POLITICAL INVESTMENT IN ECONOMIC PROTECTION: A NOTE

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This note presents some aspects of the neoclassical political economy of economic protection. It develops a conceptual framework which focuses on the costs and benefits of investment in political influence to certain coalitions in the society and how the benefit-cost structure may affect the level of economic protection and the amount of what Bhagwati called "directly unproductive profit-seeking" activities.

1. Introduction

Rightly (or wrongly), neoclassical policy analysis has often been criticized for its aversion to combine efficiency and political factors in explaining the causes of public policy. The recent rise of what is aptly called "neoclassical political economy" (Colander, 1984) can be viewed as an answer to this criticism. In contrast to traditional welfare economics, neoclassical political economy views government as a partially endogenous entity whose instituted policies reflect vested interests in the society.

This note presents some aspects of the neoclassical political economy of economic protection. The main aim is to explore the implications of collective action on the level of economic protection and on the social costs of what Bhagwati (1982) christened "directly unproductive profit-seeking (DUP) activities." Discussed in the following section, the conceptual framework focuses on the costs and benefits of investment in political influence to certain coalitions in the society and how the benefit-cost structure may lead to changes in the level of economic protection and in the amount of DUP activities.

2. Endogenous Economic Protection

Approaches to neoclassical political economy have followed diverse paths, each one tending to reflect the writer's theoretical expertise or preference in specialized fields of economics. Thus, trade theorists tend to conceptualize political economy in ways that extend trade-theoretic models, whereby

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some sort of lobbying activities are introduced into the standard general-equilibrium trade models. The largest subset of this literature can be called the "positive theory of tariffs."[1] Similarly, the "industrial organization school," which often employs partial equilibrium models in analyzing the nature and consequences of industrial policy, tends to emphasize the influence of organizational structure and firm characteristics in explaining the causes of regulation.[2] Public choice theories, on the other hand, focus on the implications of the "rules of the game" on the behavior of politicians, bureaucrats, and voters, together with their interaction in the "political market."[3]

It should, however, be noted that these approaches tend to be complementary rather than conflicting exercises in the understanding of political economy. Each approach or, to be more precise, each model tends to address a particular issue or problem within the broad domain of political economy. For instance, trade theorists ask, among others, under what conditions rent-seeking or DUP activities can lead to either a deterioration or an improvement of social welfare (a la Johnson-Bhagwati's "immiserizing growth" paradox). Also, they ask what determines the equilibrium level of economic protection, in particular the tariff. Public choice theorists, on the other hand, are more concerned about the institutional mechanisms of preference revelation (and aggregation) by the actors in the political market (i.e., by voters, politicians, and bureaucrats), as well as the search of mechanisms that can minimize efficiency losses (e.g., the design of constitution).

A Conceptual Framework

The conceptual framework in this paper draws on the assumptions common to public choice and to earlier models of endogenous tariff protection. In particular, investment in political influence by the proponents and opponents of protection is modelled as the cooperative provision of a public good to members of supporting or opposing groups. The equilibrium

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[1] For a survey of endogenous tariff theory, see Magee (1983).

[2] Nelson (1986) provides, among others, a critical assessment of the industrial organization school.

[3] Two excellent guides to the public choice literature are those of Mueller (1979) and Buchanan and Tollison (1985).

level of protection is then modelled as a noncooperative equilibrium defined by the reaction functions of the proponents and opponents of protection.[4]

Investment in political influence may take the form of resources (time and money) expended in political campaigns, political advertising, the cultivation of bureaucrats and politicians, employment of political party workers, and bribery. Treating political influence as a public good within the group of advocates or opponents, the equilibrium coalition size and investment by each group can be modelled as in public choice theory, i.e., according to the marginal benefits versus the marginal coalition costs of club expansion. To producers, the benefits of collective action are defined as the gain in producer surplus to "club" members; to consumers, the benefits are gains in consumer surplus.

Generally, these benefits can be written as

$$(1) \qquad B_i = B_i(R, N_i, x_i) \qquad i = p, c$$

where R is the rate of commodity protection (summarized, e.g., by the effective-protection-rate concept in trade literature), N is coalition size, and x is a vector of other variables. The subscripts p and c refer to groups of producers and consumers, respectively. An increase in R raises the producer surplus and, hence, B_p, but decreases consumer surplus and, hence, B_c, ceteris paribus.

In the case of agricultural protection, the primary benefit to farmers is measured by the increase in producer surplus. Thus x_p in equation (1) includes the elasticity of supply and the share of market surplus, α. For consumers, x_c includes the elasticity of demand and the share of consumers' budgets spent on the protected commodity.[5] The higher is the share of the commodity to total consumer's expenditures, the greater is the stake of the consumer in collective action.

