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The Future Monitoring Role of GATT in an International Arena of Non-Tariff Barriers: A Proposal from a Law and Economics Perspective

Andrew C. Blanar* and Jean-Louis L. Arcand**

I. Introduction

The topic of this article, *International Free Trade: GATT's Present Task of Monitoring Current and Future State Trade Restraints*, will be addressed from a combined legal and economics perspective. While we are less than sanguine about the ability of the formal legal enforcement structure of GATT to meet the challenges of a post-Uruguay Round economic order, the basic problem lies as much with the underlying economic theory upon which GATT's goals and structures rest, as it does with the formal legal edifice.

The central purpose of this article is to present argument in favor of a self-enforcement approach to the monitoring of non-tariff barriers (NTBs), and to highlight the need for a GATT legal framework to implement and support this revisionist perspective.

II. GATT: A Brief Overview

In effect there is no such thing as an international trade system. The failure by participating countries to ratify all three pillars of the system as proposed by the Havana Charter accounts for the system's non-existence.¹ Although the General Agreement and the legal un-

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derpinnings of the International Monetary Fund were ratified, the failure to ratify the Havana Charter, and the International Trade Organization that was its central component, has “[l]eft a vacuum in the organization of economic relations in the post-war period.” While this void is only partially filled, the provisions of the charter on trade policy are “broadly taken up in the General Agreement on Tariffs and Trade which came into effect on January 1, 1948.”

The GATT poses a triple threat in that it simultaneously provides a legal framework for international trade relations, an organ for conciliation and settlement of disputes, and a forum for trade negotiations and for the adaptation of its legal framework. Since GATT's genesis in 1945, world trade has increased almost 1000 percent. Additionally, membership has increased from 23 to 122 countries. Moreover, the nature of world trade and the sharp distinction between countries labelled as “haves” and “have-nots” has led to fundamental questioning of the “neo-liberal economic order upon which GATT is founded.”

It is argued that GATT's greatest challenge today is to overcome its past success. As GATT enters its fifth decade the goal of its preamble “the substantial reduction of tariffs” has been achieved. On the other hand, GATT has been less successful in addressing problems concerning “other barriers to trade” and “the elimination of discriminatory treatment in international commerce . . . .”

III. The Legal Framework of the GATT

The legal core of the GATT multilateral trade system consists of substantive and procedure legal rules as found in the General Agreement, plus separate legal agreements negotiated within the GATT framework.

The basic limitations of the GATT legal system are in essence twofold: technical and political. Technical limitations exist to the extent that complex political and economic relations are reduced to general and specific legal rules. These details of legal implementation and application inevitably add friction to the system. Political
limitations arise from the realization that legal reform of the GATT system is hostage to an ever growing diversity of political and economic interests that seriously differ from the original goals of the GATT.

Exceptions to the basic legal framework of the GATT have indeed appeared. It must be remembered that knowledgeable observers argue in favor of its adjustment to political reality.\(^\text{10}\) Political realism, actual as well as perceived, is never an end in itself. The principles of GATT may have to be modified in form if they are to maintain their substance. This is the nature of the challenge to the GATT’s legal structure, a structure that will now be examined.

The basic rules of the GATT’s legal structure include: Article I discusses the “most-favored nation” (MFN) treatment. Without a doubt this is the most important general principle of GATT. However, it is one that even as applied to tariffs allows for exceptions.\(^\text{11}\) In general, the principle suggests that any privilege granted by country A to country B must be made available to all fellow member states. National Treatment is discussed in Article III. Once a product is imported into a country, it must, for internal tax and regulatory purposes, be treated similarly to equivalent domestic products. Article IV prohibits most quantitative restrictions by the GATT, but there are some exceptions.\(^\text{12}\) Article VII allows customs and duties because, in part, they are easily identifiable. Reciprocity is defined in the context of the GATT as being implicit within the basic core of the Agreement.

These basic rules have survived early limitations. These include the right to limit one’s adherence to Part II (Articles III-XXIII) of the General Agreement,\(^\text{13}\) and the failure to eliminate the customs and duties exemption in 1955.\(^\text{14}\) Since 1966, however, attempts to amend the form of the General Agreement have not been successful. Any changes in GATT implementation over the past twenty years have taken place outside the formal legal framework of the GATT, without amending the General Agreement itself.

