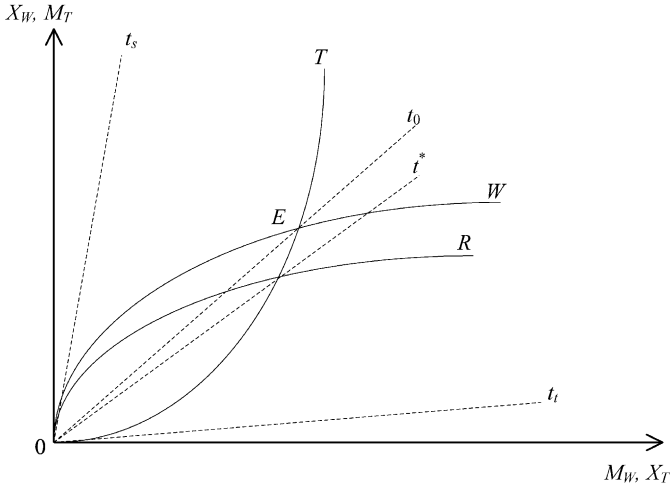


Figure 1. International trade equilibria with sanctions.

the vertical axis ($X_W = M_T$) – and it imports the export good of the target country on the horizontal axis ($M_W = X_T$). We make the simplifying assumption that the target country has a worldwide comparative advantage in the good on the horizontal axis, X_T . In other words, the target country, at least initially, is the only supplier of X_T on the world market, and all other countries are potential importers of this good and exporters of the second good, M_T . The intersection, E , between the two offer curves, W and T , is the international trade equilibrium in the two-good offer curve model. This intersection shows an equilibrium at which the given terms of trade, t_0 , simultaneously equate supply and demand, i.e., exports and imports, in the markets for both goods.

Consider now the implications of multilateral sanctions imposed by W on country T . The easiest exercise for analysis in this case is to hypothesize a total embargo on trade between W and country T . Such an embargo, by eliminating the opportunity for trade between W and T , forces T from its trade equilibrium at E to a position of autarky at the origin, 0 , and worsens the terms of trade in T from t_0 to t_t . However, **Figure 1** also clearly shows the costs of the embargo to the sanctioning countries as well as to the target country. By imposing the sanction on its trading partner T , the world is also imposing autarky conditions on itself, vis-à-vis T , and forcing a deterioration of its terms of trade to t_s . This move from trade equilibrium is welfare worsening for the sanctioning countries as well as for the target in so far as the movement of the sanctioners’ terms of trade, from t_0 to t_s , represents an increase in the price of their net importable good.⁷

⁷ Within the trading coalition of countries belonging to W there might be considerable differences in the extent to which they individually suffer as a result of this terms-of-trade deterioration. Inside the group, some

But what factors determine the extent of this terms-of-trade swing? Essentially, how far the terms of trade move in a given situation depends on the amount of curvature in the offer curves, which is in turn a function of the price-elasticity of the offer to trade and the size of the trading countries. When a very large country enters trade, its economic size relative to the amount of trade that it undertakes ensures that the equilibrium terms of trade cannot be very different from the autarky terms of trade. Very large countries are self-sufficient enough to not reap very substantial gains from trade, but conversely they do not suffer extensively from abstaining from trade, following sanctions. Thus large-country offer curves have very little curvature, almost resembling linear rays from the origin. Small countries, however, tend to be much more dependent on trade. Their demands for and supplies of tradeable goods are price-inelastic and these countries can suffer greatly from the imposition of sanctions. Thus, small countries tend to have much more curvature in their offer curves than do large countries.

Let us now consider the economic effects of unilateral sanctions on the target country and on the rest of the world. With the imposition of sanctions by one sanctioning country, S , the rest of the world's offer to trade with the target is reduced to the new offer curve, R , in Figure 1, since the sanctioning country's offer is removed from W at each terms of trade. The elasticity of this residual offer curve is also reduced by the sanctioning country's withdrawal, meaning that the new offer curve, R , must have a greater degree of curvature than the original offer curve, W .⁸ The opportunity to continue trading with those nations that are not participating in the sanctions, however, means that the target country is not reduced to autarky as it was in the first example. Rather, trade continues for the target at somewhat worsened terms of trade, t^* , where the degree of deterioration in the target's terms of trade depends on the magnitude of the shift from W to R , and on the trade elasticities involved. The greater the share of the target's pre-sanctions trade accounted for by the sanctioning country(ies), or the larger the number of sanctioning countries relative to non-sanctioners, the greater is the magnitude of the shift from W to R . As the number of sanctioning countries increases, we approach the multilateral case, with the target's terms of trade, t^* , approaching the autarky terms of trade, t_t . The less elastic is the rest-of-the-world offer curve, R , the greater the extent of the deterioration of the target's terms of trade.⁹ Although not shown explicitly in Fig-

countries might actually become net exporters of the good formerly imported from the target, so that the sanctions actually benefit those nations. As a whole, however, the sanctions cannot cause a net improvement in W 's terms of trade.

⁸ The rest-of-the-world offer curve is constructed by summing up the import and export totals for all countries, except the target country, along each ray. This is the general equilibrium equivalent of adding up individual quantities supplied or demanded at each price in a supply-and-demand diagram in order to derive a market supply or demand curve. When the sanctioning country's offer curve is removed from the rest-of-the-world offer curve, the resulting residual offer to trade lies closer to the origin at each terms of trade and is less price-elastic.

⁹ As more countries join in the sanctions, the elasticity of R is further reduced until we end up with the multilateral case.

ure 1, the deterioration of the target's terms of trade is also larger the more inelastic the target's offer curve.¹⁰

In the case of unilateral sanctions, the impact on the sanctioning country is similar to the impact on the sanctioning countries in the multilateral case. The imposition of sanctions eliminates, for S , an inexpensive source of imports and an attractive market for its exports. In the extreme case, if we assume that there are no alternative markets for S among the other members of R , the decision to apply sanctions against the target moves the sanctioning country to autarky: unable to obtain its desired import, the sanctioning country finds itself far worse off following sanctions than does the target, which retains a market among other countries albeit at worsened terms of trade.¹¹

The trade model presented in Figure 1 indicates that both the sanctioning nation(s) and the target nation are, in general, made worse off by trade embargoes.¹² The degree to which the sanctions impose costs on these nations depends on the number and size of other countries willing to continue trading and on the elasticities of the trade offers of those countries. Unilateral sanctions create a smaller deterioration in the target's terms of trade than do sanctions involving a larger number of participant countries. Moreover, any distortion of prices of traded goods caused by sanctions inevitably creates opportunities for non-sanctioning third parties, transshippers and smugglers to capture rents by continuing to trade with the target (purchasing the target's exports below the world price and selling the target's imports above the world price). The magnitude of these rents, and therefore the incentive to engage in sanctions-busting activities, rises with the severity of the sanctions as reflected in their terms-of-trade-effects, and is consequently greater in the case of multilateral sanctions than unilateral sanctions [Kaempfer and Lowenberg (1999)]. While most of the sanctions rents under unilateral sanctions accrue to traders in non-sanctioning countries, under multilateral sanctions much of the

¹⁰ On the effects of the target's domestic elasticities of demand and supply on the impact of sanctions, see Black and Cooper (1987), Dollery and Leibbrandt (1987), Kaempfer and Lowenberg (1988b) and van Bergeijk (1994).

¹¹ This result, of course, assumes no transshipment of the target's exports or imports through non-participating nations. If the goods traded among these countries were all perfectly fungible, then an embargo would leave all nations – target, sanctioner and others – exactly as they were before the embargo, less only the extra transaction costs involved in transshipping goods. Moreover, if both the sanctioning country and the target were members of larger groups of countries which participate on either side of the market, then the sanctions would not interfere with either country's ability to participate in some trade. Rather, both the sanctioner and the target would find their terms of trade worsened to some degree following sanctions, with the exact amount of damage depending on the trade elasticities of all parties involved. Harkness (1990) examines the case of sanctions that affect some, but not all, trade flows between sanctioner and target. He shows that the effects of such sanctions on the sanctioning country's terms of trade and trade balance depend on the elasticities of demand for its imports and exports.

¹² That trade sanctions impose costs on both the target and the sanctioner is one reason why sanctions are often viewed as less effective than other forms of diplomacy. For example, in a spatial bargaining model, Morgan and Schwebach (1997) show that sanctions are unlikely to alter significantly the outcome that has the highest joint probability of being accepted by both parties, essentially because the more costly the sanctions are to the target, the more costly they are to the sanctioner as well.

sanctions-busting activity is likely to involve traders in the target nation itself, thereby channeling a considerable portion of the rents into the very country that is supposed to be punished by the sanctions [Kaempfer and Lowenberg (1999)]. Sanctions rents might even, perversely, enrich the target country's own rulers if they are able to participate in the sanctions-busting trade.¹³

Turning now to the effects of investment sanctions, consider the balance of payments equation for a single-commodity economy that is a target of disinvestment,

$$P_X NX = F\{q, P_X MP_K(L, K)\}, \quad F_1 > 0, \quad F_2 < 0, \quad (1)$$

where P_X is the price of the product X , NX is net exports of X , F is net capital outflows, q is the degree of disinvestment (discussed further below), L and K are the amounts of labor and capital employed in the target economy, which for present purposes are treated as exogenous, and MP_K is the marginal product of capital. The left-hand side of Equation (1) is net exports, the nominal value of exports net of the nominal value of imports. The right-hand side is an expression for net capital outflows, which is the outflow of investment funds net of foreign investment inflows. The left-hand side and the right-hand side must be equal to each other because of the way in which a country's balance of payments is defined: the foreign currency obtained as a result of selling more goods and services to foreigners than buying from them is used to finance the purchase of foreign financial and physical assets. In effect, the trade surplus provides the foreign currency to pay for the flow of investment abroad. If net exports were negative, i.e., if domestic residents were buying more goods and services from foreigners than selling to them, then the resulting trade deficit would need to be financed by a net capital inflow. In this case, investment funds from abroad would be providing the foreign currency required to finance the country's excess of imports over exports.

Net capital outflows, on the right-hand side of Equation (1), are a positive function of the degree of disinvestment, q , and a negative function of the value marginal product of the capital stock within the target economy, $P_X MP_K(L, K)$. Disinvestment means that foreigners are selling off assets that they own in the target country and repatriating the proceeds, which gives rise to a capital outflow from the target country. Or, if mandatory disinvestment prevents foreigners from investing in the target country in the first place, there will be a decrease in capital inflows. Either way, an increase in the degree of disinvestment causes an increase in net capital outflows from the target. The value marginal product of capital is simply the dollar value of output contributed by the last unit of capital employed. The greater the productivity of target-country capital assets, the greater the incentive to hold those assets on the part of both foreigners and domestic

¹³ Thus, for example, Rowe (2001) documents the Rhodesian government's ability to exercise control over the marketing of the domestic tobacco crop. Saddam Hussein captured substantial revenues by adding illegal surcharges to the price of oil sold to intermediaries under the UN's oil-for-food program [Wall Street Journal (May 2, 2002, p. A1)] and the Milosevic regime was able to appropriate a large share of sanctions rents by creating state-run monopolies and centralizing the distribution of goods [Kaempfer and Lowenberg (1999)].

residents: more foreign capital will therefore flow into the country, while domestic residents will be more likely to employ their funds at home rather than send them abroad. Therefore an increase in the value marginal product of capital causes a decrease in net capital outflows.