The protection-formation function is assumed to be a direct function of investment in political influence by the group of producers who benefit from commodity protection (I_p) and by the group of consumers who are harmed by the protection (I_c). That is,

[4] For an earlier elaboration of this framework, see Balisacan and Roumasset (1987).
[5] See Gardner (1983).

$$(2) \qquad R = R(I_p, I_c, z)$$

$$\text{with } \frac{\partial R}{\partial I_p} > 0 \text{ and } \frac{\partial R}{\partial I_c} < 0$$

where z is a set of other variables including social norms about providing protection in various circumstances. In this view, commodity protection can be increased by the group of producers through an increase in its investment in political influence. Similarly, consumers can mitigate their loss (in terms of consumer surplus foregone) by investing in opposition to the protection of the commodity. This formulation is analogous to Becker's (1983) "political influence function," in which the results of the political pressures by the competing groups are brought to bear.[6]

The costs of collective action are made up of two components. The first one has to do with the opportunity costs of investment in political influence, V. These costs are assumed to be a rising function of I, i.e., the opportunity costs of resources withdrawn from activities in the economic sphere, as opposed to the political sphere, rise with the level of withdrawn resources. Also, since I is simply an aggregation of per-capita investment by the members of the coalition, it follows that I also rises with N, *ceteris paribus*. The second component has to do with organization (information and enforcement) costs, G. Following the tradition in public choice, we also assume that G is a rising function of N since greater organization and enforcement costs, including decision-time costs, are involved as a coalition becomes more inclusive (Buchanan and Tullock 1962, Olson 1965). These costs can be written as

$$(3) \qquad C_i = V_i + G_i = V_i(I_i, N_i) + G_i(N_i, w_i) \quad i = p, c$$

where w is a vector of other variables (e.g., group heterogeneity, geographical dispersion of the group members, and communication and transportation costs).

Given the level of investment by one group, optimal investment and coalition size by the other group can be determined by maximizing $(B_i - C_i)$ with respect to I_i and N_i. The

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[6] The main difference between Becker's model and the present one is that the public-choice aspects of political influence are made more explicit.

necessary conditions for optimal values of I_i and N_i are:

$$(4) \qquad \frac{\partial B_i}{\partial R} \frac{\partial R}{\partial I_i} - \frac{\partial V_i}{\partial I_i} = 0$$

$$i = p, c$$

$$(5) \qquad (\frac{\partial B_i}{\partial N_i} - \frac{\partial V_i}{\partial N_i}) - \frac{\partial G_i}{\partial N_i} = 0$$

Equations (4) and (5) simply state that, for I_i and N_i to be optimal, the marginal benefit of investment in political influence must be offset by the marginal cost of investment (i.e., the opportunity cost of investment), and that the marginal benefit, net of the change in investment costs, with respect to coalition size (parenthesized term) must be equal to the marginal cost of organization.[7]

The simultaneous solution of equations (4) and (5) also shows that investment in political influence by one group depends on the other group's conjecture about the opposing group's investment. Figure 1 illustrates a possible outcome of a Cournot-Nash process of equilibrium investment. The line RR shows the combination of I_p and I_c that keeps the economic protection level constant at R, and the lines pp and cc are the so-called "reaction curves" of p and c, respectively. Given I_p, an increase in I_c reduces R and makes the members of p worse off. With the marginal net benefit by p increasing as R falls, p increases its investment, making R to be higher than if there would be no action by p, but not sufficiently to restore the former level. This suggests that, along pp, R falls from left to right. It also suggests that pp is steeper than RR. Symmetrical reasoning implies that R rises from left to right along cc. It then follows that pp is steeper than cc, which is a sufficient condition for the stability of the equilibrium R endogenously determined by the intersection of pp and cc. Thus, in a Cournot-Nash process, retaliation may lower but not eliminate the benefits of investment in political influence.

