

# The role of contingent protection in WTO agreements.

Philippe Kohler\*

November 2001.

## Abstract

This paper deals with reasons of existence and increasing use of contingent trade protection provisions that accompany trade liberalization agreements. Using a political economy approach based on a mercantilist conceptualization of WTO agreements mechanisms, it is shown that an optimal trade liberalization level between nations requires contingent trade protection provisions. Moreover, the use by a nation of contingent protection provisions must paradoxically increase with its negotiated trade liberalization level given that political costs associated with trade liberalization constitute private informations.

Keywords: Multilateral trade liberalization agreements, contingent trade protection, incomplete information.

JEL Classification: F13

---

\*GEM, Institut d'Etudes Politiques de Paris – 2, square de Luynes – 75007 Paris. Email: philippe.kohler@sciences-po.fr – Presented at ETSG, Brussels, September 2001 and SETI, Miami, November 2001. I would like to thank Jennifer Reinganum for his encouragement.

# 1 Introduction.

Trade protection provisions (antidumping rules, countervailing provisions, safeguards) seem paradoxical within trade liberalization agreements which are designed to enhance foreseeability and transparency of trade barriers. However, the mercantilist mechanics of trade negotiations and the incompleteness of information about the political costs of trade openings show that contingent trade protection (CTP) provisions constitute a necessary device for an optimal trade liberalization among nations within the WTO.

WTO agreements are based on three fundamental principles:

- the non-discriminatory principle between trade members codified by Article 3 (national treatment) and Article 1 (most favored nation) of WTO agreements;
- the reciprocity principle codified by Article 28 (tariff concessions);
- the transparency principle of trade policies codified by Article 11.

Indeed, these three principles show the mercantilist spirit animating the trade negotiations mechanics within the WTO. The first principle shows that importations of home competing foreign goods are considered to be a cost. The second principle establishes conditions under which this cost is tolerated. The third principle dictates rules to be respected in order to avoid strategic manipulation of the implementation of the two previous principles.

Within WTO agreements, contingent trade protection provisions paradoxically depart from these three fundamental principles. The use of contingent protection is often arbitrary, unilateral<sup>1</sup> and lacks always transparency. Hence, the non-discriminatory principle is infringed though the ability of a nation to protect herself against foreign imports. The reciprocity principle is infringed through the possibility to renounce consolidated trade barriers measures after they has been enforced. The transparency principle is infringed through the codification of the subjective appreciation (for the benefit of the nation which protects itself) of the condition under which contingent protection can be implemented. Indeed, contingent protection allows nations to depart in a selective manner without being subject to costly retaliations.

Knowing that contingent protection provisions are in contradiction with WTO fundamental principles. The question is: to what does it serves within trade negotiations? A first step in finding the answer is to recognize that

---

<sup>1</sup>If we don't consider the dispute settlement procedure accompanying countervailing and safeguard measures.

the opening to international trade is usually considered as a political cost for governments. And because the WTO is constituted by nations, free trade is not the principal objective of the WTO. Rather, one can argue that the finality of WTO agreements consists of obtaining a durable economic growth which necessarily forwards through trade opening. From this viewpoint, the problem faced by this organization can be considered as a maximization program: trying to maximize the gap between economic growth and international trade liberalization, in other words to find an optimal allocation of trade liberalization across national productive sectors. Thus, for every government participating in WTO negotiations, the problem consists of finding the efficient allocation of opening to international trade given the national (i.e.; internal) political cost it causes: trade liberalisations have to be allocated politically efficiently.

This idea is not new: it is well-known that political costs force governments to adopt inefficient trade policy tools. By using a revealed preference argument, one can find the most politically efficient policy tools chosen by government to solve international trade problem. In this field, Messerlin (1993) shows that contingent trade protection (CTP) can be considered as a trade strategy tool used by nations in order to reduce the political cost associated with international trade opening: CTP constitutes a legal weapon of selective struggle against international competition. Messerlin (1990) shows that CTP is perverted and acts as a cartel enforcement device through the stabilization mechanism played by antidumping filing threats. This viewpoint is corroborated among others by Prusa (1992, 1994) and Staiger and Wolak (1991) through theoretical models analysing the strategic use of antidumping protection by domestic firms against their foreign rivals.

