# Protectionist policies as the regulation of international industry\*

#### ARYE L. HILLMAN

Department of Economics and Business Administration, Bar-Ilan University, Ramat Gan, IL-52900, Israel

Submitted 16 May 1989; accepted 13 October 1989

### 1. Introduction

Protectionist policies can be viewed as one manifestation of the regulation of industry for political advantage within the framework exposited by George Stigler (1971) and Sam Peltzman (1976). With amendment to account for particular characteristics of the choice between free trade and protection (Hillman, 1982), the Stigler-Peltzman perspective on the regulation of industry provides an account of the endogenous determination of international trade policy as chosen to maximize political support. Within this framework, a *national* perspective has been prominent. National interest groups associated with domestic import-competing industries have been portrayed as seeking protectionist responses from their own country's policymakers, who in turn optimize by formulating policy decisions in response to the political influence of the domestic gainers and losers from protection.

Industries however transcend national boundaries. Yet the national perspective on the determination of trade policy limits the interest of producers in protection to the scope for regulation by their home governments. This paper presents a view of protectionist policies that recognises the common interest in regulation of producers in different national jurisdictions and which demonstrates how a number of protectionist policies facilitate this objective. A unifying perspective is presented on recent literature which has been concerned with protectionist policies as regulating international industry. First, however, I present for comparison a brief review of the national perspective on protectionist policies.

## 2. Political discretion and trade policy

The theory of international trade policy, in particular in the course of its development in the 1960s and 1970s, has emphasised the *effects* of different

<sup>\*</sup> A previous version of this paper was presented at a conference on Economics and Power organized by the FWS Institute of Zug and held at Interlaken, Switzerland in July 1988.

protectionist policies on domestic production and consumption decisions. The notion of distortions has been prominent in the analysis of policy choice, with attention being directed towards identification of second-best (and beyond) policies when first-best optima are unattainable.

More recently, the range of questions addressed by the theory has expanded to include a concern for why departures from free trade take place, and why protectionist policies take different forms in different circumstances. (See my survey, Hillman, 1989). In the models developed in this literature, protectionist policies have been 'endogenously' explained, rather than exogenously presupposed to be in place.

Expositions of the endogenous determination of international trade policy have focused on agents in the one political jurisdiction. Under representative democracy the agents who have successfully contested political office, and thereby have policy discretion, mediate between domestic gainers and losers from protection who seek opposing policy outcomes. Or, in the context of political competition, rival candidates for political office formulate policies with the objective of maximizing probabilities of election by securing support from their domestic constituencies. The gainers from protection have been identified with domestic import competing industries, the losers as domestic consumers of the protected industry's output or, alternatively, the undiversified owners of factors specific to other than the import-competing industry seeking protection.

Since there can be administrative discretion in interpreting laws and regulations, bureaucrats as well as politicians have been recognized to have a role in the endogenous determination of trade policy. Anti-dumping regulations can leave open substantial discretion in interpretation of technical criteria. Or establishing whether escape-clause provisions apply requires a determination whether imports or domestic market conditions have been the cause of 'injury' to a domestic import-competing industry. Interpretations can differ. For example, Gene Grossman (1986) has applied econometric analysis to an investigation of whether administratively determined protection was justified for the U.S. steel industry and concludes that under the criteria set out in the trade laws protection granted the industry was not warranted.

# 3. International conflict and trade policy

The exercise of political discretion in enacting trade laws, and of administrative discretion in interpreting policy decisions, is often presupposed to bring different countries' policymakers into conflict regarding trade policies to be adopted. The conflict arises when, in mercantilist fashion, trade policy is directed at protecting domestic producers in their home markets, while at the

same time a country's policymakers seek to maintain open markets abroad. The policy conflict is reflected in the objectives sought in GATT negotiations. Under the GATT, the process of trade liberalization entails an exchange of 'concessions' whereby each country offers market access to foreign producers. The international exchange of market access 'harms' domestic producers, but compensation is provided by access to foreign markets. In this negotiating framework, the extent of trade liberalization that can be achieved hinges on how much 'harm' a country is prepared to allow its domestic import-competing producers to incur in exchange for foreign market access. Consumer interests have not tended to loom very large in GATT negotiations. The trade-liberalizing 'concessions' that are resisted by trade negotiators are the source of gain to home consumers.