These changes include the growth of customs unions and free trade areas, preferential treatment for developing countries,\(^\text{15}\) the ac-

\(\text{10}\). O. Long, supra note 3, at 8. Article XIV, Customs unions and free trade areas; Article XXV.5 allowing non-compliance if approved by GATT parties; Article XX, public policy, Article XXI, security, and Article I:2, allowing for the continuation of pre-GATT preferences. It should be obvious that these exceptions are major ones.
\(\text{11}\). Exceptions include some agricultural and fisheries imports, Article XI:2; restrictions to reduce balance of payment difficulties, Articles XII and XVIII; and cases involving less developed countries (LDCs), Article XVIII.
\(\text{12}\). For example, the Protocol of Provisional Application of 1947 is an exception.
\(\text{13}\). The GATT Review Session of 1955.
\(\text{14}\). Even though a new Part IV discussing Trade and Development was added to the GATT in 1955, customs and duties were still exempted.
\(\text{15}\). GATT arts. 18, 36-38.
cession of non-market economies to GATT, the nonacceptance of the idea of reciprocity by some LDCs, and a myriad of creative limitations to the MFN principle. When coupled with the natural lack of cohesion caused by separate bilateral agreements within the formal system, these changes have led to a new "legal" tolerance of pragmatic deviation. This tolerance bodes little good for the continued survival of the spirit of universal multilateralism embodied in the General Agreement.

It is not clear whether this means that the multilateral era of GATT is over or is merely catching its breath. Thus, as a result of the tendency of the current GATT system to avoid confronting fundamental contradictions for fear of conflict, it is contended that what remains is an empty basket. As yet this is not the condition of the GATT multilateral trade system. The Uruguay Round may prove successful, but the original GATT ideal is facing its most serious crisis since its inception.

IV. Self Enforcement Approach to Regulating Non-tariff Barriers

A. Underlying Premises of Self-enforcement

Fundamental self-enforcement approaches include the following premises: First, the theory of international trade which constitutes the analytical foundation for the GATT is flawed and obsolete, and is becoming increasingly irrelevant, and a potential source of confusion in an NTB-based era of international trade restraints. This view of Neoclassical trade theory is espoused by a large number of international economists. Second, the "New International Economics" and particularly its game theoretic elements can provide the basis for a self-enforcement approach to confront trade restrictions. Third, the most-favored nation approach (MFN), especially when

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18. See infra note 40.
19. For a more sympathetic evaluation, see O. LONG, supra note 6, at 17-19.
20. See infra notes 27-35 and accompanying text.
21. In traditional international trade theory, comparative advantage played the pre-eminent role in giving rise to trade. The New International Economics adds increasing returns as a result, and since increasing returns are difficult to integrate into the traditional perfectly competitive model, calls upon the tools of Industrial Organization. As such, the New International Economics can perhaps best be described as a concerted effort to integrate International Economics and Industrial Organization.
22. Recent applications of the game-theoretic approach to traditional concerns of international economists include BRANDER & SPENCER, EXPORT SUBSIDIES AND MARKET SHARE RIVALRY, 18 J. INT'L ECON. 83 (1985), in the area of export policy, and HWANG & MAI, ON THE EQUIVALENCE OF TARIFFS AND QUOTAS UNDER DUOPOLY: A CONJECTURAL VARIATIONS APPROACH, 24 J. INT'L ECON. 373 (1988), which breaks new ground on the perennial tariff versus quota debate.
23. The "New International Economics" is most often associated with the work of Paul Krugman and Elhanan Helpman; see P. KRUGMAN & E. HELPMAN, MARKET STRUCTURE AND FOREIGN TRADE (1985).
formally unconditional, inevitably encounters the problem of detectability.

In light of these premises, an alternative approach to the multilateral trading system is proposed. The current system focuses on the detection and swift, but still neutrally determined, adjudication and punishment of suspected transgressors. This approach contrasts with the existing goal of sure adjudication and severe penalties. In large part, the current system has been successful in practice because of the inherent nature of tariff barriers. The barriers are formulated in written form and must be decipherable by their administrators. Moreover, they are usually comprehensible to outsiders. As such, application of a strict, legalistic standard of proof to violations of the strictures of the GATT is both proper and enforceable.

