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37th Annual Conference of the Australian Agricultural Economics  
Society

University of Sydney

February 9-11 1993

Recent Changes in Nontariff Barriers in World Trade

by

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This paper is concerned with recent changes in nontariff barriers to trade as the environmental revolution gathers momentum. Two of the major areas of impediments to trade at the present time are sanitary and phytosanitary measures introduced by countries to protect the health of consumers, livestock and plants, and environmental protection measures introduced to achieve desirable social ends. Both areas are currently being discussed in the GATT and both areas need to be interpreted under Article XX of the GATT. Health measures have been the subject of study for a number of years but it is only recently that environmental measures have been recognised in this context.

After discussing trade theory considerations briefly, the paper discusses the relevant GATT provisions and current international negotiations taking place. Commonalities between the two types of potential trade barrier are identified. The paper then presents a brief assessment of the current state of sanitary and phytosanitary measures followed by an outline of current developments and thinking in the environmental area, and connections between the two. The paper only scans the issues and does not cover any topic in depth. It has not been possible to reference restricted documents accessible to the author.

### Theory

While GATT treats sanitary measures and environmental measures in a similar way, the domestic impacts of the two are quite different.

The economic effect of a nontariff barrier that restricts imports is to increase the cost of production for imported products with the result that the consumer pays a higher price than in the absence of the measure. The imposition of the barrier moves the supply curve for free trade further to the left (S' in Figure

\* The author gratefully acknowledges assistance from L A Petrey, S Rajasekar, R A Sandhu, and J Sinner in the preparation of sections of the paper.

Figure 1: Effect of a Nontariff Trade Barrier on Domestic Market

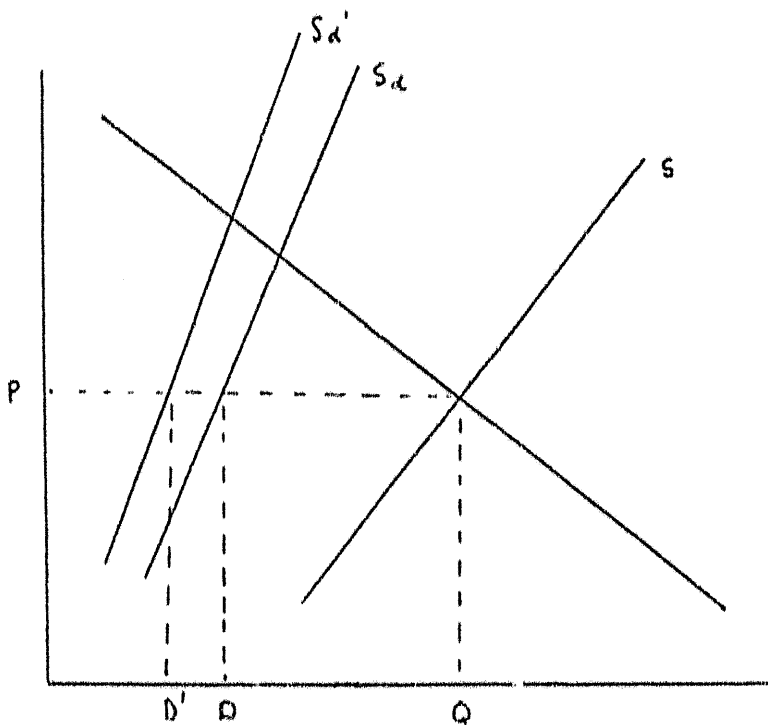
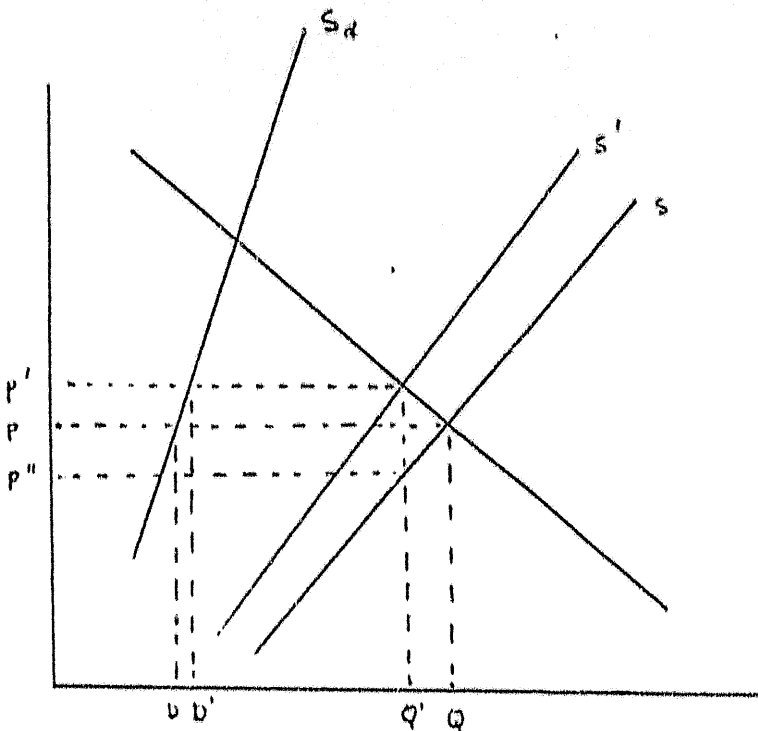