The rate of return, r , on the target country's domestic assets is defined as follows:

$$r = \{P_X MP_K(L, K)\} / \{P_K(q, K)\}, \quad P_{K1} < 0, \quad P_{K2} < 0, \quad (2)$$

i.e., the rate of return to capital is the ratio of the value marginal product of capital to the price of capital. The partial derivative, P_{K1} , measures the extent to which target-country assets are substitutable for foreign assets. Universal disinvestment by all countries would imply the sale of all foreign-owned assets in the target country. Because no foreign wealthholder would be allowed to own these assets, residents of the target country would acquire them at depressed prices. Thus, as indicated in Equation (2), $\partial r / \partial q = (\partial r / \partial P_K) P_{K1} > 0$. A rise in q causes a fall in P_K and a rise in r . This is a formalization of the "fire-sale" phenomenon, whereby disinvestment of foreign-owned assets raises the rate of return earned by domestic capital owners in the target country.¹⁴

If disinvestment occurred only on the part of a single country or a few countries, and if sufficient foreign wealthholders were indifferent between target-country and foreign assets, there would be no change in the price of target-country assets and no change in the rate of return. Intermediate cases are, of course, the most likely. In general, as the extent of disinvestment grows – from a few firms to many firms and from a mandated, fully binding policy in a few nations to most or even all nations – so the impact grows, because the degree to which target-country assets are only imperfectly substitutable for other assets rises.¹⁵ This process has the effect of decreasing the price of target-country assets, which encourages their acquisition by domestic wealthholders. Such acquisition can be financed in two ways: by the sale of foreign assets owned by residents of the target country or by an increase in the target's net exports.¹⁶

Hence, the direct effect of disinvestment is that net capital outflows rise. But the rate of return in the target country increases due to the fall in the price of productive assets. This decrease in domestic asset prices slows the net capital outflow by making domestic assets more attractive. In other words, the increase in capital outflows caused by disinvestment can be offset either by an increase in the target country's net exports or by a decrease in the price of domestic capital assets, i.e., an increase in their rate

¹⁴ For discussions of the fire-sale effect, see Kaempfer and Lowenberg (1986, 1992b, chapter 7) and Lowenberg and Kaempfer (1998, chapter 8).

¹⁵ The degree of substitutability between assets of different national origin depends on several considerations, particularly differences in country risk. A schedule of substitutability might exist for every country such that, to some extent, the degree of capital mobility or asset substitutability might be almost perfect at the margin, but as asset markets are asked to handle large capital flows, this substitutability begins to break down.

¹⁶ The terms-of-trade and exchange rate effects of sanctions are examined in more detail by Kaempfer and Moffett (1988).

of return, that is sufficient to induce target-country wealthholders to sell off their foreign assets in order to buy the cheaper domestic assets. To the extent that the target country's net exports cannot increase, perhaps due to a trade boycott that is imposed alongside the capital sanctions, the full burden of adjustment falls on domestic asset prices.

As pointed out by Kaempfer and Lowenberg (1986, 1992b) and Lowenberg and Kaempfer (1998), an implication that follows from the foregoing analysis is that disinvestment sanctions can have the perverse effect of enhancing the target country's ability to pursue its objectionable behavior. The existing foreign capital stock – the physical plant and capacity previously owned by foreigners – is purchased by domestic capital owners at reduced prices, causing yields to rise and prompting target-country residents to sell foreign assets and substitute into domestic assets with higher rates of return. The increase in the rate of return due to the acquisition of productive assets at fire-sale prices translates into a windfall gain to domestic capital owners, which increases the tax base available to the government to finance its policies, including those that attracted the sanctions in the first place.

In the longer run, if disinvestment were continued, the inflow of new capital goods from abroad would diminish as licensed techniques and patented processes of foreign firms were no longer available. In this case, the exogenous capital stock, K , will decrease. From Equation (2),

$$\begin{aligned} \partial r / \partial K &= \{ P_X (\partial MP_K / \partial K) P_K(q, K) - P_X MP_K(L, K) P_{K2} \} / P_K(q, K)^2 > 0 \\ \text{if } |(\partial MP_K / \partial K) P_K(q, K)| &< |MP_K(L, K) P_{K2}|, \end{aligned}$$

i.e., a decrease in K would both raise the marginal product of capital, MP_K , and raise the price of capital goods, P_K . These two effects work in opposite directions on the rate of return, r . A rising marginal product of capital raises r , but a rising price of capital depresses r . The above condition states that a fall in K will cause a fall in the rate of return if the impact on the marginal product of capital is less than the impact on the price of capital goods. As long as this condition holds, a decrease in K will cause a decrease in the rate of return, r , via an increase in the price of capital goods, P_K . In effect, firms in the target country will confront higher production costs and lower profits as a result of the increased scarcity of capital, thereby reducing the government's ability to extract tax revenue to finance its objectionable policy. However, as Porter (1979, pp. 590–591) points out, the long run impact of the withdrawal of international capital is essentially a growth-related phenomenon, which is difficult to capture in a static model. Although any decrease in the amount of new and depreciation investment can be expected to lower the growth rate of the target's per capita GDP, and therefore possibly hamper the target government's capacity to carry out its objectionable policy, the amount of damage depends ultimately on the difficulty experienced by the target country in replacing, or doing without, foreign sources of capital.

3. The political determinants of sanctions policies in sender states¹⁷

In this section we use an interest group model of endogenous policy to characterize the decision on sanctions implementation within a sender country.¹⁸ According to this approach, the nature and extent of sanctions applied by the sanctioning state are determined by pressures brought to bear in the domestic political system by interest groups of differing motives. These pressures are the outcomes of private utility maximization on the part of individual members of the interest groups concerned. Although the groups are defined by commonality of interests, the political participation of any group member is tempered by a desire to free ride on the collective lobbying efforts of the group.

Consider some individual i , a member of the total population I of some country. This individual maximizes utility according to:

$$\begin{aligned} \text{Max } U^i &= U^i(Y^i), \quad U_1^i > 0, \quad U_{11}^i < 0 \\ \text{subject to } Y^i &= Y^i(S), \quad Y^i(0) = Z^i, \quad Y_1^i \geq 0, \quad Y_{11}^i = 0, \end{aligned} \quad (3)$$

where Y is income, Z is an initial endowment, and S is a non-negative, continuous variable measuring the level of sanctions applied. The sanctions are assumed to increase or decrease individual income at a fixed rate. Moreover, the sanctions, like any other trade restriction, generate distortions, i.e., $\sum_i Y_1^i < 0$, although they increase the incomes of members of particular interest groups at the expense of others.

The change in utility produced by a change in the level of sanctions is:

$$\partial U^i / \partial S = U_1^i Y_1^i \geq 0. \quad (4)$$

Let $I = \{J, K\}$ such that for all $j, k \in J, K$ respectively, $Y_1^j > 0$, $Y_1^k < 0$, which allows separate demand functions for sanctions to be specified for those who benefit from them and for those who are hurt by them. For group J , all members' willingness to pay for an additional unit of sanctions can be summed to yield:

$$P_S = D^J(S) = \sum_j \partial U^j / \partial S = \sum_j U_1^j Y_1^j, \quad D_1^J < 0, \quad (5)$$

where P_S is the unit price of sanctions. This price is the dollar amount that individuals in group J would be willing to spend at the margin to achieve a certain level of utility enhancing sanctions through the political market.

Members of group K are willing to pay to avoid sanctions because $Y_1^k < 0$. This implies a demand for reduced sanctions that, when expressed as a function of an increasing

¹⁷ The material in this section and in the next section is adapted from Kaempfer and Lowenberg (1988a). See also Kaempfer and Lowenberg (1992b, chapters 4 and 8) and Lowenberg and Kaempfer (1998, chapter 5).

¹⁸ The interest group model is based on the economic theory of regulation deriving from Stigler (1971), Peltzman (1976) and Becker (1983, 1985).

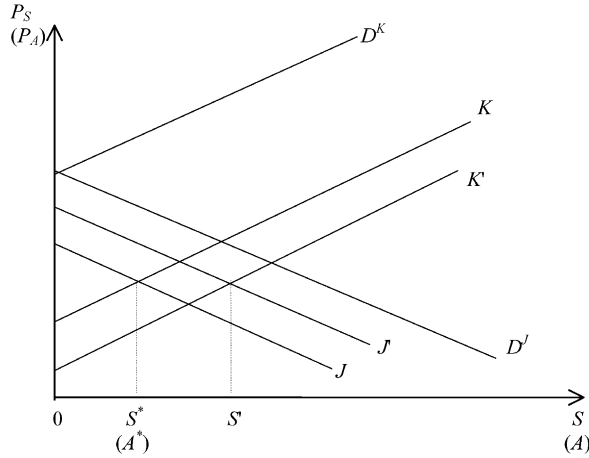


Figure 2. Endogenous policy equilibria.

level of sanctions, becomes:

$$P_S = D^K(S) = - \sum_k \partial U^k / \partial S = - \sum_k U_1^k Y_1^k, \quad D_1^K > 0. \tag{6}$$

This expression is defined as the negative of the sum of the marginal utilities of the change in Y from a change in S . In this case we interpret P_S as the amount that group K members would pay at the margin to keep sanctions from increasing.

Intuitively, the demand curve labeled D^J in Figure 2 shows the marginal utility to those interest groups that benefit from S associated with increased levels of S .¹⁹ The curve labeled D^K is the marginal utility to opponents of S from reduced levels of S . (Ignore for now the variable A , which is also plotted on the horizontal axis in Figure 2; this variable is discussed in Section 4.) The height of the D^J curve reflects the amount of resources that the proponents of policy S are willing to spend to generate political influence in order to secure one more unit of S . Similarly, the height of the D^K curve is the willingness to pay on the part of opponents of S in order to prevent one more unit from being supplied.

Demanders of S are willing to pay for increments of the policy because the distributional effects of S raise the real incomes of the beneficiaries of the sanctions policy.²⁰ This willingness to pay is represented in a political market where the demanders “pay”

¹⁹ By abstracting from income effects, we can interpret the marginal utility schedule as equivalent to a demand schedule.