Rather than policy conflict, there may however be a basis for a protectionist concensus among different countries' policymakers, because of the prospect of gain for each country's producers in the same industry. At least three types of international trade policies can be identified that are consistent with such international policy consensus: 'voluntary' export restraints, as regulate international trade in products such as automobiles, consumer electronics, and textiles; trigger-price mechanisms, such as have been used for the protection of the U.S. steel industry; and an 'involuntary' export tax, as imposed by Canada on exports of lumber to the U.S.

## 4. Voluntary export restraints: The traditional view

Traditionally protection has been provided by means of tariffs and import quotas. Tariffs disadvantage foreign producers via discriminatory taxation, and if not prohibitive are a source of government revenue. Import quotas likewise protect domestic producers, by limiting competitive imports, but the rents from restriction of trade accrue to quota holders, who are then beneficiaries of protection along with domestic import-competing interests.<sup>2</sup>

A voluntary export restraint is a quota right assigned to a foreign producer. Hence, if a tariff were feasible but a VER is observed to restrict trade, government revenue has been foregone in favor of a rent transfer to foreign producers. Similarly, if quota rights could have been assigned domestically, a VER reflects a decision to transfer income to foreigners.

The transfer of income to foreigners associated with a VER poses two related questions. Are VERs voluntary on the part of the foreign import suppliers? And why should trade policy be formulated in a manner which transfers rents to foreign interests?

VERs are 'voluntary' in the sense that, because of the income transfer, foreigners prefer such trade restriction to protection that takes the form of

tariffs and domestically assigned quotas. However, otherwise viewed, a 'voluntary' export restraint may be involuntary, for foreigners may well prefer continued free trade to protection in any form. Such would for example be the case if foreign producers had already internalized the gains from collusion before the restriction of supply mandated by a VER. Therefore, the rent transfer to foreigners which takes place via a VER has been interpreted as compensation by the protectionist government for failure to comply with prenegotiated trade concessions. Via their GATT obligations, governments will have committed themselves to reciprocate foreign trade 'concessions'. The domestic market will thereby have been opened to foreign producers. The VER effects a compensatory transfer intended to preempt retaliatory measures by the foreign government, which may otherwise be inclined to respond with protectionist measures of its own as a response to denial of its prenegotiated market access. This view of VERs, which emphasizes retaliation and compensation, is consistent with the conflict view of trade-policy negotiations. Recent analysis by Kala Krishna (1989), Richard Harris (1985), Jürgen Eichenberger and Ian Harper (1987), and myself and Heinrich Ursprung (1988) has however demonstrated that the presumption of policy conflict may be inappropriate.

## 5. Political equilibrium and VER, with quantity competition among firms

Strategic oligopolistic behavior can be described using quantities or prices as decision variables. In Hillman and Ursprung (1988) the Cournot-Nash choice of quantities as decision variables is applied to investigate political competition between two candidates for political office who make use of trade-policy pronouncements to maximize their probabilities of electoral success. Political support is expressed in the form of campaign contributions which are made to the candidates by domestic firms and foreign exporters (or the latters' domestic agents). The outcome of political competition between the two candidates depends upon stances taken on issues other than trade policy for a particular industry. However, domestic and foreign producers are focally concerned with trade policy as it affects their particular product, and direct their political activities at seeking to influence the candidates' policy positions on this one issue. Campaign contributions are chosen to maximize firms' expected profits, which depend upon the trade policies announced by the candidates and the candidates' respective probabilities of electoral success.

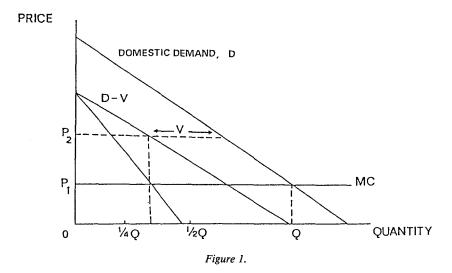
The outcome of political competition depends on how the candidates propose to restrict international trade. If protection entails the use of tariffs, the equilibrium has the characteristic that one candidate announces the policy which is most beneficial to domestic producers (prohibition of imports) while the other candidate announces the policy which is most beneficial to foreign

interests (free trade). If, however, VERs are used to make policy pronouncements, the candidates announce the same policy. Political competition with VERs therefore achieves a policy consensus. The VER equilibrium can also yield foreign and domestic producers higher profits than attainable under free trade.

