

Tariff Protection and Imperfect Competition

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1. INTRODUCTION

Experience with tariff negotiations yields the observation that most countries favour trade liberalization in principle, but are reluctant to undertake unilateral reduction of trade barriers. In return for reducing tariffs or quotas countries usually require compensation in the form of being allowed freer access to foreign markets. Thus, most recent trade liberalization has been multilateral in character rather than unilateral.

Many explanations of such behaviour could be advanced. Perhaps domestic political considerations make multilateral trade liberalization more feasible than unilateral liberalization, or perhaps most countries are large enough to pursue 'monopoly tariff' (or 'optimal tariff') policies. In this paper a rather simple contributing explanation, based on imperfect competition, is put forward. If imperfect competition is an important characteristic of some international markets, then firms in these markets may earn pure profits. Protection can shift some of this profit from foreign to domestic firms, and in addition, tariffs can transfer foreign rents to the domestic treasury in the form of tariff revenue. There is some cost in that markets are further distorted, but it is clear that, from a purely domestic point of view, protection is likely to be an attractive policy. A non-cooperative international equilibrium will involve such tariffs.

Simply shifting profit from one firm to another or from a firm to a government treasury is not beneficial to the world at large, so, from an international perspective, only the costs of protection remain. One country may benefit from protection, but the resulting losses to other countries usually more than offset this gain. Thus imperfect competition gives rise to beggar-thy-neighbour incentives for protective policies. The natural solution to this dilemma is through multilateral negotiation and trade liberalization, but unilateral tariff or quota reduction would not be expected.

This profit-shifting motive for protection suggests that a domestic firm would always favour protection of its industry, regardless of whether the industry happened to be capital- or labour-intensive. If the industry involved were large, there might be factor price effects, but they would be small compared to the transfers of rent. Furthermore, if labour were also imperfectly

competitive and could extract a portion of the extra rents accruing to the firm, labour in the industry would also favour protection.

The idea that imperfect competition might call for policy intervention has of course been recognized in the 'distortions' literature. (See, in particular, Bhagwati, Ramaswami, and Srinivasan, 1969; and Bhagwati, 1971.) Corden (1974) points out some second-best policy incentives that might arise under imperfect competition. Also the idea of using domestic policy to enhance the monopoly power of imperfectly competitive domestic firms has been considered. (See Basevi, 1979; Frenkel, 1971; and Auquier and Caves, 1979.) The setting in this paper, however, is quite different, as the central issue concerns shifting rent.

The possible use of protection to shift rents from imperfectly competitive foreign firms to domestic firms appears to have been largely ignored, which is surprising in view of the simplicity of the argument and its correspondence with actual perceptions in the business community. Katrak (1977) and Svedberg (1979) point out, using linear examples, that a tariff can be used to extract rent from a foreign monopoly, and De Meza (1979) suggests price controls. These papers do not, however, consider the role of domestic firms. Brander and Spencer (1981) consider the effects of a tariff in the case in which potential domestic entrants may be deterred from entering by a foreign monopolist.

Once it is recognized that both foreign and domestic firms are important, the question arises as to how firms interact with one another. There are many competing models of imperfect competition and the details of the analysis change according to which model is chosen. In this paper we first consider the case of simple foreign monopoly and then examine the simplest oligopoly model: Cournot duopoly with one foreign firm and one domestic firm. Even this simple Cournot model raises some interesting possibilities. From a purely positive perspective, intra-industry trade will normally arise, even if the firms produce identical products (as in Brander, 1981). On the normative side, a tariff will usually raise domestic welfare, although it is just possible that a subsidy could be the optimum policy.

We are also interested in the interaction between countries. What happens if other countries unilaterally set tariffs in response to the initial 'profit-shifting' tariff. We characterize the non-cooperative tariff equilibrium and contrast it with the co-operative equilibrium that would arise if countries could bargain and make binding agreements so as to maximize world welfare.