B. "Sub"-standard of Proof and Self-enforcement Mechanics

The problem confronting the GATT-based system of multinational trade relations today can in essence be reduced to the issue of the continuing practicability of applying the current standard of proof to NTB-type trade barriers transgressions. The common law system of adjudication allows for two standards of proof. Criminal law requires a higher standard of "beyond a reasonable doubt." The civil law demands judgment based upon a "preponderance of the evidence." The actual standard of proof utilized within the GATT system clearly is not the criminal or civil law standard. It is closer, however, in practice to that of the criminal law standard.

Accordingly, the time has arrived for the formulation of both a new standard of proof and an enforcement mechanism to meet the challenges of the emerging NTB-oriented trade era of the 1990s. A standard of proof that builds upon a "preponderance of the evidence" approach of the civil law is proposed. This standard is presented in the context of a self-enforcement mechanism suggested by simple game-theoretic arguments. This approach is more in line with the realities of the international trading environment based upon legal and economic principles than upon the current system.

C. Law and Economics — A Joint Perspective

Students of international trade, whether they be international lawyers, economists or government policy makers, must be aware of

24. For a formal treatment of game theory, one may consult one of several leading texts on the subject. See generally, J. Friedman, GAME THEORY WITH APPLICATIONS TO ECONOMICS (1986); H. Luce & H. Raiffa, GAMES AND DECISIONS (1957); H. Moulin, GAME THEORY FOR THE SOCIAL SCIENCES (1982). For the non-specialist reader, perhaps the best introductory treatment is to be found in J. Tirole, THE THEORY OF INDUSTRIAL ORGANIZATION, ch. 11 (1988).
the perspectives of their colleagues from other disciplines. It is our firm belief that the future of international free trade is particularly dependent upon a combination of the resources from the legal and economic professions. Such a joint-venture attempts to relate current economic thought pertaining to the problems of international trade and the concerns of the international trade lawyers seeking explanations for their changing professional environment. This method will enable international lawyers to devise legal rules and enforcement mechanisms that work in practice as well as in theory, especially in an era where NTBs have replaced tariffs as the restriction of choice.

V. The Limitations of the Economic Theory Supporting GATT

Scitovsky argued that a future GATT must be designed to avoid the mutually disadvantageous Cournot-Nash solution of countries seeking to maximize national welfare through trade restrictions without allowing retaliation by others. What Scitovsky understood in 1942 was that an organization was needed which could assist the international community in avoiding the mutually disadvantageous outcome that would necessarily arise out of the unregulated workings of the international market. GATT has yet to fulfill this role.

A. Strategic Interaction Defeats the Invisible Hand

The well-known Prisoner's Dilemma, which illustrates international trade self-regulation, involves two suspects who are arrested and charged with a crime. The suspects are held in separate cells and are prevented from forging an iron-clad cooperation agreement. The District Attorney separately offers each prisoner the chance to turn state's evidence, i.e., to convict the other prisoner. The jail sentence received by each prisoner as a function of their decisions are represented most simply in the following bimatrix: the length of the

25. Thus in parts II and III of this article, background on GATT and the role of law in the GATT system is provided.

26. The authors are working on a study of the recent U.S.-Canada Free Trade Agreement and its impact as a matter of law and economics on GATT. They are also working on a proposed study on the promise and peril implicit in the internationalization of American business.

27. See generally, J. Tirole, THE THEORY OF INDUSTRIAL ORGANIZATION (1988). As Tirole puts it, the Nash equilibrium concept is the "basic solution concept" in game theory. The theory applies to circumstances in which a player cannot increase his payoff by engaging in an alternative course of activity because of the action of his competitors. The player's present activity becomes his equilibrium action.


29. See any introductory game theory text (for example, R. Luce & H. Raiffa, GAMES AND DECISIONS (1957)) for a formulation and more rigorous treatment of this classic problem.
jail sentence is known as that prisoner's "payoff".

THE PRISONER'S DILEMMA

<table>
<thead>
<tr>
<th>Prisoner</th>
<th>Mum</th>
<th>Fink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prisoner</td>
<td>(1,1)</td>
<td>(5,0)</td>
</tr>
<tr>
<td>Mum</td>
<td>(0,5)</td>
<td>(4,4)</td>
</tr>
</tbody>
</table>

If both confess, they each receive a sentence of four years. If both refuse to confess, they would both receive a one year sentence because of insufficient evidence. However, if one implicates the other and the other has not done the same, the confessing prisoner is released, while the unfortunate "good-natured" prisoner faces five years of imprisonment.³⁰

The astute reader will immediately find that each prisoner prefers to confess, no matter what the other prisoner does. In game-theoretic parlance, this is expressed by saying that each player's "dominant strategy" is to fink.