²⁰ Individuals within the sanctioning country whose incomes are increased as a consequence of sanctions include producers of substitutes for proscribed imports as well as domestic consumers of exportables that previously went to the target country.

for S in a variety of ways, including political contributions or volunteer work for candidates who support policy S , a willingness to pay higher prices for goods made necessary as a consequence of S , or to make side payments to groups not otherwise involved in the issue. The demand curve has the traditional negative slope because, as the level of S rises, additional benefits to the demanders decrease at the margin.

The D^K curve in Figure 2 is, in essence, a supply curve of S , showing the ability of the government to implement policy S . Members of group K are made worse off by higher levels of S .²¹ This creates an incentive for them to engage in political activity which imposes costs on the government. These costs can come in the form of increased support for opposition candidates or various forms of protest ranging from non-violent dissent to civil disobedience. Group K 's demand price for reduced levels of S is therefore also the government's supply price for increases in S . The justification for the upward sloping supply curve is that increases in S will cause increasing utility losses at the margin for those made worse off.

The demand for sanctions must take into account the public good nature of this type of policy. The demand functions (5) and (6) are derived by summing the maximum willingness to pay for more sanctions or fewer sanctions over the members of groups J and K . In an attempt to free ride on other group members, however, each member has an incentive to reveal a lower willingness to pay. The extent to which this ability to free ride diminishes the demand of a group determines the political effectiveness of that group. The presence of free riding within groups requires a respecification of demand,

$$P_S = J(S, E^J), \quad J_1 < 0, \quad J_2 < 0, \quad (5')$$

$$P_S = K(S, E^K), \quad K_1 > 0, \quad K_2 < 0, \quad (6')$$

where E^J and E^K are shift parameters that reflect the degrees of free riding in groups J and K and in turn determine the abilities of the two groups to produce political influence [Becker (1983, 1985)]. Free riding is a function of the size of the group and other factors that influence organization and enforcement costs [Olson (1965)]. The more severe the free riding problem, the greater the magnitude of E^J and E^K . J_2 and K_2 are both negative because free riding reduces willingness to pay in both groups and therefore reduces their demand prices.

Equating the demand for more sanctions, (5) or (5'), with the demand for fewer sanctions, (6) or (6'), will clear the political market. Support-maximizing politicians clear the market by raising the level of sanctions above its zero minimum until pressure for higher sanctions at the margin is offset by pressure against higher sanctions. That is, sanctions, like any other government regulation, are supplied up to the point where the marginal utility to the beneficiaries, weighted by their political influence or effectiveness, is equal to the influence-weighted marginal disutility to the losers [Stigler (1971),

²¹ Individuals within the sanctioning country whose incomes are reduced as a consequence of sanctions include consumers of importables previously obtained from the target country as well as domestic producers of proscribed exports.

Peltzman (1976), Becker (1983)]. A necessary condition for the existence of this equilibrium is that both interest groups display diminishing returns to political influence, i.e., that the political pressure applied by each group increase at a decreasing rate as the size of the wealth transfer to the group increases.²² Figure 2 depicts such a political market for sanctions, given the following additional assumptions. First, assume initially that there are no output deadweight losses from sanctions. Thus the sanctions are merely lump-sum redistributive transfers within the sanctioning polity, i.e., $\sum_i Y_1^i = 0$. Second, assume that marginal utilities of all individuals in the neighborhood of $S = 0$ are identical. Third, assume that both groups of individuals are equally effective in controlling free riding and exerting political influence. Thus, for an infinitesimally small level of sanctions, because the income gain of group J is assumed exactly equal to the loss of group K , it follows that group J 's willingness to pay for more sanctions is equal to group K 's willingness to pay for less sanctions. The political market therefore clears at $D^K = D^J \Rightarrow S = 0$.

An increase in sanctions will be positively valued by group J along D^J , but at a decreasing rate because the marginal utility of Y is assumed to be decreasing. Similarly, group K is willing to pay increasing amounts to prevent sanctions from rising, again due to the rising marginal disutility of falling Y . Because in this case sanctions are a pure redistribution with no allocational effects, the political equilibrium is where the marginal utilities of money income of J and K are equal, which occurs at a zero level of sanctions.

Now assume that sanctions are market distorting interventions. Much like tariffs, quotas and other instruments of protection, they impose deadweight costs, i.e., $\sum_i Y_1^i < 0$. Deadweight costs associated with redistributive policies generally have the effect of increasing the amount of wealth that must be extracted from the losers while reducing the amount transferred to the recipients. Thus for each increment in sanctions, members of group K must now forgo more wealth and members of group J now receive less. Consequently, group K 's willingness to pay to prevent each increment in sanctions from being implemented is increased, while group J 's willingness to pay to obtain each increment is reduced. The D^K curve shifts up and the D^J curve shifts down, even though we are continuing to assume that the two groups are equally effective in exerting political influence. The vertical distance between the D^K and D^J curves measures the waste of resources generated as a result of the sanctioning policy, which arises because sanctions are a particularly inefficient way to redistribute income from group K to group J , especially when compared to a simple cash subsidy.²³

By causing an upward shift of the D^K curve and a downward shift of the D^J curve, deadweight costs produce an equilibrium at a negative level of sanctions – precluded by the assumption of non-negativity of S . The political market clearing level of sanctions is therefore zero. In effect, the pressure for sanctions by those individuals whose

²² Diminishing returns to political influence might arise either from diminishing marginal utility of money income, as in the present model, or from diminishing marginal product in the exertion of political pressure.

²³ On the inefficiency of regulatory transfers, see Tullock (1989, pp. 11–27).

incomes are increased by sanctions not only has to counter the pressure against sanctions by those individuals whose incomes are reduced but must also compensate for the allocational distortions and inefficiencies created by the sanctions. Moreover, if the government incurs an administrative cost of applying sanctions, this would further add to the output deadweight costs of the sanctioning policy and further increase the spread between the D^K and D^J curves.

Thus, without differences in the political effectivenesses of various interest groups, sanctions are unlikely to be applied by a government responding only to income maximizing political pressure. As Becker (1985, p. 344) points out, "...no policy that lowered social output would survive if all groups were equally large and skillful at producing political influence, for the opposition would always exert more influence than proponents." However, the political ineffectiveness of groups J and K will cause their respective demand curves, $J(S, E^J)$ and $K(S, E^K)$, to shift below D^J and D^K . If J is a small group, each member of which gains a significant share of the increase in income obtained from an increase in sanctions, e.g., manufacturers of substitutes for the exports of the target country, then J may be more politically effective than group K , comprising the consumers who lose from import restrictions.²⁴ Consequently, if E^J is smaller than E^K , the downward shift of $J(\cdot)$ below D^J might be small enough relative to the downward shift of $K(\cdot)$ below D^K to produce a political market clearing level of sanctions indicated in Figure 2 by S^* .

In general, however, political pressure for economic sanctions will arise not only because of the income effects of sanctions in terms of increased consumption opportunities for members of certain interest groups, but also because of utility enhancing attributes of the sanctions themselves.²⁵ That is, sanctions may be considered a public good (or bad) that directly contributes to individual utility (or disutility) by allowing individuals the satisfaction (or dissatisfaction) of experiencing their nation engaged in a foreign policy toward a certain goal. Some individuals might perceive their contributions to the sanctions policy as private goods, so that, in effect, sanctions jointly provide both public and private good attributes [Cornes and Sandler (1984)].²⁶ The possibility of direct

²⁴ This would be a classic case of concentrated benefits and dispersed costs which, in a majoritarian political system, so often leads to socially inefficient redistributive policies [see Kaempfer and Lowenberg (1992b, p. 28)].

²⁵ As already pointed out, in addition to the instrumental motive of imposing economic damage on the target country, embargoes can have an expressive value to sanctioners who feel obliged to act for moral or political reasons. Furthermore, sanctions that are perceived to be producing desirable results in the target country are likely to elicit growing support within the sanctioning country, while sanctions that appear not to be working, or hurting innocent groups, might be expected to attract less support.

²⁶ Cornes and Sandler (1984) demonstrate that certain standard propositions about public goods no longer hold in the presence of such jointly produced public and private outputs. For example, when the joint goods are Hicksian complements, free riding may actually diminish as the size of the group increases, i.e., agents' public expenditures may increase in response to increased public expenditures of others. Philanthropic activities, for instance, can generate private as well as public benefits to contributors.

effects of sanctions on individual utility suggests a respecified utility function:

$$U^i = U^i(Y^i, S). \quad (3')$$

Differentiating this expression with respect to S implies a direct and an indirect effect on utility from imposing sanctions:

$$\begin{aligned} \partial U^i / \partial S &= \partial U^i / \partial S| + U_1^i Y_1^i. \\ |Y_1^i &= 0 \end{aligned} \quad (7)$$

Assume initially that the direct effect, the first right-hand side term in Equation (7), is positive, which implies that pressure brought to bear by the pro-sanctions group J will increase, thereby shifting the demand for sanctions from J to J' in Figure 2. At the same time, although group K loses income from sanctions, its members obtain direct positive utility from the imposition of sanctions. Some individuals, for example, might be willing to forgo pecuniary income in order to desist from trading with an odious foreign regime. Under these circumstances, members of group K would be less willing to exert pressure against sanctions, which implies a downward shift of the demand curve for reduced sanctions from K to K' in Figure 2. Thus when all members of I derive utility directly from sanctions, the equilibrium level of sanctions will rise from S^* to S' .

The analysis in this section shows that the actual level of sanctions imposed by the sanctioning country is a function of the relative political influences of the pro-sanctions groups and the anti-sanctions groups within that country. The sanctions take the form of trade restrictions that are wealth reducing in aggregate but redistributive in nature. It follows that there is no reason why the sanctions should necessarily coincide with those required to induce maximum economic harm in the target country. It is to the target country that we now turn our attention.

4. The political effects of sanctions on the target country

We begin by assuming that the polity of the target country, like that of the sanctioning country, consists of two main interest groups. One of these, group J , exerts pressure through the political market in favor of a redistributive policy, which we will designate as A , and which is supplied by political support-maximizing politicians in the target country and is deemed objectionable by pro-sanctions interest groups in the sanctioning country. The other interest group, K , lobbies against A .²⁷ The interest group model used in this section is identical to that developed in the previous section, except that the endogenous policy outcome that emerges from the political market clearing process is the level of A instead of the level of sanctions.

²⁷ Examples of such interest groups might include pro- and anti-apartheid groups in South Africa, or supporters and opponents of the Milosevic regime in Serbia.