More generally, CTP is a tool designed to respond to internal domestic pressures. CTP often triggers implementation of non negotiable trade barriers, i.e.; barriers which are not negotiated on a multilateral basis during rounds. Theoretical interpretations of this kind of trade protection have been provided by Copeland (1990) who uses a conjectural variation model of trade negotiations based on a two-stages game in order to show that negotiable (i.e.; based on multilateral trade negotiations) and non-negotiable (i.e.; based on unilateral provisions) trade barriers are complements: the use of one trade policy tool increases with the other. In this model, each nation negotiates a trade barrier level in the first stage of the game. This level depends on the use of non-negotiable trade barriers in the second stage. The increasing use of non negotiable trade barriers emerges as a consequence of the decrease of

negotiable trade barriers in the first stage of the game. From a welfare viewpoint, the global welfare effect is positive: the use of non-negotiable trade barriers induces the overall level of trade barriers to decrease. Hungerford (1991) obtains the same conclusion through the use of infinite repeated game model of trade interaction between two nations. Under asymmetric information and uncertainty about the use of non negotiable trade barriers (which are often imposed through the CTP process), the game equilibrium shows an increased use of non negotiable trade barriers even under retaliation threats.

It is now widely recognized that governments choices are usually mercantilist. As pointed out by Messerlin (1993,1995), trade protection is beneficial as long as it is not used by trade partners. Indeed, every nation is tempted to protect itself against its trade partners without triggering the same behavior of them. In order to avoid this phenomena, nations are cooperating within the WTO to promote liberalization. In other words, from an individual viewpoint every nation would like to protect itself but if all nations adopt the same behavior they loose together. We can see here the reason why nations seek to agree upon multilateral rules designed to enhance trade liberalization.

Political costs incurred by governments are closely linked with international trade. Non-negotiable trade barriers are thus positively correlated with trade flows levels. Within a model of repeated interaction, Bagwell and Staiger (1990) show that the use of non-negotiable trade barriers (in their paper, it is called "managed trade") increases with the level of trade flows. When the trade level is high, the incentive to defect from past negotiated trade agreements is high compared with low levels of trade periods.

In this paper, we analyze the role of non-negotiated trade barriers generated by CTP at the multilateral negotiations level. We assume that each nation behave differently at two levels. During trade negotiations at the collective level (the inter-national level), a nation agrees with its trade partners in order to obtain an optimal level of trade liberalization. This level arises from the concern of maximizing the gap between international growth and trade liberalization. At the individual level (the intra-national level), each nation tries to benefit from the opening of its trade partners while remaining selectively closed to imports through CTP. The WTO can thus be considered as a team of nations that want to liberalize trade collectively while remaining protected individually. Trade liberalization appears thus a collective good produced by the team members. As it is the case in the classic problem of public good provision, externalities are present. We argue that

CTP constitutes a device to internalize these externalities under asymmetric information. The paper is organized as follows: in section 2, we set-up the model of the trade liberalization negotiations; section 3 is devoted to the interpretation of CTP as a internalization device and concluding remarks are contained in section 4.

## **2 Multilateral trade liberalization under complete information.**

We assume that, WTO members (governments of signatory nations) at the collective level, act as a single agent represented by the WTO organization whose direction is delegated to the WTO president. At the individual level, each government benefits from some liberty in the implementation of the collective agreement. This liberty can raise a free rider problem which, for nations, consists of benefiting from collective agreements without following their obligations in the liberalization of their trade. With asymmetric information between agent actions at the collective and individual levels, the WTO agreements can be viewed as the result of a Principal-multiagent contractual relationship. The Principal is constituted by the set of WTO members at the collective level. Agents are the members at their individual levels.

Nations constitute a team. The team objective consists of maximizing the gap between international economic growth and the level of international trade liberalization. In order to reach this objective, every nation has to contribute to the international trade liberalization process by opening its own economy to its trade partners within the team. Nations differs on their ability to open their economy to foreign imports. Given this ability, every nation has to produce an opening effort. Ability and effort are combined to give the contribution to the team *product* - the international trade liberalization level.