The VER policy consensus can thus benefit producers who reside in differential national jurisdictions. The foreign government regulates a restrictive export cartel and allocates market shares of cartel members in the export market. The initiative for the restriction of exports will however have come from the government of the importing country. Although the VER cartelizes the foreign export industry by setting an industry sales level for the domestic market and allocating market shares amongst exporting firms, the economic activities of the domestic import-competing firms can remain uncoordinated. No grounds therefore arise for anti-trust action against domestic producers. The outcome is nonetheless collusive. The collusive activities (or restrictive practices) take place abroad, not in the country restricting international trade via the VER. But there is now 'fair trade' and 'a level playing field.'

Underlying the VER policy consensus is the discretionary allocation of rents from the restriction of trade. Politicians have no direct claim to tariff revenue, which accrues, along with other tax proceeds, to the Treasury. Producers also have no direct interest in tariff revenue, since they likewise have no means of laying claim to the revenue. However, the rents associated with VERs are politically assignable. Political competition can transform at least part of the rents into campaign contributions to a political candidate, who via his policy pronouncements influences both the size of the rent from the restriction of international trade and its allocation.

Domestic producers directly benefit from a VER, via reduced import competition. Whether foreign exporters also gain depends on the competitiveness of the domestic and foreign industries (as expressed in the number of firms in each industry) and on the extent to which foreign and domestic goods are substitutes in domestic consumption. Favorable to an outcome of mutual producer benefit from VER regulation is a more competitive foreign industry, a less competitive domestic industry, and lower substitutability in domestic consumption between domestic and foreign goods. The more competitive foreign industry has more to gain from regulation. The foreign potential for gain is also greater, the less competitive is the domestic import-competing industry, since thereby the greater the contraction of domestic output (or smaller the expansion) subsequent to reduced import competition, and hence the greater the price that can be received for the restricted quantity of exports. Substitutability in consumption also bears upon the potential for mutual gain, since the less substitutable are domestic and foreign goods in domestic consumption, the greater is the market power than can be exercised by foreign exporters.



# 6. Price competition and VERs

The outcome of potential mutual producer gain at home and abroad from regulation of international industry via a VER can similarly be demonstrated to arise when oligopolistic behavior takes the form of Bertrand price competition. In that case, the Nash equilibrium for firms with identical costs selling homogeneous goods replicates the competitive solution. The simplest case is depicted in Figure 1. A homogeneous good is sold in the domestic market by two firms, one home and one foreign, with common constant marginal costs. Under free trade at price P<sub>1</sub> suppose that the quantity V is imported. Now let a VER be introduced at precisely the free-trade quantity of imports V. Since there is but one foreign supplier, the issue of collusion among the foreign firms facilitated by a VER does not arise here. But the VER does facilitate a departure from the noncooperative Bertrand equilibrium that duplicates the competitive outcome. The domestic producer perceives the foreign competitor to be quantity constrained by the VER. Given the limitation that the quantity of competitive imports cannot exceed V, the domestic producer can establish his residual domestic demand function, D-V, and proceed to determine the profit-maximizing domestic price P2. This price yields positive profits for the domestic producer, and also for the importer. The quantity of imports has however not changed from free trade.<sup>3</sup>

Quite generally, whether or not domestically produced goods and imports are perfect substitutes in consumption, under Bertrand price competition domestic producers and foreign exporters can gain from a quantity constraint in the neighborhood of free trade. This is the point made by Kala Krishna (1989) and Richard Harris (1985).

### 7. National policymakers as international mediators

National policymakers are here international mediators. It is in violation of anti-trust law for domestic-industry interests to communicate with their counterparts abroad who supply competitive imports to negotiate a voluntary restraint on exports to the mutual advantage of both countries' producers. However, under a negotiated VER, this outcome can be achieved via the intermediation of policymakers in the two countries.