2. FOREIGN MONOPOLY AND THE TARIFF

The point that a tariff can be used to extract rent from foreign firms so as to increase domestic welfare can be made most simply in the case of foreign monopoly. The development in this section follows Brander and Spencer (1984). Taking the view that any one industry is small compared to the entire economy,

we assume that domestic demand arises from a utility function that can be approximated by the form

$$U = u(X) + m, \quad (12.1)$$

where X is consumption of the good under consideration. In this section we use a partial equilibrium analysis so m is interpreted as expenditure on other goods. In later sections we embed the model in a simple general equilibrium framework where m is interpreted as consumption of a competitively produced numeraire good. Use of this utility function for both positive and normative analysis abstracts from a number of theoretical difficulties, including income effects, aggregation problems, and second-best problems induced by other distortions in the economy and consequently allows us to focus on the pure rent-shifting incentives.

Since this utility function implies the marginal utility of income equals 1, inverse demand is just the derivative of u :

$$p = u'(X), \quad (12.2)$$

where p represents price. Also $u(X) - pX$ is equal to consumer surplus from X and is a consistent measure of the benefit to domestic consumers from consuming good X . Therefore, with tariff t , the net domestic gain, G , from imports of good X is

$$G(t) = u(X) - pX + tX. \quad (12.3)$$

Imports X depend on t , and the relationship $X = X(t)$ is determined by the behaviour of the foreign monopolist. Domestic welfare is maximized when $G_t (\equiv dG/dt)$ is equal to zero.

$$G_t = u'(X)X_t - Xp_t - pX_t + tX_t + X = 0, \quad (12.4)$$

where $p_t = p'X_t$. Using (12.2) and letting $\mu = -tX_t/X$, the elasticity of imports with respect to the tariff, (12.4) implies

$$G_t = -X(p_t + \mu - 1) = 0. \quad (12.5)$$

The effect of the tariff on price and the tariff elasticity of imports must sum to one. If the government placed no weight on consumer welfare and wished only to maximize tariff revenue, the condition would be $\mu = 1$. Equation (12.5) arises when tariff revenue and consumer surplus are given equal weight in the domestic objective function.

A useful rearrangement of (12.4) is

$$\hat{t} = X(p_t - 1)/X_t, \quad (12.6)$$

where \hat{t} is the optimum tariff. Equation (12.6) indicates that \hat{t} is positive if $p_t < 1$; that is, if an increase in the tariff causes price to rise by less than the tariff. On the other hand if \hat{t} is negative a subsidy is appropriate. This arises if $p_t > 1$ so that an increase in the subsidy causes price to fall by more than the subsidy.

The comparative static effects p_t and X_t are therefore important in characterizing the optimal tariff. These are obtained by examination of the foreign firm's profit-maximization problem. Letting V be variable profit from the domestic market for the foreign firm and using k to denote (constant) marginal cost (including transport costs) we have

$$V(X) = Xp(X) - kX - tX. \quad (12.7)$$

The first and second-order conditions are

$$V_X = Xp' + p - (k + t) = 0 \quad (12.8)$$

$$V_{XX} = Xp'' + 2p' < 0. \quad (12.9)$$

The comparative-static effect X_t can be determined by differentiating $V_X = 0$ with respect to X and t which yields

$$X_t = 1/V_{XX} < 0. \quad (12.10)$$

X_t can be seen to depend on the relative convexity of demand. The appropriate measure of relative convexity is denoted by a variable R where

$$R = Xp''/p'. \quad (12.11)$$

From (12.11) and (12.9), $V_{XX} = p'(2 + R)$ so from (12.10) and $p_t = p'X_t$ we have,

$$p_t = 1/(R + 2). \quad (12.12)$$

Therefore p_t exceeds, equals, or falls short of one as R is less than, equals, or exceeds -1 . We can also write (12.6) as

$$\hat{t} = -p'X(R + 1), \quad (12.13)$$

which leads to the following proposition.

Proposition 1

The optimum tariff is negative, zero, or positive as R is less than, equals, or exceeds minus one.

If R is less than minus one, the marginal revenue curve is less steeply sloped than demand. Therefore a decline in marginal cost due to a subsidy will cause price to fall by more than the subsidy and increase net domestic welfare. An example of a case in which a subsidy is optimal occurs if demand has constant elasticity. Denoting the constant elasticity by $\epsilon = -p/p'X$ yields $R = -1 - 1/\epsilon$ so $R < -1$ and $\hat{t} < 0$. Katrak (1977) and Svedberg (1979) consider the linear case. With linear demand $R = 0$ and \hat{t} is positive. If one takes the view that demand is not likely to be highly convex, then it follows that positive tariffs will generally improve domestic welfare when the sole source of supply is an imperfectly competitive foreign industry.