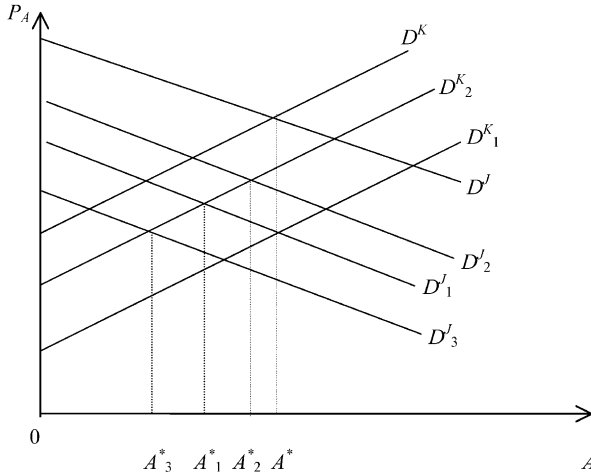


Figure 3. Effects of sanctions on equilibrium levels of policy A in the target country.

The political market clearing mechanism in the target country is described by Equations (3)–(6) and Figures 2 and 3, with the objectionable policy A replacing S . (S , the level of sanctions, was determined in Section 3. A , the level of the target country’s objectionable policy, is the endogenous variable of interest in the present section. S and A are both plotted on the horizontal axis in Figure 2 only to economize on the number of figures.) Again, the curves J and K in Figure 2 are drawn to reflect the assumption that group J , the beneficiary of A , is more effective at producing political influence than group K . This assumption will result in a positive level of the equilibrium policy outcome, A^* . The relative political ineffectiveness of group K might be due to that group being politically repressed or excluded from the policy making process. The only options open to members of such a group are costly ones like insurrection or civil disobedience, which reduces their revealed willingness to pay for lower levels of A .

Figure 3 shows the possible effects of sanctions on the political market clearing level of A . We start out with the initial demand functions, D^J and D^K , and a political equilibrium at A^* . Both interest groups are now assumed to experience a decrease in income due to sanctions,²⁸ which lowers the demand price revealed by each, either for the policy A , in the case of J , or for reductions in A , in the case of K . With a fall in income, demanders of A will be less willing to pay for this policy, and the demand curve for A will shift down to D^J_1 . However, the political costs to the government of supplying

²⁸ In general this need not be true. For instance, see Porter (1979) for a more detailed examination of the differential effects of sanctions on income groups within the target country. Sanctions restricting imports of the target country might increase the market power of producers of import substitutes [Selden (1999)]. As pointed out in Section 2, disinvestment sanctions can bring about a fire-sale selloff of foreign owned domestic assets, leading to a wealth transfer to those target country residents who acquire them at reduced prices.

A will also fall because of the negative income effect suffered by opponents of A. The decrease in incomes of individual members of the anti-A interest group reduces their ability to allocate resources to resistance activities. This fall in the government's supply price of providing A lowers the government's supply curve of A, which is group K's demand curve for reduced levels of A, to D_1^K . Both marginal utility curves have therefore shifted down from their original positions to D_1^J and D_1^K respectively and the effect on A^* is indeterminate because it depends on the relative magnitudes of the shifts. In Figure 3, A^* is unchanged. Clearly, however, it is conceivable that the income effect of sanctions might well entail an increase in A^* if group K experienced a greater reduction in income than group J. It follows that, in order to produce a diminution of the objectionable policy of the target country, sanctions should be designed to hurt the primary beneficiaries of that policy to a greater extent than those groups opposing it.²⁹

However, in addition to their income effects, sanctions affect the political effectiveness parameters of the two groups, E^J and E^K . Members of the anti-A group, K, for example, might regard the imposition of sanctions as a signal of foreign support for their struggle against the A-producing government,³⁰ or as an indication of weakness on the part of the government.³¹ In either case, free riding will diminish and group K will become more effective in exerting political influence. The resulting decrease in E^K will cause the demand schedule of group K in Figure 3 to shift up from D_1^K to D_2^K , leading to a fall in the equilibrium level of A from A^* to A_1^* . As Tullock (1971) has pointed out, anything that increases the probability of successful political resistance or lowers the expected costs to individuals of political participation will lead to an increase in resistance activities. Kaempfer and Lowenberg (1992a) use a threshold model of collective action to demonstrate how external pressure, such as sanctions, can generate widespread propagation of support for a group's cause among the domestic population.³²

²⁹ However, if A is an inferior good for group J, then the negative income effect will induce an upward shift of D^J , leading to an increase in A^* . For example, sanctions that reduced the incomes of white workers in South Africa might have led to an increase in demand for regulations protecting them from black labor market competition, i.e., an increased demand for apartheid [Kaempfer et al. (1987)].

³⁰ Of course, this effect would depend on the identity of the sanctioner. If the sanctioning nation is not held in high regard by the populace in the target country, the sanctions could actually hinder the work of the domestic opposition.

³¹ Such weakness, possibly in terms of financial resources or in terms of mass legitimacy, could be interpreted as a political opportunity by the anti-A group, mobilizing its members irrespective of whether or not they derive solace from the actions of foreign sanctioners.

³² Kaempfer and Lowenberg's (1992a) analysis identifies several mechanisms linking sanctions with changes in political effectiveness of interest groups within a target nation. First, individuals might revise their private beliefs and preferences when they discover that foreigners publicly profess belief in some policy objective. The greater the number of people who appear to hold an opinion, the greater the extent to which private beliefs and preferences will be altered to accord more closely with that opinion. Second, foreign pressures could produce an increase in reputational benefits awarded to individuals who support certain domestic interest groups, by increasing the effectiveness of those groups in rewarding their supporters with selective incentives.

The impact of sanctions on the political effectiveness of the pro- A group, J , is ambiguous. One possibility is that members of group J might view sanctions as an unwelcome foreign encroachment on national sovereignty, in which case they will rally around the flag and the group as a whole will expend more resources on the production of political influence in favor of policy A . This rally effect makes it easier for the rulers to mobilize support for their policies. In effect, the incentive to free ride within group J will diminish, leading to a decrease in the group's political ineffectiveness parameter, E^J . The result is a shift to the right of the demand curve for A in Figure 3 from D_1^J to D_2^J and a rise in the resulting equilibrium level of A from A_1^* to A_2^* .

Alternatively, however, if individual members of group J are discouraged in their support for A by the income reducing impact of sanctions, their incentive to free ride in the production of pro- A pressure will increase. For example, individuals who normally support the ruling group might be deterred from doing so if foreign economic pressure is perceived to increase the probability of the ruling regime losing power, or if the sanctioners threaten even larger reductions in income in the future, or promise to remove the sanctions if the target regime rescinds its objectionable policy. Such discouragement of the regime's supporters causes E^J to increase and group J 's demand curve in Figure 3 shifts down from D_1^J to D_3^J , leading to a reduction in the equilibrium level of A from A_1^* to A_3^* .³³

The preceding analysis suggests that signal or threat effects of sanctions operate to bring about changes in A^* that are quite independent of the sanctions' impact on the income of the target country. In fact, sanctions that generate the greatest economic damage³⁴ need not necessarily produce a decrease in A^* , and might even precipitate an increase. A large negative income effect will cause a large downward shift of curves D^J and D^K in Figure 3, but unless group J is hurt proportionally more than group K so that D^J shifts down by more than D^K , there will be no reduction in A^* . If K 's income falls by more than J 's, then D^K will shift down by more than D^J , and A^* will actually increase. These economic impacts of sanctions thus have indeterminate and potentially perverse effects on the equilibrium level of A .

It follows from the interest group analysis of sanctions in this section that only those sanctions that have *selective* impacts on the supporters and opponents of A will lead to

Third, sanctions or foreign interest group lobbying might cause an increase in "collective sentiment" for the policies advocated by a domestic interest group, where collective sentiment, following Kuran (1989, p. 46), is defined as a representative individual's expectation about the share of the population adopting a given policy position. The perception that a threshold percentage of the population has already adopted such a position can create a bandwagon effect.

³³ An example is provided by Findlay and Lundahl (1987) who argue that white South African workers might have responded to disinvestment pressure from shareholder groups abroad by conceding to a diminution of apartheid in order to prevent erosion of their standard of living.

³⁴ As indicated in the previous section, the choice criteria for selecting sanctions need not necessarily include damage to the target country; rather, sanctions design reflects interest group preferences in the sanctioning countries. Sanctions that inflict the greatest economic damage would likely be broad-based multilateral trade embargoes, mandatory disinvestment or withdrawal of international credit.

policy changes in the target country. One way to bring about such selective impacts is to design the sanctions strategy with a view to its signal and threat effects rather than its income effects. A signal of support for the goals of the political opposition, and/or threats of further pain to supporters of the regime, will alter the political inefficiency parameters attaching to these two interest groups and thereby produce endogenous policy change in the desired direction. The interest group analysis therefore supports the smart sanctions strategy of aiming sanctions narrowly to impact specific groups within the target country. There is, in fact, considerable agreement in the sanctions literature on the value of pinpointing those groups most responsible for the objectionable policy. Morgan and Schwebach (1996), for example, argue that the impact of sanctions on the target country is best conceptualized in terms of their effect, direct or indirect, on the political elite.³⁵

Kaempfer and Lowenberg (1999) maintain that non-economic or cultural sanctions are often more likely to have selective effects on narrowly-defined groups than are trade or investment sanctions whose income effects are typically quite indiscriminate. Moreover, symbolic sanctions, because they presuppose close cultural affinity between sanctioner and target, are necessarily unilateral rather than multilateral, or at least involve only a small group of sanctioners.³⁶

³⁵ A similar view is taken by Alerassool (1993), Smith (1996), Dashti-Gibson et al. (1997) and Selden (1999). In the words of Cortright and Lopez (2000, p. 245), “[s]anctions are most likely to be effective when they target the decision-makers responsible for any wrong doing and deny the assets and resources that are most valuable to these decisionmaking elites.” It is argued that smart sanctions are not only more effective than simply GNP reducing sanctions in achieving their objectives but are also less likely to impose “collateral damage” on innocent groups within the target country, such damage having the undesired effect of potentially strengthening the regime and retarding the emergence of a middle class and civil society [Haass (1998, p. 202)]. See also Weiss (1999), Cortright and Lopez (2000), Lopez (2001), Cortright, Lopez and Rogers (2002), Cortright, Millar and Lopez (2002) and Cortright and Lopez (2002a, 2002b). In a case study of US trade and financial sanctions against Iran, Torbat (2005) notes that these sanctions, while delivering a powerful economic blow, have had little political success. As an alternative, Torbat advocates the use of smart sanctions designed to exert pressure directly on the ruling clerics while avoiding negative impacts on the Iranian population as a whole. Kirshner (1997, pp. 56–63) offers a compelling example of how US sanctions against the Trujillo regime in the Dominican Republic in 1960–1962 provided vital support and encouragement to the domestic opposition. While the traditional view is that sanctions should be tailored to hurt the ruling elite and core support groups within the target country [Kirshner (1997, p. 42)] and to benefit, or at least avoid harming, the opposition, Major and McGann (2005) argue that, in some cases, relatively disinterested bystander groups ideally should feel the brunt of sanctions. These groups, because they attach little salience to the objectionable policy of the regime, will normally spend a very small proportion of their resources on lobbying either for or against this policy. Therefore sanctions that impose costs on such groups will produce a greater increase in lobbying expenditures against the objectionable policy than sanctions that target higher-salience groups such as either the elites or the counter-elites. A potential obstacle to evaluating the effectiveness of smart sanctions, however, lies in the difficulty of obtaining data to measure the impacts of these sanctions on targeted groups.