WTO members open their economy in order to benefit from the international economic growth. The pillar of trade liberalization agreements is given by the reciprocity principle: each nation that opens its economy has to benefit from the economy opening of its trading partners. The question we address is the following: taking into account the impossibility for the WTO to check the true implementation of this principle because of informa-

tion incompleteness, how should be built trade liberalization agreements? In other words, should the reciprocity principle be strictly applied? As pointed out in the beginning of this paper, CTP violates the reciprocity principle. Is this violation necessary to obtain the optimal level of international trade liberalization taking into account the mercantilist behavior of nations?

## 2.1 WTO viewed as a team.

Formally, the world is composed of  $n$  WTO Members indexed by  $i$ . As in a team, each nation behaves collectively and individually: collectively, with other nations, when trade agreements are shaped internationally at the WTO level and individually, when trade agreements are implemented at the national level.

Messerlin (1993) describes the timing of the trade liberalization negotiation at the WTO level. Each nation makes first a concessions package offer in order to participate in the collective liberalization agreement.

## 2.2 Externalities associated with MTLAs.

Assume that  $x$  is the level of trade after Members have made their contributions denoted by  $k_i$  to the liberalization of international trade where  $k = (k_1, \dots, k_n)$ <sup>2</sup> is the vector of Members contributions. Denote by  $b_i(x)$  the benefit accruing to Member  $i$  and  $c_i(k_i)$  its cost incurred to provide  $k_i$ . The net benefit perceived by Member  $i$  at its individual level can be written as:

$$b_i(x(k)) - c_i(k_i) \tag{1}$$

Assume that the collective level, the WTO members gross benefit is denoted by

$$U(x(k)) = \sum_{i=1}^n b_i(x(k)) \tag{2}$$

The individual net benefit perceived, by Member  $i$  at the collective level is given by:

$$U(x(k)) - c_i(k_i) \tag{3}$$

This political economic modeling of trade liberalization agreements leads out onto the following lemma:

---

<sup>2</sup> $k_{-i} = (k_1, \dots, k_{i-1}, k_{i+1}, \dots, k_n)$

**Lemma 1.** *Under assumptions (1) to (3), WTO Members are incited to violate multilateral trade liberalization agreements.*

*Proof.* Optimal individual contributions are incompatible with an optimal collective liberalization level. Individually, each WTO Member chooses its contribution  $k_i$  by equaling marginal benefit to marginal cost, i.e.;

$$\frac{\partial b_i}{\partial x} \cdot \frac{\partial x}{\partial k_i} = \frac{\partial c_i}{\partial k_i} \quad (4)$$

Collectively, Member  $i$ 's contribution is given by:

$$\frac{\partial U}{\partial x} \cdot \frac{\partial x}{\partial k_i} = \frac{\partial c_i}{\partial k_i} \quad (5)$$

Members contributions at the individual level will be compatible with their contributions at the collective level only if:

$$\frac{\partial b_i}{\partial x} = \frac{\partial U}{\partial x} \quad (6)$$

However, under assumption (2) we have:

$$\sum_{i=1}^n \frac{\partial b_i}{\partial x} = \frac{\partial U}{\partial x} \quad (7)$$

which contradicts expression (6).  $\square$

Lemma 1 implies that trade liberalization agreements need to be violated to be optimal i.e.; to induce Members to contribute efficiently to collective trade liberalization. Lemma 1 allows us to give the following proposition:

**Proposition 1.** *Under complete information about trade liberalization contributions, the Nash equilibrium  $k^*$  under which multilateral trade liberalization is optimal is given by:*

$$k^* = \arg \max_k [U(x(k)) - \sum_{i=1}^n c_i(k_i)] \quad (8)$$

$k^*$  will emerge only if (2) is violated.

Proposition 1 shows that multilateral trade liberalization agreements incur externalities emerging from the divergence between individual and collective benefits of liberalization contributions. Suppose that a MTLA generates  $k^*$  without violation of condition (2).  $k^*$  cannot be an equilibrium because each Member is incited to deviate from an optimal collective viewpoint in order to gain from an individual viewpoint. Violation of (2) balances individual and collective interests and thus internalizes the externality through a greater individual benefit for participants to the MTLA.

Under complete information, no efficient MTLA can thus emerge unless (2) is violated. In practice, could this rule be observed? Of course not, because collective utility equals the sum of individual utilities associated with MTLA<sup>3</sup>.

Complete information about contributions inhibits the emergence of efficient MTLAs because internalization of external effects implies an unpractical condition: the collective benefit has to exceed the sum of individual benefits. Under information completeness, Members contribution can be checked by all the participants. Participants cannot cheat they have agreed upon the MTLA.