3. DOMESTIC AND FOREIGN FIRMS

The main focus of this paper concerns the case in which there are both domestic and foreign firms. At this stage we also wish to make a few comments concerning embedding the industry of interest in a simple general equilibrium setting. Utility is assumed to arise from $U = u(X) + m^c$, where m^c is consumption of a competitively produced numeraire good, m , that can be produced in either the domestic country or the foreign country. Since the price of m is normalized to equal 1, domestic profit and government revenue are just added to $u(X)$ to obtain the domestic benefit function. (One extra dollar of profit or tariff revenue is used to buy one unit of m which produces one extra unit of utility.)

$$G(t) = u(X) - pX + tx + \pi, \quad (12.14)$$

where π is the profit of the domestic firm (which is assumed to be owned by domestic residents). Output in the domestic economy is produced using a single factor, which we refer to as labour, and good m has production function

$$L_m = m^p, \quad (12.15)$$

where L is the amount of labour used in the production of m and m^p is the amount of m produced domestically (which may differ from m^c , the amount of m consumed domestically).

There is a single domestic firm producing good X. Its production is denoted y , so that the total amount of X consumed domestically is $x + y$ where x is domestic sales by the foreign firm. The domestic production function for y is, in implicit form,

$$L_y = F + cy, \quad (12.16)$$

where F and c are measured in units of labour. Labour is supplied inelastically to the domestic economy in amount L so that $L_y + L_m = L$. The value of marginal product of labour in the competitive sector is one so the wage rate is one. The cost of producing y is then just $F + cy$ so the domestic firm has profit function

$$\pi = yp(X) - cy - F, \quad (12.17)$$

where F and c now represent dollar values. The variable c becomes marginal cost and F becomes fixed cost.

The foreign economy is similar, so the foreign firm has variable profit V from the domestic market where

$$V(x, y; t) = xp(X) - kx - tx, \quad (12.18)$$

where k is its (constant) marginal cost and t is the tariff.

This simple general equilibrium setting is, of course, equivalent to a partial equilibrium model in which profit functions (12.17) and (12.18) are specified directly. The point being made is that a partial equilibrium model can always be given the general equilibrium interpretation presented here. The essential

question is not whether a model is partial or general equilibrium, but whether the industry in question is large enough to give rise to income effects, cross-substitution effects in demand and factor price effects. We have assumed that it is not so as to focus on the issue of central interest here: the rent-shifting aspect of a tariff under imperfect competition.

Maximizing G with respect to t yields first-order condition

$$G_t = -Xp_t + tx_t + x + (p - c)y_t + yp_t = 0, \quad (12.19)$$

where subscripts denote derivatives. Rearrangement and substituting $\mu = -tx_t/x$ yields

$$G_t = -x(p_t - 1 + \mu) + (p - c)y_t = 0. \quad (12.20)$$

The first term captures the change in consumer surplus and the change in tariff revenue arising from a change in imports from the foreign firm. Since $(p - c)y_t = \pi_t - yp_t$, the second term reflects the change in domestic profit and consumer surplus arising from the change in the price of the domestic output. More directly the second term is the marginal surplus, $p - c$, from domestic production times the change in domestic output. Solving (from (12.20)) for the optimal tariff, \hat{t} , yields

$$\hat{t} = -[(1 - p_t)x + (p - c)y_t]/x_t. \quad (12.21)$$

Comparison of expressions (12.6) and (12.21) is illustrative. With both domestic and foreign firms the optimal tariff is related to the effect of a tariff on domestic firms in addition to its effect on the foreign firm. The nature of the interaction between the two firms becomes important. Most reasonable representations of this interaction have the property that $y_t > 0$ and $x_t < 0$: a higher tariff decreases imports and increases sales of the domestic firm.

As before, the condition $p_t < 1$ is sufficient to insure that the optimum tariff is positive. However, even if $p_t > 1$ the optimum tariff may still be positive because the term $(p - c)y_t$ is positive.

Proposition 2

With both domestic and foreign firms, $p_t < 1$ is sufficient but not necessary for the optimal profit-shifting tariff to be positive. In particular (from (12.21)), a positive tariff is optimal if

$$p_t < 1 + (p - c)y_t/x. \quad (12.22)$$

Proposition 2 is no surprise. In addition to capturing tariff revenue a domestic tariff now has the added feature that profits are shifted to the domestic firm.