This simple example can be recast in the following international trade setting. Two countries attempt to agree on the elimination of all tariffs which hamper trade between them. If they both refrain from cheating on the agreement, they both receive the well-known benefits of free trade. In the terms used in the original example, each would receive the short 1 year sentence. If one country imposes trade restrictions on the other, and the second country does not respond in kind, the first, implicating country benefits, while the other country loses. It is well-known from traditional trade theory that the efficient outcome in which world welfare is maximized is that of free trade in which there are no restrictions. This arises in a perfectly competitive situation in which the Invisible Hand is left to its own devices. The simple Prisoner's Dilemma argument applied to this situation illustrates, however, that such an outcome is not attainable. Further, the dilemma illustrates that the Cournot-Nash solution involves a suboptimal outcome in which trade restrictions persist because of the rational strategic concerns of the two countries. Thus is Adam Smith's mighty Invisible Hand felled by Augustin Cournot's strategic interaction.


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trade theory. Traditionally, the pure theory of international trade has been approached from one of four directions: Ricardian comparative advantage,\textsuperscript{32} the crude exchange model,\textsuperscript{33} Hecksher-Ohlin factor proportions\textsuperscript{34} theory and the specific-factors model.\textsuperscript{35}

B. Two Limitations of the Traditional Approach

There are many limitations to these traditional approaches, but for the purposes of this article it suffices to discuss only two of them. First, traditional theories of international trade have always been less than satisfactory as policy tools, particularly because of their lack of robustness at the empirical level. Second, there is a widely held view that international trade policy is increasingly concerned with the division of a shrinking international pie.

Today, very few individuals, even economists, are willing to accept the unqualified beauty of free trade. In 1947, Joan Robinson wrote:

> The popular view that free trade is all very well so long as all nations are free-traders, but that when other nations erect tariffs we must erect tariffs too, is countered by the argument that it would be just as sensible to drop rocks into our harbours because other nations have rocky coasts . . . . [W]hen the game of beggar-my-neighbor has been played for one or two rounds, and foreign nations have stimulated their exports and cut down their imports by every device in their power, the burden of unemployment upon any country which refuses to join in the game will become intolerable and the demand for some form of retaliation irresistible. The popular view that tariffs must be answered by tariffs has therefore much practical force, though the question still remains open from which suit in any given circumstances it is wisest to play a card. (emphasis supplied)\textsuperscript{36}

\textsuperscript{32} The Ricardian model stresses the role of technological differences as the basis for trade, although it does allow a role for demand-side factors.

\textsuperscript{33} The exchange model concentrates on the demand side and is useful as a vehicle for discussing the stability of the international trade equilibrium and the determination of the terms of trade. The first issue was raised by J. Hicks, \textit{Value and Capital} (1939); the second by Samuelson, \textit{The Transfer Problem and Transport Costs: The Terms of Trade When Impediments Are Absent}, 62 \textit{ECON. J.} 278-304 (1952).

\textsuperscript{34} The Heckscher-Ohlin model focuses on "differences between countries in their relative factor endowments and on differences between commodities in the intensities with which they use these factors." R. Jones & P. Kenen, \textit{Handbook of International Economics} 14 (1984). The Heckscher-Ohlin model is particularly notable in that it offers an explicit treatment of the effects of trade on the internal distribution of income.

\textsuperscript{35} The specific factors model differs from the Heckscher-Ohlin model in its assumptions about the mobility of factors of production among sectors. This difference in assumptions is sufficient for the results to be appreciably different from those of the Heckscher-Ohlin model. For an introduction to this class of models, see Jones, \textit{A Three Factor Model in Theory, Trade and History}, in J. Bhagwati, \textit{Trade, Balance of Payments, and Growth: Essays in Honor of Charles P. Kindleberger} (1971).