Assume that cheating behaviors because of information incompleteness about contributions. Aside the necessary violation of condition (2) for the MTLA to be collectively optimal, a new free riding problem emerges: the informational externalities associated with adverse selection and moral hazard about Members types and action before and after MTLAs are signed.

Information incompleteness distorts the optimal solution. In this context, a second best optimum has to be characterized which has to take into account informational externalities.

---

<sup>3</sup>Holmstrom (1982) proposes a solution to this free rider problem: if  $x(k^*)$  can be computed at the Nash equilibrium  $k^*$ , a binary sharing rule based on taxation of Member  $i$  of an amount of  $c_i(k_i)$  under deviation from  $k_i^*$  provides the efficient outcome. However, binary rule implies that if deviation occurs, the collective output has to be destroyed. This leaves intact the free rider problem. Rasmusen (1987) amends the Holmstrom's solution by pointing out that violation of a condition like (2) is necessary only if agents are risk averse. A random taxation rule when the optimal output is not provided generates an efficient outcome. However, output needs still to be destroyed under the Rasmusen rule.

### 3 Multilateral trade liberalization under incomplete information.

Under incomplete information, we assume that each WTO Member participating in the MTLA is characterized by a privately known parameter  $\theta$  representing an inability to liberalize its trade relationships. Taking into account this inability, each Member is doing an effort denoted by  $e$  to liberalize its trade relationships i.e.; to reduce the  $\theta$ . Thus, under incomplete information, we assume that the team is constituted by a Principal (set of Members at the collective level) whose direction is delegated to the WTO president and  $n$  agents (Members at their individual levels, when they implement the negotiated trade liberalization agreement).

Formally,  $\theta_i$  is privately known by nation  $i$  and unobservable by its trade partners. Their beliefs about  $\theta_i$  are summarized by a probability distribution denoted by  $F(\theta_i)$  where  $f(\theta_i)$  is the associated density. Given a trade liberalization inability level, each nation  $i$  produces a liberalization effort  $e_i$ . Inability and effort are combined to give the contribution of nation  $i$  to international trade liberalization denoted by  $k_i$ <sup>4</sup>. Trade liberalization agreements are based on the reciprocity and the MFN principles which establish protection concessions exchange rules. Each nation agrees to lower its trade barriers level in return for a reduction of its trade partners protection barriers. The timing of the MTLA is the following:

(1) each Member  $i$  announces a trade opening inability  $\tilde{\theta}_i$  and commits to produce an effort  $e_i$  to open its trade.  $\tilde{\theta}_i$  and  $e_i$  leads on to trade liberalization  $k_i$ . Formally,  $\theta_i$  and  $e_i$  are privately known by Member  $i$ .

(2) Members agree upon  $k$  and the MTLA is implemented.  $k$  is publicly observable.

The Member  $i$  political cost associated with the MTLA is denoted by  $c(k_i(\theta_i))$  with:

$$c_k(k_i(\theta_i)) > 0, c_{kk}(k_i(\theta_i)) > 0, c_\theta(k_i(\theta_i)) > 0, c_{k\theta}(k_i(\theta_i)) < 0 \quad (9)$$

i.e.; political costs associated with trade liberalization either are increasing with opening inability  $\theta$  and trade liberalization contribution  $k_i$ .

The gross benefit of this reduction for Member  $i$  is denoted by  $b_i(x, (\tilde{\theta}_i, \theta_i))$  where  $x$  is the global international trade liberalization level.

---

<sup>4</sup>For example,  $k_i = \theta_i - e_i$ .

Denote by  $W$  the WTO Members aggregated net benefit at the collective level. Because liberalization has to be allocated politically efficiently,  $W$  is formally given by the gap between:

(1) the level of utility associated with international economic growth generated by trade liberalization;

(2) the sum of Member's individual political costs.

Formally, we have:

$$W = U(x, k, \theta) - \sum_{i=1}^n c_i(k_i(\tilde{\theta}_i), \theta_i) \quad (10)$$

Again, this formalization choice allows us to point out the mercantilist spirit of WTO trade liberalization agreements: liberalization is not considered by governments as a final goal but as a tool to enhance international economic growth to which each nation can benefit.