³⁶ Kaempfer and Lowenberg (1999) offer the example of the sports embargo on apartheid South Africa, imposed by a handful of rugby- and cricket-playing nations, which arguably had a greater impact on whites in that country, without hurting blacks much, than did many of the severest economic sanctions that were applied. On sanctions that entail proscriptions on cultural activities and sporting events, see Hanlon and Omond (1987, p. 225).

Smart sanctions are especially desirable in the case of an autocratic target regime, where the sanctions ideally should undermine the power of the autocrat, as well as diminish the resources available to the autocrat's key supporters, without imposing severe collateral damage on the repressed citizenry [Kaempfer et al. (2004)]. According to Wintrobe's (1990, 1998) model of dictatorship, an autocrat uses two inputs in the production of power, namely, repression and loyalty. Applying Wintrobe's model to sanctions, Kaempfer et al. (2004) show that sanctions can increase the budget of the dictator and thus strengthen his position if he is able to gain some of the rents accruing from changes in the terms of trade. If the sanctions harm the target country's economy to such an extent as to impoverish the public, the domestic opposition's ability to exert influence might be weakened. Furthermore, the capacity of the regime to repress dissent might be increased if a poor populace is more readily policed. In this case, the price of repression is lowered and the regime substitutes more repression for loyalty in the production of power. On the other hand, if the sanctions restrict the regime's access to instruments of repression, such as police and military equipment, or if the sanctions provide encouragement to opposition forces in organizing collective action, then the price of repression might rise. The effect of sanctions on the price of loyalty depends on the disposition of domestic interest groups at the time the sanctions are imposed. Groups that are close to the regime might be induced by the sanctions to increase their support in order to capture more of the sanctions rents for themselves. The price to the regime of obtaining loyalty from these groups is therefore reduced. However, the regime's opponents might allocate more effort toward resistance, or at least become less supportive of the regime, in which case the price to the regime of extracting loyalty from opposition groups is increased. A change in the quantity of repression also has an income effect on the quantity of loyalty supplied to the regime because repression is wealth-reducing in aggregate. Sanctions-induced changes in the price of power have both income and substitution effects on the dictator's budget constraint. The relative magnitude of these effects determines the impact of sanctions on the quantities of power and consumption chosen by the dictator to maximize his utility.

5. Single-rational actor and game theory approaches to sanctions

The previous two sections examined sanctioning behavior and the political effects of sanctions from the standpoint of an interest group theory of the political process. According to this theory, observed policies in international relations and their consequences are viewed as outcomes of the configurations of domestic interest group politics within sender and target nations. National governments are treated as more or less impartial arbiters of competing domestic interest group pressures; governments themselves have no independent policy preferences or agendas. This approach is consistent with the methodological individualism of neoclassical economics, in the sense that the behavior

of interest groups is premised on utility maximization on the part of individual group members.³⁷

However, many international relations scholars and economists have studied sanctions using a single-rational actor methodology, in which the relevant unit of analysis is no longer individual interest group members, voters or politicians, but entire nation-states. According to this approach, states are the main players on the international stage and decisions about whether and how to apply sanctions and whether to comply with or resist sanctions are made by states. Insights generated by single-rational actor theories are not necessarily inconsistent with those of interest group theories; rather, the two methodologies focus on different questions. The main concern of interest group models is to show how national policy choices reflect the interests of constituency groups within the polity. In single-rational actor models, however, the main purpose is to show how one country's international policy decisions both affect and are affected by other national governments' decisions. These decisions are usually strategic and game theory is often brought to bear in analyzing the behavior of states.

Thus, for example, Drezner (1998, 1999) explicitly rejects the domestic-politics approach in favor of a game-theoretic model of economic coercion in which both senders and targets of sanctions, viewed as nation-states, incorporate expectations of future conflict as well as the short-run opportunity costs of coercion into their decisions. Drezner identifies a "sanctions paradox" which is directly attributable to conflict expectations. The paradox is that sender states that anticipate frequent conflicts with the target state are more likely to initiate sanctions than states that anticipate few future conflicts, while target states that expect to be in conflict with the sender in the future are less likely to comply with the sender's demands for fear that concessions made in the present will be utilized in the future to threaten their security [Drezner (1998, p. 711)]. It follows that senders will be more likely to impose sanctions against adversaries than against allies but will get more significant concessions from allies because the latter are less concerned about the relative gains of holding out for a better bargaining position in the future, due to a low expected likelihood of future conflict. Drezner (1998, 2001) finds empirical evidence supporting the conflict expectations model. Moreover, Drezner (1999) dismisses domestic politics as a cause of the initiation of sanctions, finding evidence for his position in the fact that sanctions events are strongly correlated with crises in which states' interests are directly threatened; sanctions events tend not to be randomly distributed across *all* international crises as a domestic-politics hypothesis would predict.

Of game-theoretic treatments of sanctions, the most well-known in the literature are those of Eaton and Engers (1992, 1999). Using a theory of bargaining under incomplete information, Eaton and Engers (1999) demonstrate that success is more likely when the cost of a threatened sanction to the sender country is low relative to the gain to the sender

³⁷ On methodological individualism in international political economy, see Kaempfer and Lowenberg (1992b, chapter 3).

from changing the target's behavior, while the cost of the sanction to the target is high relative to the cost to the target of complying with the sanctioner's demands. Although this result is quite intuitive, the model does produce some interesting implications. In a world of perfect information, sanctions would never be implemented: if a threatened sanction were sufficiently effective, the target would comply immediately, obviating the need to impose the sanction, while if the sanction were ineffective, the sender would not threaten it in the first place. The fact that sanctions are observed means either that the sanctioner underestimated the target's cost of compliance, in which case the sanction fails, or that the target underestimated the sanctioner's resolve, in which case the sanction succeeds.

Although in many cases the mere threat of sanctions will be sufficient to induce compliance by the target, there could be instances of incomplete information in which the sender imposes sanctions and the target holds firm. For example, a sender might impose sanctions against a target for whom the cost of complying is greater than the cost of the sanction, either because the sender wishes to reinforce its reputation for toughness or because the sender cannot discriminate between a complaisant and a stubborn target [Eaton and Engers (1999)]. Lacy and Niou (2004) use a multistage game model to demonstrate that sanctions are most likely to be imposed precisely when they are not likely to succeed, while the sanctions that *are* likely to succeed will do so as threats, without having to be imposed at all. In the words of Eaton and Engers (1992, p. 902), "sanctions can be effective even if, in equilibrium, they are not actually used." An observer of actually applied sanctions would likely conclude that sanctions do not work, even though most sanctions are successful at the threat stage. Empirical studies based only on observed sanctions would then be biased against sanctions success. However, Eaton and Engers (1999) also point out that a resolute sanctioner might impose sanctions repeatedly, merely to demonstrate its resolve, thereby initiating a pattern of compliance on the part of targets over time which would lead an observer to conclude that sanctions are extremely effective. In this case, empirical analyses based on observations of actually implemented sanctions would be biased in favor of sanctions success. In general, sanctions that are actually imposed "constitute a very unrepresentative tip of an iceberg" [Eaton and Engers (1999, p. 410)]. We will return to the problem of selection bias in empirical sanctions studies in the next section.

In ongoing interactions characterized by a repeated game between sanctioner and target, Eaton and Engers (1999) show that the commitment of the sanctioner to actually impose sanctions if the target balks is an important determinant of the success of sanctions. By committing to always use sanctions rather than deciding on a case-by-case basis, the sender removes a target's incentive to balk in the hope of raising the probability that sanctions will be lifted in a future period [Eaton and Engers (1999, p. 413)].³⁸ The degree of compliance that a sanction is able to extract from a target

³⁸ Dorussen and Mo (2001), however, demonstrate that commitment strategies, by helping states improve their bargaining positions, make conflict resolution more difficult and therefore increase the duration of sanctions episodes.

depends not only on the cost of the sanction to each party but also on each party's patience. Eaton and Engers (1992) develop a measure of "toughness" based on a party's willingness to incur the cost of sanctions. The greater the target's impatience and the lower the cost to the sender, the more likely the sanction is to be successful. However, a patient sender and a high cost to the target could actually hinder compliance. Since the anticipation of such a high-cost sanction is enough to exact compliance, the threat to implement such a sanction every period is not credible. Because a patient sender will not apply sanctions with great frequency, the target can take advantage of the sender's patience by delaying compliance [Eaton and Engers (1992, p. 902)]. In this situation, a sanction that imposes less harm on the target (such as a symbolic sanction or a trade sanction affecting only a small share of the target's total trade), and is therefore more credible in repeated implementation, can sometimes be more effective.³⁹

6. Empirical sanctions studies

There is a large literature that attempts to deal with the question of what factors determine whether or not sanctions are effective in bringing about their stated objectives. The starting point for this literature is the pioneering work of HSE, who assign to each sanctions episode in their database a success score ranging from 1 to 16.⁴⁰ HSE consider a sanction to be successful if its success score is greater than eight,⁴¹ and then proceed to identify 18 potential correlates of sanctions success. Using a multiple regression model they test the impact of these correlates on the sanctions success score. However, the explanatory power and predictive success of the HSE model is weak, accounting for only 21 percent of the variation in success scores [Bonetti (1997), Leitzel (1987)]. One of the main reasons for these weak results is that HSE employ an ordinary least squares estimation technique that is not appropriate to the case of a limited dependent variable such as the sanctions success score [Bonetti (1997), van Bergeijk (1994)].⁴² This

³⁹ However, Morgan and Schwebach (1996, 1997) argue that sanctions will have the greatest effect on the distribution of expected outcomes if the cost of the sanctions is sufficiently high relative to the values at stake. Specifically, Morgan and Schwebach's spatial bargaining model reveals that sanctions will be successful in attaining their political objectives in a target country only if they impose significant costs on politically powerful segments of the target society relative to the salience these segments attach to the issue in dispute.

⁴⁰ The outcome of each episode is ranked from one (failure) to four (success); the contribution of sanctions to this result is likewise ranked from one (none) to four (significant). The overall success score of the sanctions episode is then the product of the policy result score and the contribution score.

⁴¹ However, as Bonetti (1997, pp. 334–335) points out, since the expected value of both the "result" score and the "contribution" score is 2.5, the expected success score for a random event where all results and contributions are equally probable is 6.25, which might be a more appropriate benchmark for sanctions success.