The game-theoretic terms speak for themselves. The concept of the tariff negotiation process is a game which goes back much further to Torrens, Mill, Sidgwick and Bickerdike, although it was largely neglected by the main corpus of international trade theory cast in the Neoclassical mold. What is also interesting in Robinson's words, however, is the question from which "suit" it is best to pick one's retaliatory action. During the past 20 years, and especially since the virtual elimination of tariffs as important barriers to trade (to a large extent a product of the Tokyo Round), the answer to this question has consisted of two words: Non-Tariff Barriers.

VI. The Challenges Facing the GATT System: An Elementary Game-Theoretic Approach

Nations can switch from easily monitored tariffs to "covert protectionism" in the form of various ingenious combinations of NTB's as trade barriers become increasingly difficult to regulate. Given this development, it is essential for GATT to formulate rules to regulate such behavior. These rules must satisfy a number of institutional constraints imposed by the particular environment in which GATT must operate.

First, the new rules must specify a set of criteria according to which a country would be deemed to be in accordance with or in violation of the GATT charter. Second, these criteria must be relatively simple, and must not entail an enormous commitment of bureaucratic resources by GATT. Third, given that the GATT has not

37. Note that Von Neuman and Morgenstern's Theory of Games and Economic Behavior had been published in 1944. It was only much later that this theory was applied to questions of international trade. For recent examples of the New International Economics, in addition to Krugman and Helpman (1985), supra note 23, see H. Kierkowsk, Monopolistic Competition and International Trade (1984) and A. Dixit, Strategic Aspects of Trade Policy (1986).

38. In Economics, "Neoclassical has become a term synonymous with 'mainstream.'" The approach was codified in rigorous mathematical terms in Paul Samuelson's monumental Foundations of Economic Analysis (1947). The Ricardian model focuses on production and on the changes in resource allocation when trade is opened up.


been vested with effective supranational powers enabling it to police its own rules, the criteria must be largely self-enforcing, with GATT's role being restricted essentially to that of a monitoring agency.

The distinguished economist and pioneer thinker on international trade issues, Jacob Viner, saw things much in the same way when he wrote that:

"[E]ven if agencies could be established to enforce a code of rules, no one seems as yet to have discovered even the elements of a possible pattern for such a code which would have some logic, be reasonably fair to most parties under most circumstances, be simple enough to be administrable, and be acceptable to countries which feel themselves to be possessed of relatively strong bargaining power."  

It would be unrealistic to pretend to offer specific answers to questions that experts could not resolve. Relatively recent developments in the theory of games, such as those presented by Jacob Viner, however, do offer the "elements of a possible pattern for such a code," and certainly offer the logic that is needed to resolve the issue at hand. Arguments suggesting game-theoretic analysis and application in the international arena provide a starting point for a solution.

A. Some Elementary Game-Theoretic Arguments

Attempts to bring elementary game-theoretic arguments to bear on the GATT monitoring issue begs the question of why Neoclassical trade theory has failed to provide cogent suggestions of its own. For the student of the Neoclassical international economics literature, the answer is obvious to the point of being tautologous. With the exception of the optimal tariff literature, Neoclassical international trade theory has ignored strategic issues which involve the interaction of a small number of actors. This strategic interaction is, of course, the behavior that GATT policy is supposed to be designed to regulate.

There is, however, a second question. The "New International Economics," inspired by the Industrial Organization (IO) Renaissance (itself generated by the introduction of Game Theory to IO) is not a new phenomenon. Why then has its influence not been ex-

42. The Industrial Organization Renaissance is generally held to have begun in the 1970's and consisted in a rapid expansion in the theoretical literature in the field, fueled by the application of game-theoretic techniques. For a comprehensive survey of the "state of the art" of the field, see generally, Tirole, supra note 27; R. Schmalensee & R. Willig, Handbook of Industrial Organization (unpublished manuscript).
tended to the international policy arena? Further, why has it been conspicuous by its absence in the GATT forum? An answer can best be found in an oft-cited sentence from the concluding pages of Keynes' *General Theory*:

> Madmen in authority, who hear voices in the air, are probably distilling their frenzy from the writings of some long-defunct academic scribbler.4

Without suggesting that the authors of international trade legislation, and in particular the authors of the GATT charter and the various amendments to it, are "madmen," it is believed that they are "in authority," and that they are "practical men."44 As such, they do indeed distill their "frenzy," or, wisdom, from the writings of old-fashioned Neoclassical economists. Given that economically-motivated suggestions for reform of GATT rules rest on the intellectual foundation of a largely outdated school of economic thought, it is hardly surprising that they have failed to provide satisfactory answers.