When information is complete, the Member  $i$  net benefit  $u_i$  associated with a MTLA is given by:

$$u_i(\theta_i) = b_i(x, \theta) - c(k_i(\theta_i)) \quad (11)$$

where  $b_i(x, \theta)$  is the political benefit associated with the trade opening of Member  $i$ ' MTLA partners and  $c(k_i, \theta_i)$  is the political cost associated with the opening of its own economy.

Under incomplete information, we have:

$$u_i(\tilde{\theta}_i, \theta_i) = b_i(x, \tilde{\theta}) - c_i(k_i(\tilde{\theta}_i), \theta_i) \quad (12)$$

where  $\tilde{\theta} = (\tilde{\theta}_1, \dots, \tilde{\theta}_n)$  is the vector of trade opening inability announces at stage (1) of the MTLA negotiation and  $\theta = (\theta_1, \dots, \theta_n)$  is the corresponding real trade opening inabilities.

### 3.1 Externalities under incomplete information.

Through the MTLA, WTO Members want to maximize  $W$  subject to two kinds of constraints. First, every Member has to participate in the MTLA. Second, each Member has to produce an optimal level of trade liberalization effort given its inability to liberalize its trade. Formally, the collective objective can be represented by program P1:

$$(P1) \begin{cases} \max_{k(\theta)} E [W(\theta)] \\ st \ u_i(\theta_i) = b_i(x, \tilde{\theta}) - c(k_i(\theta_i), \theta_i) \geq 0 \quad \forall \theta_i \in \Theta \quad IR \\ \quad u_i(\theta_i, \theta_i) \geq u_i(\tilde{\theta}_i, \theta_i) \quad \forall (\theta_i, \theta_j) \in \Theta^2 \quad IC \end{cases} \quad (13)$$

where  $E[\cdot] = \int_{\theta_1^-}^{\theta_1^+} \dots \int_{\theta_n^-}^{\theta_n^+} (\cdot) \prod_{i=1}^n f(\theta_i) \cdot d\theta$ .

IC constraint ensures that, at the MTLA negotiation stage, each Member announces the truth about its opening inability.

**Lemma 2.** *If a nation adopts a lying strategy, its benefit will be:*

$$u(\theta_i, \tilde{\theta}_i) = u(\tilde{\theta}_i) + c_i(k_i(\tilde{\theta}_i), \tilde{\theta}_i) - c_i(k_i(\tilde{\theta}_i), \theta_i) \quad (14)$$

Lemma 2 allows us to give the following proposition:

**Proposition 2.** *Incentive compatibility of Members contributions to trade liberalization requires that MTLA benefits have to be a decreasing function of trade liberalization inability.*

*Proof.* Using the Envelope Theorem, IC can be rewritten as follows:

$$\frac{du}{d\theta_i} = \frac{\partial u}{\partial \tilde{\theta}_i} \Big|_{\tilde{\theta}_i = \theta_i} = -c_{\theta_i}(k_i(\theta_i), \theta_i) < 0 \quad \forall \theta_i \in \Theta \quad (15)$$

□

Taking into account expression (15), the objective P1 of the MLTA can be formally rewritten through program P2:

$$(P2) \begin{cases} \max_{k(\theta)} E \left[ U(x, k, \theta) - \sum_{i=1}^n c_i(k_i(\tilde{\theta}_i), \theta_i) \right] \\ st \ u_i(\theta_i) = b_i(x, \tilde{\theta}) - c(k_i(\theta_i), \theta_i) \geq 0 \quad \forall \theta_i \in \Theta \quad IR \\ \frac{du}{d\theta_i} = -c_{\theta_i}(k_i(\theta_i), \theta_i) \quad IC \end{cases} \quad (16)$$

More simply, P2 can be rewritten as follows:

$$\max_{k(\theta)} E \left[ U(x, k, \theta) - \sum_{i=1}^n \left[ c(k_i(\theta_i), \theta_i) - c_{\theta_i}(k_i(\theta_i), \theta_i) \cdot \frac{1 - F(\theta_i)}{f(\theta_i)} \right] \right] \quad (17)$$

Collectively, Members are looking for the value of  $k(\cdot)$  which maximizes the gap between the collective utility associated with international economic growth and the sum of political costs associated with individual trade liberalizations.