An illustrative special case is the case in which the market rivalry between the two firms is resolved as a Cournot duopoly. In this case the domestic firm maximizes profit (given by equation (12.17)) with respect to its own output yielding first-order condition:

$$\pi_y \equiv yp' + p - c = 0. \quad (12.23)$$

The first-order condition association with the profit-maximization problem faced by the foreign firm is (from (12.18))

$$V_x \equiv xp' + p - k - t = 0. \quad (12.24)$$

Equations (12.23) and (12.24) are the reaction functions of the two firms in implicit form. Each shows the 'best reply' output for the firm, given whatever level of output the other firm happens to be producing. The Cournot equilibrium occurs when both (12.23) and (12.24) are satisfied: neither firm can improve its profit given the output level of its rival.

Second-order conditions require $\pi_{yy} < 0$ and $V_{xx} < 0$. In addition, only stable equilibria are of interest. Stability can be insured by that rather weak requirement that each firm's perceived marginal revenue decline when the output of its rival rises. This means $\pi_{yx} < 0$ and $V_{xy} < 0$ and also implies that

$$D = \pi_{yy}V_{xx} - \pi_{yx}V_{xy} > 0. \quad (12.25)$$

((12.25) is necessary for stability but does not imply $\pi_{yx} < 0$ and $V_{xy} < 0$. Therefore stability is possible even if $\pi_{yx} > 0$ and $V_{xy} > 0$. This unusual possibility is not something we wish to examine here.)

It is then an easy comparative static exercise to show that y_t is positive and x_t is negative. Totally differentiating (12.23) and (12.24) with respect to y , x , and t yields comparative static matrix equation

$$\begin{bmatrix} \pi_{yy} & \pi_{yx} \\ V_{xy} & V_{xx} \end{bmatrix} \begin{bmatrix} y_t \\ x_t \end{bmatrix} = \begin{bmatrix} 0 \\ 1 \end{bmatrix}. \quad (12.26)$$

$$\text{Then} \quad y_t = -\pi_{yx}/D \quad (12.27)$$

$$x_t = \pi_{yy}/D. \quad (12.28)$$

Since $\pi_{yx} (\equiv yp'' + p')$ is negative and D is positive, y_t must be positive. Also with $\pi_{yy} < 0$ and $D > 0$, it follows that x_t is negative: an increase in the tariff increases output of the domestic firm and reduces imports. Furthermore, total domestic consumption tends to fall as the tariff is increased:

$$X_t = y_t + x_t = (\pi_{yy} - \pi_{yx})/D = p'/D < 0. \quad (12.29)$$

Proposition 3.

A tariff reduces domestic consumption.

The main point of this section is that, even though a tariff reduces domestic consumption, a country would normally perceive an incentive to impose a tariff since gains to domestic firms and increases in government revenue would more than offset losses to consumers.

4. TWO COUNTRIES

In considering a two-country world one important consideration is whether markets are unified or segmented (using the terminology of Helpman (1982)). Segmented markets arise when firms treat different countries as different markets in that they choose their strategy variables (in this case quantity) for each market separately. The segmented markets assumption corresponds to our perception of the way in which many firms operate: Toyota makes distinct decisions concerning how many cars to produce for domestic consumption and how many to export to the US; it does not bring its entire output to market in Tokyo and rely on arbitrage to distribute it throughout the world.

With segmented markets, imperfect competition gives rise to intra-industry trade. The causes and consequences of this type of intra-industry are described in Brander (1981) and Brander and Krugman (1983). The analytical point can be made by noting that the non-cooperative solution to the profit-maximizing problem faced by the firms involves intra-industry trade. Assuming that both countries charge tariffs and using asterisks to denote variables associated with foreign country, the domestic firm's total profit is

$$\pi = yp(X) + y^*p^*(X^*) - cy - c^*y^* - t^*y^* - F \quad (12.30)$$

and the profit of the foreign firm is

$$\pi^* = xp(X) + x^*p^*(X^*) - kx - k^*x^* - tx - F^*. \quad (12.31)$$

The coefficients c^* and k include transportation costs so $c^* > c$ and $k^* < k$. In any case, the first-order conditions are

$$\pi_y = 0; \quad \pi_x^* = 0; \quad \pi_{y^*} = 0; \quad \pi_{x^*}^* = 0. \quad (12.32)$$