B. Super-Games

The elementary lessons drawn from super-game theory can best be illustrated by an extension of the simple Prisoner's Dilemma game.46 Consider the same example as above, in which the two countries are negotiating the removal of trade restrictions, in which both countries have an incentive to cheat. In this case, however, the game is repeated several times in succession. Extension to an intertemporal context has several important consequences. First of all, and as shown rigorously by a number of recent abstract theoretical papers, any outcome, and in particular the outcome in which both prisoners cooperate, can be supported as a Nash equilibrium.46 This suggests that, given a number of pre-conditions, both countries in the simple trade restriction game considered above can eliminate tariffs. Moreover, such behavior will be individually rational. In other words, the cooperative outcome will be self-enforcing as being in the interests of all, thus supporting the utility of the so-called "Folk Theorems."48

44. Id.
46. See supra note 27 and accompanying text.
47. See supra note 45.
48. The name "Folk Theorem" stems from the fact that the basic theorem has been
The precondition for this result is the existence of adequate "punishment strategies" which ensure compliance with the cooperative outcome. A "punishment" in super-game terminology consists of actions inflicted by all the players participating in the game on a player who deviates from the cooperative agreement. A "punishment" for a country that attempts to cheat by raising its tariffs unilaterally, allows the other country to do precisely the same to the deviating country. Such punishment will continue until the gain that accrued to the deviant from cheating is completely wiped out and turned into a loss.

The purpose of these possible punishments is to deter a potential cheater from deviating from the cooperative outcome in the first place. For this threat to be credible, the potential deviant must believe that the other countries will punish him if he does indeed cheat on the agreement. To ensure that this potential deviant does take the threat seriously, it is also necessary that a country that refuses to punish a cheater be himself punished. Such an argument can be carried forward ad infinitum until the initial desire to cheat is completely neutralized by the certainty of severe punishment that will follow a deviation. The concept of the credibility of threats forms the crux of one of the most productive innovations to game theory in the last two decades: the concept of "subgame-perfection."49

The existence of credible threats is sufficient to deter deviation from the cooperative outcome in which trade barriers are dismantled. These threats do not depend upon the existence of an international policeman for their enforcement. It is in the individual interest of each participant in the international trading system for them to be credible. As long as these threats are credible, they need never be carried out. This suggests the roles that GATT should really be playing: a monitoring agency which attempts to detect when cheating is occurring and a coordinating agency that ensures that the response of the international community to a nation deviating from the cooperative outcome be appropriately severe. Thus, there is neither a reason for GATT to play the role of an international policeman, nor a need to attempt the Herculean task of vesting it with such supranational powers.

This does not indicate that GATT is without a role to play in an NTB oriented system of trade restrictions, but only that the legal

known for quite some time to game theory practitioners but was never attributed to any one author. Various versions of the Folk Theorem are, however, associated with J. Friedman. See, J. FRIEDMAN, GAME THEORY WITH APPLICATIONS TO ECONOMICS (1986).

49. See Selten, Spieltheoretische Behandlung eines Oligopolmodells mit Nachfragetragheit, 12 ZEITSCHRIFT FUR DIE GESAMTE STAATSWISSENSCHAFT 301-24 (1965); and also Selten, Reexamination of the Perfectness Concept for Equilibrium Points in Extensive Games, 4 INTERNATIONAL JOURNAL OF GAME THEORY 25-55 (1975).
framework for the conduct of trade relations and the formal enforcement mechanism will not be as directly intertwined as they have been in the past. Dispute settlement procedures must be adapted to meet the challenge of a self-enforcement approach that is not restricted in its methods by the obsolete formal mechanisms of the tariff-based past. 50

The lessons learned by students of the criminal justice system support the arguments advanced by economic game theory, as well as those lessons derived from "common sense." A swift, sure and measured response to transgressions is more effective as a deterrent to such activity than a more severe, but less certain one. If the sanctions imposed are also seen as procedurally fair, though imperfect, the total effect will be a system of enforcement of practical norms that will be acceptable to all concerned. 51

This is the situation facing GATT as it attempts to adapt to the challenges of an NTB-based era of increasing restrictions on imports. It is asserted that what superficially appears to be an unlikely source of conceptual and practical assistance, the experience of the criminal justice system with deterring illegal activity, can be a useful source of ideas for a self-enforcement approach to dealing with NTBs.