⁴² The HSE regression analysis has also been criticized by van Bergeijk (1994, p. 73) and by Lam (1990, p. 241) for using as a dependent variable a measure of sanctions success that includes the importance of the sanction to the attainment of the goal. This measure requires prejudging the extent to which a given sanctions episode caused a change in the target's policy, which is precisely what is supposed to be estimated on the right-hand side of the regression equation.

problem has been addressed by various authors using discrete dependent variables estimators.⁴³

The conclusions of this literature are quite mixed, the results being heavily dependent on model specification,⁴⁴ but a few regularities emerge, namely that the success of sanctions is positively correlated with political instability and economic weakness in the target country [HSE, Lam (1990), van Bergeijk (1989, 1994)] and with close, cordial ties between sanctioner and target prior to the sanctions being imposed [HSE, Lam (1990), Bonetti (1998)] – hence HSE’s well-known dictum that it is better to sanction a friend than an enemy. Many, although not all,⁴⁵ empirical studies find a significant positive relationship between the cost of the sanctions to the target, measured as a percentage of the target’s GNP, and the success of the sanctions [HSE, Lam (1990), Dehejia and Wood (1992), Dashti-Gibson et al. (1997), Drury (1998), Hart (2000)], while Lam (1990) also finds that the cost of sanctions to the sanctioner is negatively related to sanctions success. Several scholars have argued that a sanctioner’s bargaining leverage, or its ability to impose costs on the target, depends on the extent of pre-sanctions trade linkages between the two countries [Miyagawa (1992), Dashti-Gibson et al. (1997), Bonetti (1998), Drury (1998), Hart (2000)]. Thus, for example, van Bergeijk (1994, pp. 77–87) finds that the potential welfare loss to the target, particularly as measured by proportional trade linkage – the sanctioner’s trade flow to the target as a percentage of the target’s GNP – is an important determinant of the success of sanctions. In Drury’s (1998, p. 502) words, “closer ties with the target increase the sender’s ability to visit damage on the target, and, according to the conventional wisdom, the greater the damage, the more effective the sanctions will be.” However, Drury finds no significant effect of pre-sanctions trade flow on the sanctions outcome, leading him to conclude that while “pre-sanction trade was important in that it allows the sender to visit damage on the target . . . [i]t is this damage, measured by GNP cost, that increases sanction effectiveness” (1998, p. 507).

Although most studies find that multilateral cooperation among sanctioners has a negative impact on sanctions success,⁴⁶ Drury (1998) shows that this result holds only

⁴³ For example, van Bergeijk (1989, 1994), Drury (1998) and Dehejia and Wood (1992) use logit models, Lam (1990) and Hart (2000) use probit, and Bonetti (1998) uses logistic regressions to identify the circumstances in which high levels of success or failure are probable.

⁴⁴ For a recent survey of results, as well as a contribution of some new ones, see Jing et al. (2003).

⁴⁵ For a contrary finding, see Jing et al. (2003).

⁴⁶ See, for example, HSE and Bonetti (1996). This finding might seem counterintuitive because, as pointed out in Section 2, multilateral sanctions will generally have greater terms-of-trade effects on the target than unilateral sanctions. However, Kaempfer and Lowenberg (1999) argue that multilateral sanctions are actually less effective than unilateral sanctions precisely because the larger terms-of-trade effects generate sanctions rents that are often captured by the target regime. Also, the same large terms-of-trade effects create strong incentives for members of multilateral coalitions to cheat, trading with the target in contravention of the sanctioning agreement, thereby sending a counterproductive signal of support to the target government. Miers and Morgan (2002) implement a multidimensional spatial modeling approach to account for the higher failure rate of multilateral sanctions than unilateral.

if international organizations are not involved in the sanctions. Moreover, while assistance to the target from third countries is normally expected to reduce the probability of sanctions success [HSE, Bonetti (1998)], Drury (1998) finds that this is true only when the target was originally dependent on the sanctioner for its imports. Another correlate of sanctions success examined in the literature is the nature of the goal of the sanctions, with more ambitious goals generally shown to be negatively associated with success [Dashti-Gibson et al. (1997)], presumably because such goals are more difficult to achieve.⁴⁷ However, Drury (1998) finds no significant effect of the ambitiousness of the goal on the sanctions outcome. While countries that resort frequently to sanctions are found to be less successful on average than infrequent sanctioners [Paarlberg (1983), Dashti-Gibson et al. (1997)], the effect of duration of a given sanctions episode is controversial: Daoudi and Dajani (1983) and Brady (1987) argue that the welfare costs of sanctions increase with time, so that prolonged sanctions are more effective than short-lived sanctions,⁴⁸ whereas several other scholars find that sanctions duration is negatively correlated with success [Nincic and Wallenstein (1983), Leyton-Brown (1987), HSE, van Bergeijk (1989, 1994), Martin (1992), Miyagawa (1992), Bolks and Al-Sowayel (2000)].⁴⁹

The empirical sanctions literature has been criticized for selection bias because the HSE data include only those episodes in which sanctions were actually applied. There are many other instances in which sanctions were considered or threatened but ultimately not used (since, as indicated in the previous section, a credible threat to sanction is, by itself, often enough to elicit compliance). In general, Fearon (1994) points out that samples of conflicts that are actually observed are drawn from an entirely different population than those of conflicts that are merely threatened. In the context of sanctions, Morgan and Miers (1999), Hart (2000) and Nooruddin (2002) argue that economic coercion is typically applied only in the most intractable of situations, in which irreconcilable differences between sanctioner and target make it unlikely that the sanctions will succeed in changing the target's behavior. It follows that the results of studies focusing on only those sanctions that are implemented will necessarily be biased against sanctions success. In order to address this problem, Drezner (2001, 2003) surveys cases in which sanctions were imposed in pursuit of economic or regulatory goals. In these categories of sanctions, threats are often made publicly before sanctions are implemented, providing an ideal test for selection bias. Consistent with Eaton and Engers'

⁴⁷ For example, a goal of overthrowing a ruling regime in some target country would be much more difficult to attain than simply bringing about a marginal change in the target government's policy.

⁴⁸ Galtung (1967) suggests that, as the costs of sanctions mount over time, threatening severe economic damage and political disintegration, the target is likely to eventually comply with the sanctioner's demands despite the prevalence of rally effects at lower levels of cost.

⁴⁹ This result might be due to the fact that the passage of time cracks the solidarity of international sanctioning coalitions [Martin (1992)] and hardens the resolve of the target [Miyagawa (1992), Bolks and Al-Sowayel (2000)] while enabling the target to find alternative markets and substitute imports [Renwick (1981, p. 81)], or because failed sanctioners are often reluctant to abandon their sanctions after recognizing a fiasco [Leyton-Brown (1987)].

(1992, 1999) and Lacy and Niu's (2004) theoretical analysis discussed in the previous section, Drezner's results show that the sanctions that generated significant concessions were most likely to end at the threat stage. Drezner interprets his findings to suggest that the significance of economic coercion might have been greatly undervalued, contradicting as they do much of the consensus in the recent literature that sanctions generally fail to achieve their political goals and that their continued use can be explained only by non-instrumental motives, such as domestic politics within the sanctioning countries. However, the view that empirical sanctions studies are biased *against* sanctions success is by no means universal. As noted in the previous section, a committed sanctioner might repeatedly apply sanctions, creating an incentive for targets to comply [Eaton and Engers (1999)]. Empirical studies based on observations of actually implemented sanctions would then be biased *in favor* of sanctions success. The same would be true if sender countries behaved strategically by imposing sanctions only when they believed them to have a good chance of working.

The problem of selection bias is part of a broader issue, namely that the factors determining whether sanctions are used are inherently connected to the factors determining their success [Smith (1996), Morgan and Miers (1999), Hart (2000), Bolks and Al-Sowayel (2000), Nooruddin (2002), Jing et al. (2003)]. This point is made clear by Eaton and Engers (1999, p. 413): "Any analysis of situations in which senders actually resort to taking measures can paint a misleading picture of the role of sanctions in the international order: a measure may be taken only in rare instances when a sender thinks that it can accomplish something, or in rare instances when a target fails to submit to the sender's will. . . . [A]ny attempt to quantify [sanctions'] effectiveness must consider the circumstances that lead to their use in the first place. Doing so requires an econometric approach more firmly embedded in theory."

From an empirical standpoint, the problem is that the choice of policy instrument, e.g., trade sanctions, financial sanctions, or military intervention, is endogenous to the political process and, in particular, to the policy outcome sought by the sanctioner.⁵⁰ But the choice of instrument also affects the outcome of the sanctions. Therefore some of the variables that explain the effectiveness of sanctions, e.g., the types of sanctions that are chosen or the design of the sanctions strategy, are themselves explained by other right-hand-side variables. Jing et al. (2003) address this endogeneity issue by estimating a simultaneous equations model in which the sanctions policy outcome and the probabilities of the sanctioner's adoption of different sanctions instruments are jointly determined.⁵¹ Their results confirm some findings of the earlier literature but also reveal some key differences. Consistent with previous studies, sanctions are found to be

⁵⁰ Military intervention, for example, would normally be more costly to the sanctioner than either trade or financial sanctions, and would therefore most likely be implemented in pursuit of only the most ambitious, or highest-priority, policy outcome.

⁵¹ Another two-stage estimation approach that has been used to deal with the problem of simultaneity of instrument choice and effectiveness is the censored probit model, exemplified by Nooruddin (2002), whose contribution is discussed further in the next section.

Table 1
Determinants of sanctions effectiveness: Dependent variable = sanctions success score

Independent variables	Hufbauer et al. (1990)	Lam (1990)	Dehejia and Wood (1992)	van Bergeijk (1994)	Dashti-Gibson et al. (1997)	Bonetti (1998)	Drury (1998)	Hart (2000)	Bolks and Al-Sowayel (2000)	Nooruddin (2002)	Jing et al. (2003)
Political instability of target	+	+		+							+
Economic weakness of target	+	+		+							+
Cordial pre-sanctions ties	+	+				+					+
Cost of sanctions to target	+	+	+		+		+	+			
Cost of sanctions to sender		-									
Trade linkages between sender and target				+							
Multilateral cooperation among senders	-						-†				
Third-party assistance to target	-					-	-††				
Ambitiousness of sanctions goal					-						
Sender is frequent sanctioner					-						

(continued on next page)

Table 1
(continued)

Independent variables	Hufbauer et al. (1990)	Lam (1990)	Dehejia and Wood (1992)	van Bergeijk (1994)	Dashti-Gibson et al. (1997)	Bonetti (1998)	Drury (1998)	Hart (2000)	Bolks and Al-Sowayel (2000)	Nooruddin (2002)	Jing et al. (2003)
Size of sender relative to target											–
Trade versus financial sanctions*	–				–		–				
Duration of sanctions	–			–					–		
Democratic versus autocratic target**									+	+	

Note: + indicates a statistically significant positive effect of the independent variable on sanctions success; – indicates a statistically significant negative effect of the independent variable on sanctions success.