At the collective level, two costs are present: the real political cost  $c(k(\theta))$  and a virtual cost associated with the presence of asymmetric information.

Because of the incompleteness of information about efforts and trade opening inability, an externality emerges. This externality is associated with two elements: different trade liberalization inabilities among Members and information incompleteness about the real implementation of trade liberalization agreements at individual (i.e.; national) levels.

The internalization process of this informational externality is beared by Members with low liberalization ability: in asymmetric information, the collective perception of the trade liberalization political cost of low ability Members is modified compared with its perfect information level. The increase of this political cost is given by:

$$-c_{\theta_i}(k_i(\theta_i), \theta_i) \cdot \frac{(1 - F(\theta_i))}{f(\theta_i)} \quad (18)$$

This increase equals zero for nations with high trade liberalization ability. It goes towards infinity for nations with low trade liberalization ability. The presence of an adjusted political cost points out the trade-off surrounding trade liberalizing agreements when information about political costs is incomplete. When they open their economy, nations with low trade liberalization abilities will claim high concessions from their trade partners. This will effect nations with high trade liberalization ability to mimic low ability nations and induce them to lie about their actual trade liberalization abilities. Given that the trade liberalizing agreement emerges from mercantilist behaviors, the overall trade liberalizing level will decrease because high ability nations will lower their trade liberalization level. Collectively, nations have thus to reduce the opening of low ability nations in order to discourage high ability nations to reduce the opening of their economy.

### 3.2 Internalization through CTP.

The optimal trade liberalizing agreement can be formalized by the vector  $k(\cdot)$  that emerges from the solution of program  $P1$ .

$$k_i^*(\theta_i) = Arg \max_{k_i} E \left[ U(x, k, \theta) - \sum_{i=1}^n \left[ c(k_i(\theta), \theta) + c_{\theta_i}(k_i(\theta), \theta) \cdot \frac{(1 - F(\theta_i))}{f(\theta_i)} \right] \right] \quad (19)$$

When agreements are concluded, they need to be implemented. Assume that  $E(x) = \omega(k(\theta))$  is the expected level of trade liberalization obtained

through  $k$  and that  $\omega_i(k(\theta))$  is the expected increase of  $x$  due to an increase of the contribution of nation  $i$ :

$$\omega_i(k(\theta)) = \frac{\partial \omega(k(\theta))}{\partial k_i} \quad (20)$$

We assume that contributions increases are complements:

$$\omega_{ij}(k(\theta)) = \frac{\partial^2 \omega(k(\theta))}{\partial k_i \partial k_j} \geq 0 \quad (21)$$

Assume that  $\beta_i(\theta)$  is the part of the collective utility going to nation  $i$ . If this nation is sheeting in the implementation of its negotiated trade concessions by arguing that its opening ability is given by:  $\tilde{\theta}_i$ , its benefit from the trade agreement will be:

$$b_i(x, \theta) = \beta_i(\theta) \cdot [x - \omega(k^*(\theta))] + c(k_i(\theta), \theta) - \int_{\theta^-}^{\tilde{\theta}} c(k_i(v), \theta) \cdot dv \quad (22)$$

This expression shows that the optimal trade liberalizing agreement has to leave an informationnal rent to nation with high ability of opening. Leaving an informational rent implies that the balance of concessions has to be violated. Hence, the reciprocity principle will not work for these nations. In WTO agreements, CTP allows such a violation.

## 4 Conclusion.

In this paper, a theoretical explanation of the presence of CTP within WTO trade liberalizing agreements has been given. By assuming that trade agreements deals with a mercantilist mechanics, it has been shown the use of CTP is a necessary condition for optimal trade liberalization. More accurately, CTP allows the internalization of externalities associated with the supply of trade liberalization by nations. Hence, the use of CTP implies a violation of one of the GATT fundamental principle, namely the reciprocity principle codified by article 28. This violation is optimal for nations that have high ability to trade opening. It is thus possible to understand why the decrease of trade barriers negotiated during multilateral rounds are accompanied by increase of non negotiable trade barriers, i.e.; CTP.