The first two equations, $\pi_y = 0$ and $\pi_x^* = 0$ are independent of x^* and y^* and their solution for the Cournot model is as presented in the previous section. Similarly $\pi_{y^*} = 0$ and $\pi_{x^*}^* = 0$ give rise to an equilibrium in the foreign country with both firms selling. Because of transportation costs, each firm will have a larger share of its home market than of its export market, but both firms will operate in both markets. Since firms set perceived marginal revenue equal to marginal cost in each market, and perceived marginal revenue is higher for the firm with the small market share, that firm can absorb transport costs and still find it profitable to be in the market. Helpman (1982) observes that the crucial element in firms' perceptions concerns market segmentation. Instead of perceiving only a single world market demand, each firm perceives distinct country-specific demands.

Our main focus here is on tariff policy. The domestic tariff t influences the market equilibrium in the domestic market and the foreign tariff t^* affects the foreign market. Each of these tariffs has an impact on the profits of both firms and therefore on the net welfare of both countries.

$$G = G(t; t^*) = u(X) - pX + tx + \pi \quad (12.33)$$

$$G^* = G^*(t^*; t) = u^*(X^*) - p^*X^* + t^*y^* + \pi^* \quad (12.34)$$

Once again the 'best-reply' functions are defined by the first-order conditions:

$$dG/dt = 0; \quad dG^*/dt^* = 0. \quad (12.35)$$

If the profit functions are as written in expressions (12.30) and (12.31) the term 'best-reply' is rather misleading because the optimum tariff t is independent of t^* : what happens in the foreign market has no effect on the domestic market (and vice versa). If, however, marginal cost were not constant the two markets would interact and the tariff chosen by one country would depend on the tariff chosen by the other. Expression (12.35) is two equations in the two variables t and t^* whose solution characterizes the non-cooperative tariff equilibrium. This equilibrium is to be compared with the cooperative or world welfare-maximizing tariff levels.

The total world welfare is $G + G^*$. Since any one country's tariff revenue is a cost to the foreign firm, tariff revenue is irrelevant to world welfare. It is however possible that a positive tariff could increase welfare if transport costs were high. With constant marginal costs the domestic tariff does not affect sales x^* and y^* in the foreign country, so the total effect of a change in the domestic tariff on world welfare $G_t + G_t^* = G_t + V_t$ where V is the variable profit from the exports of the foreign firm. From (12.20),

$$G_t = -x(p_t - 1 + \mu) + (p - c)y_t$$

and from (12.5)

$$V_t = \frac{\partial V}{\partial x}x_t + \frac{\partial V}{\partial y}y_t + \frac{\partial V}{\partial t} = 0 + xp'y_t - x \quad (\text{assuming Cournot behaviour}).$$

Adding these and using $\mu = -tx_t/x$ and $p_t = p'(y_t + x_t)$ yields

$$G_t + V_t = -xp'y_t + tx_t + (p - c)y_t.$$

Then noting that the first-order condition for profit maximization by the foreign firm implies $p + xp' = t + k$, the change in world welfare is

$$G_t + V_t = (p - k)x_t + (p - c)y_t. \quad (12.36)$$

Expression (12.36) requires very little interpretation. The effect of a change in the tariff on world welfare is just the marginal net benefit associated with x times the change in x plus the marginal net benefit of y times the change in y . Using the Cournot example developed in Section 3, we have $x_t < 0$ and $y_t > 0$. Since $p - k$ and $p - c$ are both positive, the two terms in (12.36) work in opposite directions. If k and c were roughly equal, x and y would also be roughly equal. Expressions (12.27), (12.28), and (12.29) then imply that y_t would be smaller in absolute value than x_t so $G_t + V_t$ would clearly be negative. However,

if there are large transport costs k will exceed c and $G_t + V_t$ may be positive. The net benefit would be made possible by replacing high cost foreign production with low cost domestic production.

Proposition 4

If foreign marginal cost (including transport costs) is less than or equal to domestic marginal cost, an increase in the domestic tariff decreases world welfare.

From the international point of view higher tariffs have the effect of reducing intra-industry trade. This may be beneficial if there are high transport costs and, as a consequence, substantial waste. If transport costs are low, however, the pro-competitive effect of intra-industry trade offsets the waste due to transport costs and tariffs are inefficient. Tariffs are particularly undesirable if the domestic industry is 'weak' in the sense of having higher costs. Yet this is precisely the case in which unilateral pressures for tariffs are usually strongest.