* + means trade sanctions are more effective than financial sanctions; – means financial sanctions are more effective than trade sanctions.

** + means sanctions are more effective against democratic targets than against autocratic targets.

† Only if international organizations are not involved in the sanctions.

†† Only if the target is dependent on the sender for imports.

more effective the warmer the prior relationship between sanctioner and target and less effective the healthier the target, both economically and politically. However, contrary to some earlier studies, *Jing et al. (2003)* find that the larger the size of the sanctioner relative to the target the lower the likelihood of sanctions success and that the effectiveness of sanctions is not influenced significantly by third-country assistance to the target or by the costs of sanctions, to either sanctioner or target. Moreover, *Jing et al.*'s results reveal no unambiguous conclusions regarding the relative effectiveness of trade versus financial sanctions, contrary to *HSE, Alerassool (1993), Dashti-Gibson et al. (1997), Drury (1998)* and *Selden (1999)*, all of whom maintain that financial sanctions are more effective than trade sanctions.⁵²

The main empirical findings on the causes of sanctions success discussed in this section and the next section are summarized in *Table 1*.

7. Political institutions and sanctions

Another focus of inquiry in the sanctions literature, most prevalent among political scientists, is the role of domestic institutions and politics in determining both the likelihood that sanctions will be used and the political outcome of sanctions.⁵³ One of the most important aspects of domestic institutions is the nature of the political regime in both target and sanctioner, characterized as either democratic or non-democratic. The interest of sanctions scholars in regime type stems from the international relations literature on the so-called democratic peace, which is the theory that democratic dyads are less likely to enter into military conflict than non-democratic or mixed dyads.⁵⁴ One argument that is

⁵² The expectation of greater effectiveness of financial sanctions may be attributable to the fact that financial sanctions often have more selective effects on particular groups within the target polity, notably the wealthy elite, than do trade sanctions.

⁵³ Thus, for example, *Allen (2005)* finds that domestic political structures in target states strongly influence their response to sanctions, while *Bolks and Al-Sowayel (2000)* show that a target country's institutions and the political vulnerability of its regime significantly affect the duration of sanctions episodes.

⁵⁴ For clear statements of the democratic peace hypothesis and empirical tests which confirm the pacific benefits of democracy, see *Russett (1993), Dixon (1994), Oneal and Russett (1997), Mousseau (1998), Russett and Oneal (2001)* and *Dixon and Senese (2002)*. For reviews of the literature, see *Russett and Starr (2000)* and *Weede (2004)*. For an analytical treatment of both the democratic peace argument and its various detractors, see *Zinnes (2004)*. *Mousseau (2003)* demonstrates that the peace among democracies is limited to market-oriented states, which he ascribes to common interests derived from common economic structure. Indeed there is evidence that the conflict-reducing effect of democracy is conditional upon income levels. *Mousseau (2000)*, for example, finds that this effect is about twice as strong among developed countries compared with other dyads and is not statistically significant among the poorest decile of jointly democratic conflict-prone contiguous dyads. A variant of the democratic peace theory is the liberal peace, which postulates a pacifying effect of trade [see *Oneal and Russett (1997, 1999a, 1999b, 2001, 2003), Russett and Oneal (2001), Oneal (2003), Oneal et al. (2003)*]. Trade exerts not only a direct influence on peace but also an indirect one, to the extent that it contributes to prosperity and democracy [*Weede (2004, p. 170)*]. For a critique of the view that trade causes peace, see *Barbieri (1996, 2002)*, who notes that economic interdependence can potentially

typically made in support of this theory is that democratic political competition reveals information about a country's level of resolve, thereby avoiding escalation of disputes into violent conflict [Lektzian and Souva (2003, p. 647)].⁵⁵ A further argument is that accountability of democratic politicians to large constituencies gives them a greater incentive to conduct successful foreign policies and protect their citizens from the costs of war [Bueno de Mesquita et al. (1999, 2003)].⁵⁶ Autocrats, by contrast, are less concerned with overall public welfare and are therefore more likely to lead their nations into military conflict.

Bueno de Mesquita and Siverson (1995) find empirical evidence that engaging in war is hazardous to the survival in office of all types of leaders, but especially democrats. Along similar lines, McGillivray and Smith (2000) argue that domestically accountable politicians incur costs in the form of reduced levels of public support if they fail to cooperate with foreign nations. Leaders who can be easily replaced by their electorates if they cheat on international cooperative arrangements can credibly commit to cooperate [McGillivray and Smith (2005)]. Therefore the prospect of losing their jobs makes accountable leaders more trustworthy in the eyes of foreigners and fosters greater international cooperation. On the other hand, when replacing leaders is difficult, cooperation is less robust, which often leads to inter-state hostilities [McGillivray and Smith (2000)]. Moreover, as Bueno de Mesquita et al. (2003) point out, leaders of authoritarian states obtain support from narrow constituencies, with successive dictators normally relying on mutually exclusive groups of supporters. Consequently, leadership change results in different interests being represented, and policies are revised accordingly. Democratic leaders, however, must appeal to broader constituencies, the make-up of which does not change significantly with leadership turnover. As a result, it is unlikely that policies, including foreign economic policies, will change much with change in democratic

bring about *increased* frictions among trading partners. However, Barbieri's analysis has been challenged on the grounds that she fails to control for the relative capabilities of nations to wage war over considerable distances, while it has also been pointed out that her method of measuring trade shares biases her results in favor of a conflict-enhancing effect [Weede (2004, pp. 169–170)].

⁵⁵ It has also been hypothesized that the absence of liberal-democratic norms among leaders of non-democratic states creates an expectation of aggressive intentions and a presumption of enmity on the part of democratic leaders [see Farnham (2003)]. Gartzke (2000) attributes much of the lack of militarized disputes between democracies to preference similarity across democratic states, while Siverson and Emmons (1991) document a high rate of alliance formation among democracies.

⁵⁶ It is of course conceivable that the direction of causality might be quite the reverse, i.e., that the observed rarity of wars between democracies could be explained by a negative effect of war on democracy rather than vice versa. For example, it is plausible to suppose that nations become more autocratic as they prepare for impending wars. Mousseau and Shi (1999) test this hypothesis but find that disputant countries are in fact equally likely to become more democratic as they are to become more autocratic in the periods leading up to the outbreak of wars. James et al. (1999, 2000) reject single equation estimates of the relationship between democracy and war as merely ad hoc reduced forms, lacking in causal inference. In their view, a more appropriate methodology would be to identify a structural equation as part of a simultaneous system in which both democracy and conflict are treated as endogenous. Using a simultaneous equations model, Reuveny and Li (2003) find that dyadic militarized disputes reduce joint democracy while at the same time joint democracy reduces the probability of militarized disputes.

leadership [Major and McGann (2005, pp. 346–347)]. In an empirical study of trading relations, McGillivray and Smith (2004) confirm that the impact of leadership turnover on trade between democracies is much less pronounced than in the case of autocracies.⁵⁷

The democratic peace theory is by no means uncontroversial, however, with some scholars disputing both the logical basis and the empirical evidence for it.⁵⁸ Nevertheless, it has clearly been influential in the sanctions literature. Thus Lektzian and Souva (2003) and Cox and Drury (2006) investigate whether there is an analogous “economic peace” between democracies, i.e., whether democracies are relatively unlikely to use economic sanctions against other democracies. The same factors that encourage peace among democracies – a greater ability to send clear signals of resolve and a greater dependence of democratic politicians on successful policies – are expected to operate in the realm of sanctions [Lektzian and Souva (2003, p. 647)]. Both Lektzian and Souva’s (2003) and Cox and Drury’s (2006) results show that democracies impose sanctions more often than other regime types. Lektzian and Souva hypothesize that this propensity to sanction is due to the fact that the ruling coalitions in democracies encompass a greater variety of interest groups that need to be satisfied (2003, pp. 644–645). Trade sanctions are useful particularly to democratic governments as a device to justify protection for domestic industries while still professing commitment to a liberal trading regime [Cox and Drury (2006)].⁵⁹ Cox and Drury add that democracies might choose sanctions over military action because non-violent measures generally attract less public attention and opposition.

At the same time, however, both Lektzian and Souva (2003) and Cox and Drury (2006) also find that democracies are more likely to sanction non-democracies than other democracies. Cox and Drury suggest that this result occurs because two of the

⁵⁷ These findings extend also to economic sanctions. Thus McGillivray and Stam (2004) show that leadership change in non-democratic sanctioning and target states is strongly related to the ending of sanctions, whereas leadership change in democratic states is unrelated to the duration of sanctions. Once sanctions are lifted, Lektzian and Souva (2001) find that jointly democratic dyads return to pre-sanctions levels of trade faster than non-democratic or mixed dyads, a result which they ascribe to the transaction cost-reducing and trust-promoting characteristics of democratic institutions.

⁵⁸ Hess and Orphanides (2001) for example argue that, because incumbent democratic leaders often have a need to hold on to power in the face of poor economic performance, they will sometimes have an incentive to initiate international conflict in order to salvage their domestic positions. Rosato (2003), after a critical examination of the causal logic underpinning the democratic peace theory, concludes that, while there is certainly peace among democracies, this peace may not be primarily due to the democratic nature of those states. Henderson (1999, 2002) attributes the post-World War II stability among democratic dyads not to joint democracy, but to the presence of an international security regime characterized by bipolarity, nuclear deterrence, alliance membership and trade links. Senese (1999) finds that regime maturity is just as important as regime type in determining dyadic conflict intensities.

⁵⁹ As Kaempfer and Lowenberg (1988a) point out, majoritarian democracies are especially vulnerable to pressure from interest groups to impose sanctions, sometimes motivated by moral outrage against the objectionable behavior of a foreign regime, but often driven by little more than thinly disguised protectionist interests in trade restrictions.

most common reasons that democracies impose sanctions – to promote democracy and to punish human rights violations – apply largely to autocratic targets; democratic states, by definition, are usually not the ones guilty of abusing their citizens’ political or human rights. Moreover, according to [Lektzian and Souva \(2003, p. 648\)](#), given the strong imperative for democratic leaders to pursue successful foreign policies, they will typically prefer to pick on non-democratic targets on the grounds that a democratic target “will take all necessary means to offset or counter the sanctions in an effort to continue providing a stream of public goods to members of its broad winning coalition.”⁶⁰

The belief that democracies are more motivated than non-democracies both to use sanctions and to resist the demands of external sanctioners derives in part from [Fearon’s \(1994\)](#) notion of audience costs. These are the costs in terms of forgone political support that are incurred by a nation’s leaders when the public becomes disillusioned with their leaders’ abilities. According to Fearon, a democracy, which faces high domestic audience costs, is always less likely to back down in a public confrontation during international crises than a non-democracy, whose audience costs are considerably lower and which consequently has greater flexibility to alter its policies in the face of foreign pressure.⁶¹ It follows that a signal of resolve sent by a democratic target of sanctions will be more credible than one sent by an autocratic target, so that a potential democratic sanctioner, itself constrained by its own domestic political institutions to avoid foreign policy failures,⁶² is less likely to initiate sanctions against a democratic target [[Lektzian and Souva \(2003, p. 648\)](#)]. [Galtung \(1967\)](#) lends further credence to the relative resilience of democratic targets by pointing out that democracies have greater legitimacy and are therefore more likely than autocracies to rally their citizens around the flag of resistance to sanctions.