Figure 2: Effect of a Domestic Environmental Charge on Domestic Market

1.). With higher prices to consumers, prices to foreign producers are lowered ( $P''$ ). Domestic producers will gain from the arrangement ( $P'$ ). With unit elasticities, the losses to international producers are greater than the gains to domestic producers. Such barriers are attractive because the gains for an industry group are easily identified while the losses to consumers are spread and not easily identified.

Nontariff barriers can be quite wide ranging and include, inter alia, quantitative restrictions; levies, duties and deposits; administrative practices; and technical requirements, such as sanitary and phytosanitary measures.

In the case of an environmental measure, it would be necessary to identify the extra "cost" of meeting some environmental standard laid down elsewhere. Such an externality raises the social cost of production; this also can be demonstrated as a shift of the domestic supply curve to the left in the case of an agricultural importer (From  $S_d$  to  $S_d'$  in Figure 2). In this case, domestic suppliers are put at a disadvantage and increased opportunities are available to foreign suppliers. The first country benefits as it can import product more cheaply than it can produce it and it also reduces its production of a good with high social costs. It has been said that imports are substitutes for soil erosion, or put another way, a country can export its problems by trade in environmentally sensitive goods.

But if a border instrument is used to enforce the environmental standard on foreign suppliers, the domestic producer gets additional protection, and the exporting country is penalised as in Figure 1.

In the case of an agricultural exporter, the externality measure raises the cost of production, and reduces internal demand and exports. In a sense, environmental interventions reduce an exporting nation's competitiveness.

From this kind of analysis it can be demonstrated that liberalising trade in a good with adverse environmental impacts improves a small country's welfare if it imports the good; but if it exports it the negative environmental effects are subtracted from the gains from trade and the welfare effects are ambiguous. By importing a good that causes pollution during its manufacture, a country lets some other country worry about its polluting properties. By exporting it, an exporting country continues to face the social cost of these externalities in the home market (Anderson 1991, 1992).

It is useful to distinguish between domestic environmental problems and international or global problems. Domestic problems relate to costs generated by environmental programmes and standards. They tend to reduce international competitiveness. At the same time, governments and firms in other countries may interpret such standards as barriers against their imports into that country. Global problems are those that cross international borders. Pollutants can contaminate a lake, river or sea that is

shared by other countries. The discharge of carbon dioxide into the atmosphere affects other countries. These are called transborder or global physical spillovers (GATT 1992).

#### GATT

The current round of GATT negotiations include specific negotiations on sanitary and phytosanitary (SPS) measures. The framework for SPS measures is believed to be useful as a starting point for discussing environmental measures (Runge 1990). Both raise questions of required standards of performance and international cooperation to remove unnecessary restrictions. Both are justified according to exterior judgements about their desirability. Both have the capacity to reduce trade flows and international competitiveness.

The GATT Articles, adopted by the contracting parties in 1947, explicitly recognised the possibility that domestic health, safety and environmental policies might override general attempts to lower trade barriers. GATT Article XI, headed "General Elimination of Quantitative Restrictions" stated in para (1):

No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

Article XX, headed "General Exceptions", provides:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade...nothing in the Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures;...(b) that enable countries to take such measures as they consider necessary to protect plant, animal, human life and health;...and (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption; ...

