A RATIONALE FOR QUOTA PROTECTION:
A POLITICAL ECONOMY APPROACH

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INTRODUCTION

The equivalence between tariffs and quotas under perfect competition is one of the most fundamental results in international trade theory. This result states that under competitive market conditions, if a tariff is replaced by a quota such that the import levels associated with both are the same, then the real outcome will be identical, i.e., there will be no difference in the price and quantity consumed and domestically supplied.1

Starting from Bhagwati [1965], however, economists recognize that the extent of anticompetitive effects can differ across the two instruments when alternative market structures are assumed. More specifically, Bhagwati [1965] demonstrates that import quotas can be more protective than the tariffs that induce the same level of imports when the domestic producer is a monopolist. The reason is that quotas deprive domestic consumers of the possibility of substitution towards imported goods and thus insulate the domestic producer from competitive pressure. The nonequivalence result, since then, has been extended to many other settings including the case of duopoly [Krishna, 1989; Hwang and Mai, 1988], the presence of uncertainty [Falvey and Lloyd, 1986], and the possibility of implicit collusion [Rotenberg and Saloner, 1989].

Magee [1988] provides a new perspective on the choice of the means of protection between quotas and tariffs. Noting that politics is largely responsible for protectionism, Magee proposes a so-called “principle of optimal obfuscation.” According to this principle, ceteris paribus, politicians will choose an instrument of protection that is less transparent to the losers from protection in order to minimize the political cost of displeasing the losers. This explains why a quota can be a preferred means of protection despite the availability of more efficient means of protection such as a tariff; quotas are less transparent than tariffs in that tariffs provide an explicit measure of the increase in the domestic price over the world price due to protection.

Cassing and Hillman [1983], in contrast, construct a political model of endogenous protection in which the policymakers' objective is assumed to be the maximization of political support. In contrast to Magee [1988], they show that a tariff is chosen over a quota as the means of protection. This is due to the fact that tariffs generate more profits and hence, more political support from the protected industry than quotas when both instruments lead to the same domestic price.2

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In this paper, I synthesize these two political economy approaches to provide a rationale for quota protection in declining industries.

**POLITICAL SUPPORT MAXIMIZATION**

Consider a Ricardo-Viner type specific factors model of international trade in which owners of the factor specific to the import-competing sector lobby for protection while owners of other factors oppose protection. Adopting the Stigler-Peltzman assumption employed in the context of regulation, let me specify a political support function which depends on the welfare levels of the two competing groups, which in turn, depend on the level of the regulated domestic industry price [Stigler, 1971; Peltzman, 1976]. More precisely, the government maximizes the following Stigler-Peltzman political support function (SSPSF): \(^4\)

\[
\Sigma(P) = M(\Pi(P), P),
\]

where \(P\) is the domestic price in the import-competing industry and \(\Pi(P)\) is the corresponding industry profits. Higher industry profits elicit greater political support from the owners of the factor specific to the industry. Consumers, however, are antagonized by higher prices; \(M_\pi > 0\) and \(M_\pi < 0\). Further assume that \(\Pi_\pi > 0\) and \(\Pi_\pi < 0\) in the relevant range. \(^5\)

Let \(P^*\) and \(T\) denote the world price and the specific tariff, respectively. Then, I have

\[
P = P^* + T.
\]

Let me define

\[
P = \arg\max M(\Pi(P), P).
\]

Then, the government sets the domestic price to be equal to \(P^*\) by using trade policy instruments, i.e.,

\[
P = P^* + T.
\]

This implies that the tariff is adjusted to exactly offset any changes in the world price to ensure that the static political support-maximizing price \(P^*\) always prevails in the domestic market, i.e.,

\[
dT = -dP^*.
\]

The implication of this setup is that the industry's domestic price is invariant to import price changes because the political support-seeking policymaker will always ensure that the domestic price is maintained at the level where the political support function is maximized. This can be done with either a tariff or a quota. \(^6\)

### NOTES

1. With the proviso that the revenue would accrue to the government in the case of the tariff whereas rents from quota would accrue to those receiving the import quotas in the absence of quota auctions.
2. See Hillman (1980) for an excellent survey on the political economy of protection.
3. When the policymaker also receives revenues generated by tariffs or quotas, the choice of instrument for protection is no more clear-cut and will depend on the relative importance between political support and revenue income for the policymaker.
5. To facilitate comparison, I follow closely the notation used by Hillman (1980).
6. Based on equation (5), Hillman (1982) concludes that the SSPS function permits permanent protection to the declining industry. To escape the conclusion of a static domestic price and to derive more interesting price dynamics in the face of international import competition, Hillman amends the SSPS by assuming that political support relies on the divergence of welfare levels from their natural...
SHOCK THERAPY VS. GRADUALISM:
A NEOCLASSICAL PERSPECTIVE

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One of the central policy questions in the new field of transition economics concerns the optimal speed of policy reform. How quickly should tariffs and other distorting instruments be removed? This debate is often couched in terms of "shock therapy" and "gradualism," which, while colorful, may be somewhat misleading, since they suggest two polar opposites, whereas, in reality, a spectrum of reform speeds are possible, from eliminating the relevant distorting instruments instantaneously at the beginning of the reform (shock therapy) to one end of the spectrum to no reform (maintaining the status quo) at the other.1

A key result in this literature is what has been dubbed the "Mussa proposition," which asserts that, absent other distortions, shock therapy is the optimal reform plan, even in the presence of costs of adjustment. In other words, even though resources may move slowly between sectors, policy should adjust instantaneously. This proposition still occasionally strikes some readers and seminar audience members as counterintuitive: in fact, it is nothing other than a simple application of the fundamental theorems of welfare economics. Given that the economy inherits a set of distorting policy instruments at the beginning of the reform process, the best that policymakers can do is set these distorting instruments to zero immediately, which serves to equalize the structure of domestic relative prices to world relative prices at the very beginning of the process.2 It follows that the equilibrium trajectory of the economy after that date will represent a welfare optimum, since the economy is now undistorted, so that private marginal costs and benefits of adjustment equal their social counterparts; the economy's speed of adjustment in response to the shock to the structure of relative prices is therefore optimal. It would certainly be better never to have had the distortions in the first instance, but, given that the reform-minded policymaker has inherited them, the best that she can do is to eliminate them in one fell swoop at the very beginning.

Of course, the phrase "absent other distortions" is key in the statement of the proposition. If other unremovable distortions are present, which the policymaker cannot touch, then we are in a second-best world, and the Lipsey-Lancaster theorem of the second best applies. Stated loosely, the theorem tells us that whenever unremovable distortions are present, it is no longer the case that eliminating all those distortions which the policymaker can control is now necessarily optimal. The beacon of the first-best ceases to be a lighthouse, and the unsuspecting policymaker navigating in second-best waters may well be dashed against the rocks as a consequence. It follows that shock therapy is now not necessarily optimal; it all depends on the specifics of the situation.

REFERENCES