However, like its political counterpart in the democratic peace literature, the economic peace hypothesis is contentious. In particular, the claim that a democratic target is less likely to concede to sanctions than a non-democracy is rejected by many scholars. For example, [Nooruddin \(2002, pp. 69–70\)](#) argues that, precisely because democratic political leaders are compelled to take into account their public’s preferences, it is probable that a democratic target government would agree to the sanctioners’ demands in order to get the sanctions lifted and relieve the suffering of its constituents. Similarly, [Bolks and Al-Sowayel \(2000\)](#) show that democratic governments typically do not resist sanctions for long because of the resulting domestic political costs that their

⁶⁰ [Lektzian and Souva \(2003\)](#) also find that, owing to incentives to achieve successful foreign policies and minimize harm to their publics, democratic regimes are more likely than non-democracies to use financial sanctions instead of trade sanctions. For the same reason, democracies are more likely to pursue minor foreign policy goals rather than attempt to bring about ambitious policy changes in target countries.

⁶¹ In an empirical test of Fearon’s theory, [Partell and Palmer \(1999\)](#) find that domestic political audiences do indeed exert a strong influence over which countries in a crisis are likely to achieve successful outcomes, although relative national capabilities are also found to be important.

⁶² [Hart \(2000\)](#) suggests that democracies are generally more successful sanctioners than non-democracies because the audience costs confronted by democratic governments insure that they will initiate sanctions only if they are committed to holding out for success.

electorates would impose upon them. Much the same argument is proposed by Nossal (1999, p. 130), who notes that political leaders in target nations who fail to alter their behavior in order to put a stop to the economic pain caused by sanctions risk being ejected from office.⁶³ By contrast, in non-democracies, Pape (1997, p. 93) points out that unpopular ruling elites can often protect themselves and their supporters by shifting the economic burden of sanctions on to disenfranchised groups.⁶⁴ According to Bolks and Al-Sowayel (2000), when the leadership of a state is concentrated in the hands of a few, the leadership is better able to implement countermeasures that insulate the government from the economic hardships caused by sanctions. Non-democratic and illiberal regimes find it especially easy to hold out in the face of damaging sanctions because they can “simply pass on the costs of the sanctions to the governed and rely on armed forces to deter political opponents who are dissatisfied with policies” [Nossal (1999, p. 134)].⁶⁵ Moreover, pervasive nationalism often makes citizens of non-democratic states willing to endure considerable punishment rather than abandon policies that are seen to be in the national interest [Pape (1997, p. 93)]. Cortright and Lopez (2000, p. 214) argue that “sanctions provide authoritarian governments with leverage to create a ‘rally-around-the-flag’ effect as a means of suppressing domestic opposition.”⁶⁶ Damrosch (1993, p. 299) contends that sanctions will almost inevitably benefit an autocratic regime because the regime will always be in a better position than the civilian population to control external transactions and the internal economy. In Damrosch’s view, the creation and enrichment of a criminal class that profiteers from trading bootleg or scarce goods means that even the most skillfully targeted sanctions will serve only to entrench the power of the ruling elite.

Bolks and Al-Sowayel (2000) and Nooruddin (2002, p. 73) present empirical evidence that sanctions imposed against autocratic targets are less successful than those imposed against democracies. Nooruddin (2002, pp. 69–70) draws the logical conclusion that sanctioners are therefore more likely to sanction democracies than non-democracies precisely because democracies are more likely to concede.⁶⁷ A further argument supporting the claim that democracies, in particular, are inclined to use sanctions against

⁶³ Drawing on a large panel of cross-country and time-series data, Marinov (2005) finds empirical evidence for the destabilizing effect of economic pressure on the leadership of target countries.

⁶⁴ Pape (1997) cites the case of Iraq, which, despite facing the most damaging economic sanctions in history, with 48 percent of its GNP destroyed, did not acquiesce.

⁶⁵ Thus, in the literature on civil war, autocratic societies have been found to have somewhat lower risks of rebellion than partial democracies due to the ability of autocrats to successfully repress potential dissident groups. See Collier and Hoeffler (2007) (Chapter 23 in this *Handbook*).

⁶⁶ On the tendency of sanctions to strengthen the “hawks” and weaken the “doves”, see Willett and Jalalighajar (1983/84).

⁶⁷ This finding does not necessarily refute the notion of an economic peace among democracies, however. The economic peace is a dyadic phenomenon [Lektzian and Souva (2003, p. 647)]; it requires that pairs of democratic countries be less likely to be involved in sanctions than pairs of non-democratic countries or mixed pairs. Although Nooruddin finds that democracies are more likely to be *targets* of sanctions, he does not test whether democracies are also more likely than non-democracies to *impose* sanctions. In fact, Nooruddin’s data include only US-imposed sanctions (2002, pp. 63, 70).

Table 2
Summary of literature on regime type and sanctions

Autocracies more likely than democracies to concede to sanctions	Democracies more likely than autocracies to concede to sanctions	Democracies more likely than autocracies to impose sanctions	Sanctions imposed by democracies more successful than sanctions imposed by autocracies	Democracies more likely than autocracies to be targets of sanctions	Autocracies more likely than democracies to be targets of sanctions
Lektzian and Souva (2003)	Damrosch (1993)	Lektzian and Souva (2003)	Hart (2000)	Nooruddin (2002)	Lektzian and Souva (2003)*
	Pape (1997)	Cox and Drury (2006)			Cox and Drury (2006)*
	Nossal (1999)				
	Bolks and Al-Sowayel (2000)				
	Cortright and Lopez (2000)				
	Nooruddin (2002)				

*If the sender is democratic.

democratic adversaries is the observation that democracies prefer to substitute non-military coercion, including sanctions, for militarized tools of foreign policy when confronting other democracies in inter-state disputes [Palmer et al. (2002), Morgan and Palmer (2003)].⁶⁸

Table 2 provides a summary of the contributions to the literature on sanctions and political regimes surveyed in this section.

8. Conclusions and avenues for further research

A number of areas of consensus have emerged in the sanctions literature. There is, for example, wide agreement on the utility of smart sanctions – those designed to have

⁶⁸ There is some evidence, however, that democracies favor the use of positive economic incentives rather than sanctions, especially in dealing with other democracies [Davidson and Shambaugh (2000), Drezner (2000)].

selective effects on specific groups within the target country. In addition, economists and political scientists alike have come to recognize that consideration of the political processes by which sanctioning policies emerge in the sender nations, as well as the political processes through which sanctions generate policy outcomes in a target country, is key to addressing the two main questions in the political economy of sanctions. These questions are (i) what factors determine when sanctions will be used as a preferred instrument of influence exertion in international relations and (ii) what factors determine the likelihood of success or failure of sanctions in achieving their policy objectives? Game-theoretic treatments of sanctions have contributed a clear understanding that these two questions are intrinsically linked: observed instances of sanctions represent only a small sub-sample of sanctions strategies, most of which end without sanctions actually being imposed. This understanding has carried over into the empirical literature, in which most practitioners now acknowledge the presence of potential selection bias in the data on observed sanctions episodes. Simultaneous equations approaches, geared to dealing with the problem of joint determination of instrument choice and success, have therefore become the norm. Moreover, scholars have increasingly recognized the importance of political institutions, within both sanctioning countries and target countries, in influencing the decision to implement sanctions and the effectiveness of the sanctions in attaining their goals.

Despite the fact that the body of knowledge about the processes generating sanctions and determining their success has undoubtedly expanded, and analyses of sanctions, both theoretical and empirical, have become considerably more sophisticated over the years, there are puzzles that still need to be resolved. Why, for example, has the use of sanctions accelerated so dramatically in the post-Cold War era, and why are some countries more frequent users of sanctions than others? The latter question applies with particular force to the United States, which is by far the premier sanctioner in the world.⁶⁹ Without further research on these questions, we can only speculate as to their answers. Perhaps the collapse of the Soviet Union initiated a spurt of sanctioning activity because sanctioners need no longer be concerned that their actions will exacerbate Cold War tensions between superpower blocs.⁷⁰ Perhaps the nations that are most likely to rely on sanctions are those without access to alternative avenues of pressure that could be brought to bear in a dispute, such as historical, colonial or cultural ties with potential targets.

In resolving these issues, consideration must necessarily be given to more than the standard economic and political factors that, thus far, have dominated the sanctions literature. We believe that cultural and historical characteristics of nations, which have been neglected in the literature, will need to be taken into account in future research on sanctioning behavior and effectiveness. Scholars of economic growth and development

⁶⁹ On the proclivity of the United States to resort to sanctions, see Hufbauer (1998).

⁷⁰ Verdier (2005) argues that, now that countries' allegiances are less transparent than they were during the Cold War, sanctions are useful in screening adversaries into "deterable" and "undeterable" types.

have increasingly applied political economy models to explain how cultural or normative attributes of states play an important role in determining institutions, policy choices and economic performance.⁷¹ Moreover, the democratic peace literature suggests that countries that share participatory political institutions may be in a better position to signal levels of resolve or commitment in international disputes than countries lacking such institutions. In general, states with similar political and economic institutions can be expected to have similar foreign policy preferences and therefore to be less likely to enter into conflict with one another [Souva (2004)].⁷² The same might conceivably be said for other dimensions of national similarity, including culture and historical experience. Nations that share a range of cultural attributes may be supposed to be more effective in communicating their collective preferences and intentions than culturally dissimilar countries, thus mitigating conflict and increasing the likelihood of successful resolution of inter-state disputes. A high priority for future extensions of the economic sanctions research agenda will be to follow the broader emerging trend in economics, specifically, to take into account a wider array of behavioral determinants than have traditionally been applied in the study of sanctions.

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⁷¹ Examples include La Porta et al. (1999), Acemoglu et al. (2001, 2004), Rodrik and Subramanian (2003) and Tabellini (2005).

⁷² Souva's (2004) empirical results confirm that dyadic institutional similarity, especially similarity of economic institutions, reduces the probability of militarized conflict.

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