The VER appears to be a politically astute means of intervention. The imposition of VERs has not been associated with the opposition of the sort that might arise, were newpaper reports to read, 'Domestic industry negotiates with foreign competitors to collusively reduce competitive imports: Prices to domestic consumers of imports and domestic substitutes rise'. But one does find newspaper reports along the lines of: 'Government officials negotiate with foreign officials to seek solution for problems of import competition confronting domestic producers: Foreign officials agree to convince exporters to act with restraint'.

## 8. Trigger-price mechanisms

VERs offer one means whereby firms resident in different national political jurisdictions can be regulated for mutual benefit. Another means is provided by a price instrument, the trigger-price mechanism. The trigger-price mechanism is a form of conditional non-intervention in international trade. A minimum price is determined for domestic sale of imports. A protectionist response is automatically evoked, should imports be priced below the trigger price. Trigger-price mechanisms have been introduced as the consequence of negotiations between governments following dumping complaints. Domestic sale of imports below the negotiated trigger price is agreed to be indicative of dumping, and therefore to warrant antidumping duties.<sup>4</sup>

Governments appear to have had little difficulty in justifying imposition, or threat, of anti-dumping duties, which are presented as a response to 'unfair' competition by foreigners. (See Robert Baldwin, 1985, for a description of the trigger-price mechanism applied to imports of steel into the U.S.) The trigger-price mechanism is a guarantee of preemption of 'unfair' foreign competition.

However, consider Bertrand price competition between a foreign and domestic firm in the domestic market. In the absence of a trigger-price mechanism the firms can be assumed to achieve the noncooperative Nash equilibrium. The cooperative profit-maximizing equilibrium is not attainable, because of the absence of a credible commitment not to defect from the collectively optimal price – the familiar prisoners' dilemma. The trigger-price

mechanism introduces a binding commitment by the foreigner not to decrease the price of imports below a prespecified level. The rules of the game have therefore changed. Being aware of the lower bound to the foreign competitor's price, the domestic firm chooses the corresponding profit-maximizing price for its own output. The foreign firm can now be viewed as a Stackelberg leader, the domestic firm as the follower. The profits of both firms are increased, relative to the noncooperative Nash equilibrium. The collusive profit-maximizing equilibrium is unattainable via the regulatory device of a trigger price (since Stackelberg behavior cannot achieve this equilibrium). But both firms are better off than when left to compete without a binding constraint on the limits to price competition.<sup>5</sup>

An agreement negotiated between the domestic producer and foreign competitor that imports not be priced below the trigger price would constitute collusive price fixing, and hence would be in violation of anti-trust law. However, the same agreement when secured by international mediation by countries' policymakers under the guise of trigger-price mechanism confronts no such legal obstacles. Rather than being in violation of the law, the pricing agreement is sustained by the legal force of anti-dumping regulations.

### 9. Involuntary export taxes

A final example of the use of trade policy to regulate international industry is provided by an 'involuntary export tax' such as has been imposed by Canada on lumber sales to the U.S. I draw here upon the study by Joseph Kalt (1988).

In the lumber case, the previously observed characteristics of regulation of international industry reappear. The beneficiaries of the restriction of international trade again transcend national boundaries, and trade policy was the subject of 'negotiated compromise' between the policymakers of different national jurisdictions.

In January 1987 the Canadian government placed a tax of 15 percent on exports to the U.S. of softwood lumber used for construction to preempt a U.S. countervailing import duty of the same magnitude. The Canadian export tax was 'involuntary', in the sense that, if the tax had not been imposed, a U.S. countervailing duty would have been maintained.

As did the U.S. import duty which it preempted, the involuntary Canadian export tax increased the domestic U.S. price of Canadian lumber, thereby benefitting the U.S. lumber industry. Under the U.S. import duty, protection would have entailed the home government's use of trade policy to protect its own producers, to the disadvantage of home consumers. With the imposition of the foreign export tax, the benefit to the domestic import-competing in-

dustry and the cost to domestic consumers became the consequence of trade intervention by a foreign government. Thus, as with voluntary export restraints, the restriction of international trade took place under the auspices of the government of the exporting country.

The initiative for the restriction of trade came, however, from the domestic gainers from protection, U.S. lumber industry interests. The gain to U.S. lumber interests, and the political gain to the U.S. administration from the provision of protection, would under the U.S. import duty be at the expense of losses imposed on the counterpart Canadian industry. A political cost would also be incurred by the Canadian authorities, who would be seen to be inadequate in defending their domestic producers' interests. If the motive of the U.S. administration in restricting imports were political benefit, the incidental revenue gain could be dispensed with. The revenue could be transferred to Canada. The Canadian government could then (at least potentially) compensate its domestic losers.