Now we consider whether the non-cooperative solution involves a higher level of tariffs than the world welfare-maximizing solution. The world welfare-maximizing tariff requires that $G_t + V_t = 0$. Since $G_t = 0$ at the non-cooperatively chosen tariff but $V_t \neq 0$ the non-cooperative solution does not maximize world welfare. Since $V_t = xp'y_t - x < 0$, world welfare would increase if the tariff were reduced from the non-cooperative or unilaterally chosen level.

Proposition 5

The world welfare maximum may involve positive tariffs, but the non-cooperatively chosen tariffs exceed the world welfare-maximizing tariffs.

The important point is that the non-cooperative solution is generally inferior to the co-operative solution. Although each country perceives a unilateral incentive to impose a tariff, normally each would be better off if they could agree to have lower tariffs, hence the incentive for multilateral tariff reduction.

5. CONCLUDING REMARKS

An important aspect of world trade is that there is substantial trade in similar but not identical products. The greater variety of consumption made possible by international trade becomes an important source of gains from trade in addition to any pro-competitive effects of trade. Several authors have analysed such trade including Krugman (1979, 1980, 1981), Lancaster (1980), Helpman (1981), and Eaton and Kierzkowski (1984). Lancaster (1984) examines protection in such a context. The point we wish to make here is that the framework of this paper can be easily extended to include product variety, and gives rise to a different treatment of variety than the other papers just mentioned. If the output of the foreign firm sells for p and p^* in the domestic and foreign countries respectively, while the (slightly different) domestic output shells at prices q and q^* , then profit functions become

$$\pi = yq(x, y) + y^*q^*(x^*, y^*) - cy - (c^* + t^*)y^* - F \quad (12.37)$$

$$\pi^* = xp(x, y) + x^*p^*(x^*, y^*) - (k + t)x - k^*x^* - F^* \quad (12.38)$$

As before, a non-cooperative equilibrium where $\pi_y = 0$, $\pi_{y^*} = 0$, $\pi_x^* = 0$, and $\pi_{x^*}^* = 0$ will normally involve intra-industry trade. As before, optimum tariffs can be calculated and similar results as for the homogeneous case follow. An economically interesting set of questions arise concerning how the degree of substitutability affects the extent of intra-industry trade and the structure of optimum tariffs, but serious analysis of these issues is beyond the scope of the present paper. The fact remains, however, that the central points of this paper are robust to the introduction of product differentiation.

The world described in the paper is one in which the rivalry of imperfectly competitive firms serves as an independent cause of international trade. In such a world firms tend to invade one another's home markets, which gives rise to intra-industry trade, even in homogeneous products. Yet such trade tends to be welfare-improving because of its pro-competitive effects. Only if transport costs are high will such trade be welfare-reducing.

The main objective of the paper is to use this imperfectly competitive setting to present a simple explanation of why a country might impose tariffs on foreign firms but be in favour of multilateral trade liberalization. The distinction is just the difference between a non-cooperative solution and a co-operative one.

We have used a simple Cournot model to demonstrate the main points. Similar insights would emerge in the more sophisticated imperfectly competitive environments described by Krugman (1984) and Shaked and Sutton (1984) since the nature of tariff incentives is based chiefly on the presence of pure profits. The principal role of the tariff is to shift profit from foreign firms to domestic firms and to the domestic treasury. Naturally each country would be reluctant to reduce such rent-generating tariffs, but might be persuaded to do so if domestically owned firms were to be allowed freer access to profitable markets.

We do not, of course, wish to suggest that policy-makers singlemindedly pursue welfare-maximizing policies of the sort described here, nor that policy-makers have access to all the relevant information required to formulate such policy. However, we would argue that if simple welfare-improving policies are available, some kind of incentive will be perceived, however imperfectly, by policy authorities.

Finally, it should be emphasized that our arguments should not be taken as support for using tariffs. The highly tariff-ridden world economy that would result from each country maximizing domestic welfare taking the policies of other countries as given would be a poor outcome. Our analysis is meant to contribute to an understanding of the motives that might underlie tariff policy, and provides support for the multilateral approach to trade liberalization.

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