## References

- Bagwell K. and R.W. Staiger, 1990, "A theory of managed trade", *American Economic Review*, 80(4), 779-795.
- Bagwell K. and R.W. Staiger, 1997, "An economic theory of GATT", *NBER Working paper*, # 6049.
- Bagwell K. and R.W. Staiger, 2000, "GATT-think", *NBER Working paper*, # 8005.
- Baldwin R., 1987, "Politically Realistic Objective Functions and Trade Policy", *Economic Letters*, 24, 287-90.
- Baldwin R.E. and M.O. Moore, 1991, "Political aspects of trade remedy laws", in *Down in the Dumps*, R. Boltuck and R.E. Litan eds, Brookings Institution, Washington.
- Blonigen B. and T.J. Prusa, 2001, "Antidumping", *NBER Working paper*, # 8398.
- Caplin A. and K. Krishna, 1988, "Tariffs and the most favored nation clause: a game theoretic approach", *Seoul Journal of Economics*, 1, 267-289.
- Clarke E.H., 1971, "Multipart pricing of public goods", *Public Choice*, 2, 19-33.
- Dick A. R., 1996, "Explaining managed trade as rational cheating", *Review of International Economics*, 4(1), 1-16.
- Feenstra R. C. and T.R. Lewis, 1991, "Negotiated trade restrictions with private political pressure", *Quarterly Journal of Economics*, 1287-1307.
- Groves T., 1973, "Incentives in teams", *Econometrica*, 41(4), 617-631.
- Holmstrom B., 1982, "Moral hazard in teams", *Bell Journal of Economics*, 13, 324-340.
- Hungerford T.L., 1991, "GATT: A cooperative equilibrium in a noncooperative regime?", *Journal of International Economics*, 31, 357-369.
- Jackson J. H., 1989, *The World Trading System*, MIT Press, Cambridge.
- Kohler P. and M.O. Moore, 1998, "Design of an antidumping rule with incomplete information about material injury", *Journal of Economic Integration*, 13(1), 62-88.
- Kohler P. and M.O. Moore, 2001a, "The safeguard clause, asymmetric information, and endogenous protection", *Review of International Economics*, 9(1), 52-67.
- Kohler P. and M.O. Moore, 2001b, "Injury-based protection with auditing under asymmetric information", *Southern Economic Journal*, 68(1), 42-59.

- Ludema R., 1991, "International Trade Bargaining and the Most-Favored Nation Clause", *Economics and Politics*, 3, 1-20.
- Maggi G., 1999, "The Role of Multilateral Institutions in International Trade Cooperation", *American Economic Review*, March, 89(1), 190-214.
- Maggi G and A. Rodriguez-Clare, 1998, "The Value of Trade Agreements in the Presence of Political Pressures", *Journal of Political Economy*, 106(3), 574-601.
- Marschak J. and R. Radner, 1972, *Economic theory of teams*, Yale University Press, New Haven.
- McAfee R.P. and J. McMillan, 1991, "Optimal contracts for teams", *International Economic Review*, 32(3), 561-577.
- Messerlin P.A., 1989, "The EC antidumping regulations: a first economic appraisal, 1980-1985", *Weltwirtschaftliches Archiv*, 125, 563-587.
- Messerlin P.A., 1990, "Antidumping regulations or pro-cartel laws: The EC chemical case", *The World Economy*, 13(4), 465-492.
- Messerlin P.A., 1993, "Rôles de l'OMC et enjeux de l'Uruguay round", *Politique étrangère*, 93-2.
- Messerlin P.A. et G. Reed, 1995, "Antidumping policies in U.S. and E.E.C.", *Economic Journal*, 105, 1565-1575.
- Messerlin P.A., 1995, *La nouvelle organisation mondiale du commerce*, IFRI, Paris.
- Nelson D., 1988, "Endogenous tariff theory: a critical survey", *American Journal of Political Science*, 32, 796-837.
- Palmer D., 1991, "The antidumping law: A legal and administrative nontariff barrier", in *Down in the Dumps*, R. Boltuck and R. E. Litan eds, Brookings Institution, Washington.
- Prusa T., 1992, "Why are so many petitions withdrawn?", *Journal of International Economics*, 33(1), 1-20.
- Rasmusen E., 1987, "Moral hazard in risk-averse teams", *Rand Journal of Economics*, 18, 428-435.
- Staiger R.W., 1995, "International rules and institutions for cooperative trade policy", in *Handbook of international economics*, G. Grossman and K. Rogoff eds, Elsevier, Amsterdam.