VII. The Problem of Detectability: Optimal Trigger Mechanisms 52

When a deviator faces a credible threat on the part of the international community, then the cooperative outcome of free trade (or at least freer trade) will be self-enforcing. If, however, detecting cheating is a problem, one is brought back to the initial discussion of the increasing prevalence of NTBs, whose presence is extremely difficult to detect.

Suppose that an exporting country, Us, experiences a large decline in the demand for a particular class of products it exports to a foreign country, Them. Suppose also, national economies being what they are, the Them economy is at the same time subject to business cycles, periods of boom being associated with strong demand for imports from Us, and periods of bust with weaker demand for imports.
The decrease in the demand for the products exported by Us could therefore be the result of low demand in Them, due to a cyclical downturn, the imposition of a tariff, quota, or other explicitly detectable trade restriction by Them, the imposition of an undetectable NTB by Them, or all of the above in various combinations.

It is clear that the problem facing policymakers in Us is one of "signal extraction." For example, one must extract the cause from a harmful result such as the fall in the demand for its exports. If an explicit tariff or quota is not in evidence as the main culprit, the problem of disentangling the resulting possibilities remains. If, after factoring out legitimate causes, such as cyclical and other macroeconomic phenomena, the decline in the demand for its exports is still not accounted for, it seems reasonable for Us to believe that it has been subject to covert NTB measures. Deciding which causes are legitimate and what imputed level of NTB intervention constitutes a violation of the cooperative agreement, is the monitoring role to be played by GATT.

Agreeing to such a set of measures is not likely to be an easy task for negotiators. The rules governing when a country is in violation of the agreement would be for the most part straightforward. These measures do not involve the complex measuring costs of production in different countries. They involve assessing the historical patterns of demand for a particular country's exports, estimating what demand should be at a particular time, factoring out those elements which cause realized demand to differ from expected demand, and thus arriving at a rough assessment of whether or not an NTB has been in effect during the period in question. In order to reduce the margin of error involved, these computations will be supplemented with additional sources on the prevalence of NTB's. There is still some question as to whether these investigations of hidden protectionism, investigations that GATT is already well-equipped to handle, should be biased in one direction or the other.

Surprisingly, the answer is in the affirmative. Tests of violation of the cooperative agreement should be biased in such a way that more violations are found than exist in reality. In light of the super-game arguments presented above, the purpose of this bias should be obvious. It is to ensure that no cheating country goes unpunished even if this means punishing a number of innocent parties. Bias in the opposite direction would be disastrous, as it would weaken the credibility of the threat of punishment.

VIII. Proposed Standard of Proof and Deterrence Rationale

Unlike the Anglo-American theory of criminal responsibility which is based on a "beyond a reasonable doubt" standard of proof
as well as a "just deserts" rationale for punishment, our approach to NTB offenses is predicated upon a lower and more readily achievable standard of proof and is justified on a deterrence rationale. A deterrence rationale is less concerned with justice in an individual determination of a violation than with the overall effect of a finding on the actual and potential transgressions of the rights of others. While a self-enforcement approach may not meet the strict standards of proof required by our system of criminal justice, it is contended that such a standard is not necessary for policing and punishment duties within a system governing international trade relations.

Under this proposed reform of the GATT system, countries will be punished briefly and occasionally for deviations from free trade they have not committed. Thus, such deviations simply arise out of the uncertainty prevalent in the international trading environment and their domestic economies. Periods of cooperation in which trade flows freely will be interspersed with periods in which relatively innocent players on the international scene will be subject to punishment. While this may appear to be "cutting off one's nose to spite one's face," the unfair punishment of a very restricted number of countries some of the time and for very brief periods pales in comparison with all countries effectively punishing each other even more harshly forever — which is the situation we are faced with now and which will persist indefinitely if action is not taken. Periodic vaccination with diluted protectionism, a vaccination which ensures that no country contracts the disease, is therefore needed to quell the epidemic.