However, was this merely compensation? The Canadians after all achieved (involuntarily) what they might not have dared seek unilaterally, international trade intervention taking advantage (although by Kalt's estimates, not optimally so) of market power to increase the price of Canadian lumber in the U.S. market.

### 10. Concluding remarks

The political feasibility of protectionist policies that regulate international industry derives from the absence of overt collusion among domestic importcompeting producers. The regulation of international industry cannot be explicit since governments would thereby be perceived to be approving (or instigating) international collusion. Hence, voluntary export restraints have been popularly presented with a focus on the difficulties confronted by domestic import-competing producers and a de-emphasis on the mutual gains to domestic and foreign producers from monitoring by a foreign government of a restrictive export cartel arrangement. Similarly, trigger-price mechanisms have popularly been explained in terms of the need for anti-dumping measures to preserve 'fair' competition. Likewise, the involuntary export tax derived in the first instance from an administratively validated (but, as demonstrated by Kalt's econometric analysis, contentious) complaint of 'unfair' foreign competition. Voluntary export restraints, trigger-price mechanisms, and involuntary export taxes are however protectionist devices, the beneficiaries of which can transcend national jurisdictions, and which have in common the characteristic that the gains to domestic industry interests derive from the regulation of foreign competitors.

#### Notes

- 1. This evident but often neglected point is used by Ethier (1982) to develop a theory of international trade which acknowledges the existence of scale economies for international industry.
- The quota rents would accrue to the government if the right to import were competitively auctioned. Quota rights have however in general been assigned rather than auctioned.
- 3. The distribution of profits between the domestic producer and foreign supplier in Figure 1 is arbitrary and expository. However, the effect of the VER set at the free-trade level of imports is to reduce the market share of the domestic producer.
- 4. For further discussion of anti-dumping duties as a form of conditional protection, see Ethier and Fischer (1987).
- 5. For a formal demonstration of the mutual producer gain achievable by a price floor as entailed in a trigger-price mechanism, see Eichenberger and Harper (1987).

#### References

- Baldwin, R.E. (1985). The political economy of U.S. import policy. Cambridge, MA.: MIT Press. Eichenberger, J. and Harper, I. (1987). Price and quantity controls as facilitating devices. Economics Letters 23: 223-228.
- Ethier, W. (1982). National and international returns to scale in the modern theory of international trade. *American Economic Review* 72: 389-405.
- Ethier, W. and Fischer, R.D. (1987). The new protectionism. *Journal of International Economic Integration* 2: 1-11.
- Grossman, G.M. (1986). Imports as a cause of injury: The case of the U.S. steel industry. *Journal of International Economics* 20: 201-223.
- Harris, R. (1985). Why voluntary export restraints are voluntary. *Canadian Journal of Economics* 18: 799–809.
- Hillman, A.L. (1982). Declining industries and political-support protectionist motives. *American Economic Review* 72: 1180–1187.
- Hillman, A.L. (1989). The political economy of protection. New York: Harwood Academic Publishers.
- Hillman, A.L. and Ursprung, H. (1988). Domestic politics, foreign interests, and international trade policy. *American Economic Review* 78: 729-745.
- Kalt, J. (1988). The political economy of protectionism: Tariffs and retaliation in the timber industry. In R. Baldwin (Ed.), *Trade policy issues and empirical analysis*, 339–364. Chicago: University of Chicago Press for NBER.
- Krishna, K. (1989). Trade restrictions as facilitating practices. *Journal of International Economics* 26: 251-270.
- Peltzman, S. (1976). Toward a more general theory of regulation. Journal of Law and Economics
  19: 211-240. Reprinted in G.J. Stigler (Ed.) (1988), Chicago studies in political economy,
  234-266. Chicago: University of Chicago Press.
- Stigler, G.J. (1971). The theory of economic regulation. Bell Journal of Economics and Management Science (The Rand Journal of Economics) 1: 1-21. Reprinted in G.J. Stigler (ed.) (1988). Chicago studies in political economy, 209-233. Chicago: University of Chicago Press.