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[7] The sufficient conditions to ensure that equations (4) and (5) give net-benefit-maximizing values of N_i and I_i are that the protection-formation function is concave at the origin, the cost functions are positively sloping with respect to I_i and N_i, and the marginal benefit with respect to coalition size is constant or diminishing.
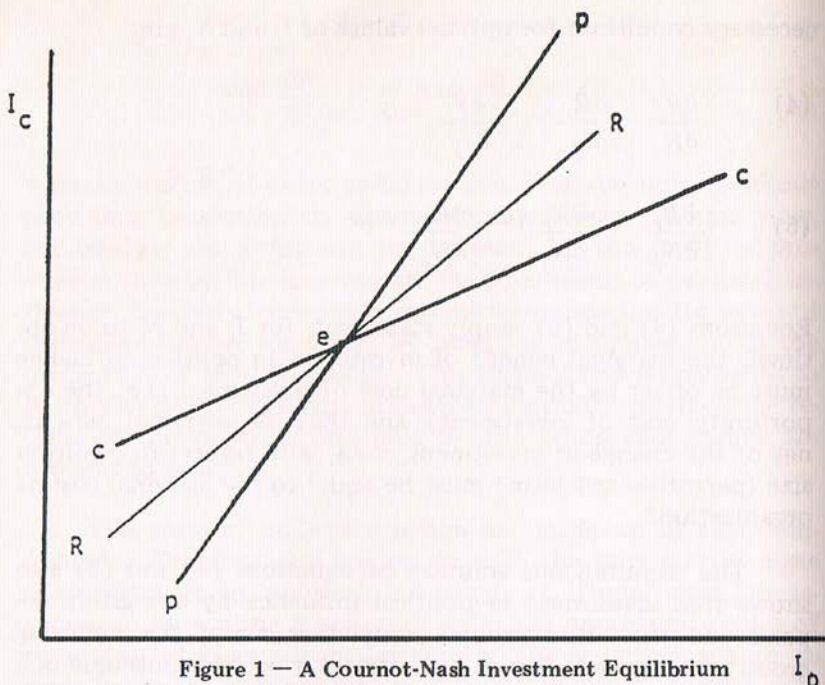
Figure 1 — A Cournot-Nash Investment Equilibrium I_D

Thus, factors that can raise one group's benefits (costs) of investment in political influence will tend to increase (decrease) the amount of its investment. One factor often mentioned in the public choice literature is the institution of what Olson (1965) calls "individualized selective incentives" that induce a rational individual to act in a group-oriented way. Fines to deviant members and rewards to well-behaved ones are two examples of such incentives. There can be also strong moral sanctions against violations of the group norms that likewise contribute to the enforceability of group contracts. These sanctions are stronger where the members of the group have similar background, language, and culture (Tideman and Tullock 1976).

Some implications

The social costs of economic protection consist of three components: the deadweight loss (C_d) due to misallocation of resources (i.e., the traditional Harberger "triangles"), the amount of resources spent in protection-seeking activities $(C_p + C_c)$ and the administrative costs of protection (C_a). In a Cournot-Nash world, not only will the rate of economic protection rise when I_p increases but I_c will increase as well, so that

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both C_d and $C_p + C_c$ will unambiguously increase. If $C_p + C_c$ and C_a are relatively substantial, then the economic case for a deregulation will be stronger than when, as in traditional neo-classical policy analysis, only C_a is taken into account.[8]

Where the absolute investments by both opposing coalitions are high, C_p and C_c are expected to be similarly high but C_d is not. This is because the equilibrium level of economic protection R is determined by the *relative* investments of the contending coalitions, not by their *absolute* investments. That is, political success is determined by the relative ability of each group to control the so-called free-rider problem (and, hence, to invest in political influence).

The framework can be also employed to explain the often noted stylized fact concerning the increase in agricultural protection over the course of a country's economic development.[9] The evolution of the costs and benefits of agricultural protection shapes the balance in political influence between the agricultural producers and the consumers. On the benefit side, the modernization of agriculture increases the share of market surplus in total production and, hence, the sensitiveness of farmers' income to price policy. Consumers' real income, on the other hand, becomes less sensitive to agricultural price as the proportion of food in total consumers' budget falls. On the cost side, the decrease in organization costs due to the decline in communication and transportation costs will probably affect both groups about equally, so that its effect on agricultural protection will probably be small. On balance, this allows the pressure from agricultural producers to eventually dominate the protection-seeking process.

3. Concluding Comments

The conceptual framework developed in this paper appears to be capable of characterizing the nature and causes of economic protection. In particular, by focusing on the costs and

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[8] If rent-seeking is competitive, the rent created by a distortionary policy will tend to be dissipated (Krueger 1974). The amount of resources spent in rent-seeking or DUP activities can thus be assumed to roughly equal the size of the rent. These social wastes, and the "crises" they ultimately lead to, are the stronger case — as opposed to Harberger efficiency loss alone — for economic liberalization (Lal 1987).

[9] See Anderson and Hayami (1986) and Balisacan and Roumasse (1987) and the cited literature therein.

benefits of investment in political influence, the framework is able to provide insights into the level of economic protection, the amount of DUP activities, and the often noted stylized fact concerning the positive income elasticity of agricultural protection.

These results are quite limited. It would be useful to extend the framework by, e.g., allowing for the form of political institutions to affect the weights given to investments in political influence by various groups. Also, the implications of other "conjectural variations" on equilibrium investments and economic protection would have to be explored. It is plausible, for example, that, with perfect information, the amount of DUP activities will be less than that implied by the Cournot-Nash solution.

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