IX. International Free Trade and the Most-Favored Nation Principle

International free trade can arise as a self-enforcing equilibrium if the monitoring issue is resolved, a set of criteria under which behavior defined as constituting a violation of the rules is developed, and adequate punishment of culprits can be devised. In the meantime, and in the belief that the three preceding issues can and will be resolved only in the long run, it is worth considering whether current goals espoused by GATT are steps in the direction of freer trade or instead constitute barriers to such progress. The cornerstone of the GATT agenda is the unconditional Most Favored Nation Principle and it is therefore to this policy prescription that we now turn.

53. It is our position that the likelihood of some errors in the assignation of NTB violations in a self-enforcement mechanism can be alleviated in its unjust effect by a reduction in the severity of the sanction. A quest for perfect justice is an impossible one and that is a major weakness of the current approach.
54. GATT art. 1.
The unconditional "Most Favored Nation (MFN) Principle" is enshrined in Article I of the General Agreement on Tariffs and Trade (GATT), which states: "any advantage, favor, privilege or immunity granted by a contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties." The issue at hand is whether the unconditional MFN principle leads to greater trade liberalization or whether it is in fact a barrier to the dismantling of protectionism. A simple thought exercise illustrates why the answer is not so clear-cut.

Consider three countries who have granted MFN status to each other and who are negotiating over tariff reductions. Under the unconditional MFN, two countries reaching a bilateral accord to reduce tariffs to a given level must grant the same reduction in tariffs to the third country with which they both have an MFN agreement. Does the third country have any incentive to enter into negotiations with the other two? A priori the answer would seem to be "no," because the MFN clause creates an "externality." The benefit of the agreement concluded between the first two countries accrues to the third country, regardless of the fact that it did not participate in the negotiations and did not agree itself to any such tariff reductions. One may then ask whether the first two countries will ever find it in their interest to conclude an agreement. As noted by Cooper: "MFN creates the possibility of 'free-riders' on any trade negotiation, and with the number and economic importance of countries now members of the GATT having increased sharply, this free-rider aspect may well stifle further progress toward trade liberalization."

With the preceding comments in mind, it is perhaps surprising that in his well-known textbook, Ethier (1983) claims that "[s]ince the MFN clause implies that bilateral agreement will have direct multilateral consequences, the multilateral approach to negotiation is much more efficient (emphasis supplied)." Bhagwati (1983), notes that there is little disagreement about the "intrinsic desirability" of MFN. Wolf (1983) notes that the MFN rule is a tool for bringing about "maximum trade liberalization."

It seems that Ethier et al are implicitly positing some process
which leads the world onto a Pareto-improving path, or at least a path along which tariffs are falling. Furthermore, this process depends on the unconditional MFN clause. Very little theoretical research has been done in this area, although some exploratory work has been carried out by Ai and Arcand (1987). In their model, in which it is assumed that the unconditional MFN rule is strictly adhered to, a sequence of bilateral trade negotiations can, under certain reasonable conditions, lead to a worldwide general reduction in the level of trade restrictions.

While the Ai and Arcand study is certainly not conclusive proof that bilateralism in conjunction with the unconditional MFN leads to free trade, it does suggest that criticisms of the GATT’s unconditional MFN rule based on the “free-rider” argument may be misguided, and that the unconditional MFN may indeed be an institutional mechanism which leads to greater world efficiency. It also suggests that eschewing the bilateral approach, with its proven track record of modest successes, such as the recent U.S.-Canada agreement, in favor of a global multilateral approach riddled with question-marks, is at best an uncertain proposition, or at worst a counter-productive one.

X. Conclusion

While the MFN Clause in Article I of the General Agreement remains the formal central core of the structure of the current world trade system, the increasing reliance by GATT member states on sophisticated non-tariff approaches to restraining imports has changed the operational ethos and methods of that system. The MFN approach of Article I of the General Assembly has led to an integrated system of international trade. Although it is not as successful as originally hoped, it has accomplished many of its basic goals within a tariff-based international trading system. To a large extent the growth of NTB’s can be traced to the general success of the GATT approach in reducing tariffs. The rise of alternative barriers to trade and the renewed interest in bilateral trade agreements also reflect the end of that era which saw the emergence of GATT.

A system that can work in an NTB based trade environment can help preserve the essential principle of GATT: mutual universal reciprocity. In this light it is posited that a self-enforcement approach such as the one presented in this article remains the most practical, albeit limited, approach to be followed within the original philosophy, if not within the formal mechanisms of GATT.