These provisions provide the necessary exceptions for countries to take such measures as they consider necessary to protect plant, animal and human life and health, and the conservation of exhaustible natural resources. For a discussion of the origin of the drafting of these clauses see Charnovitz (1991, p 45), particularly the interpretation placed on the term "exhaustible natural resources". It is important to note that GATT panels have established that fish stocks qualify as exhaustible natural resources, thus widening the definition well beyond raw materials

and minerals as was probably originally meant (Charnovitz 1991, p 51).

GATT law also emphasises that any restrictions imposed on foreign practices for environmental or health reasons must also reflect a domestic commitment, so that the exceptions cannot be misused as a disguised form of protection (Runge 1990).

Signatories to the Tokyo Round Agreement on Technical Barriers to Trade (known as the Standards Code) were required to notify other parties through the GATT Secretariat of products to be covered by proposed technical regulations if the regulation differs from international standards (GATT 1992). Since 1980 there have been 211 notifications in the area of environment protection and 168 notifications in the area of public health and safety. GATT (1992) note that as environmental awareness has increased, the use of health and safety standards has become more common. They suggest that both types of measure reduce international competitiveness through increased costs; health and safety measures through nontariff barriers and environmental standards through pollution charges and the like. It is significant that the number of notifications in the environmental field exceeds the number covering health and safety.

The Standards Code covers all products, industrial and agricultural, and applies to a wide range of technical standards for products and to certification systems for those products including permissible deviation from such standards. The Code links environmental requirements with SPS requirements in the manner of Article XX:

...No country should be prevented from taking measures necessary...for the protection of human, animal or plant life or health, or the environment...subject to the requirement that they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries...

(GATT 1992, p 23)

There is provision for dispute resolution in the GATT rules. A country can ask for a panel to be appointed to review a particular domestic policy in the light of existing GATT obligations. Recent panels in the environmental area have made a number of rulings which indicate how international agreements will guide the development of case law. Some of these rulings are discussed below.

The thrust of the current SPS negotiations is to establish a common set of rules and disciplines to guide the adoption, development and enforcement of sanitary measures. Greater transparency would facilitate the achievement of this uniformity. More importantly, greater international "harmonisation" of standards, rules and procedures using international organisations is likely to produce trade benefits. Better frameworks for consultation and dispute settlement would also assist. Finally, the concept of "equivalence" is being discussed whereby

equivalent methods of achieving the same result obtain international acceptance (Rajasekar 1991).

It is argued that similar processes will have to be developed for environmental measures (Runge 1990). Countries have already introduced various environmental instruments and are likely to introduce more with the current interest in Rio and other UNCED initiatives. The argument runs that trade will be less distorted and the global environment more readily protected if national governments pursue similar policy targets. Further, governments could be granted the flexibility to achieve similar targets through different but "equivalent" instruments. Ultimately, negotiations could aim to achieve some "harmonisation" of standards, rules and procedures for environmental protection. Runge argues that it may be necessary to go beyond the language of GATT Article XX and to develop principles and protocols to guide national and international judgements about the appropriate matching of targets and instruments. This would probably have to wait until after the completion of the Uruguay round.

#### Sanitary and Phytosanitary Measures

World trade in many agricultural products is large and growing and is regulated by internationally agreed sanitary and phytosanitary bilateral agreements. Most countries have well to highly developed protocols for import standards for such products. They basically refer to human and animal health issues. Such measures represent an area where current international negotiations can produce a worthwhile trade improvement by harmonisation and greater transparency.

Harmonisation of standards will encourage countries to adopt where ever possible standards and guidelines that have been adopted by international standardising bodies such as Codex Alimentarius, the Organisation International Epizootics (OIE), and the International Plant Protection Convention. Countries would have the right to adopt measures more stringent than those provided by international standards but such cannot be established without reasonable scientific justification. Harmonisation will embrace more active support for and participation of international scientific organisations.

The purpose of the negotiations (GATT 1991) has been to define the process clearly, make the process as transparent as possible, and promote greater consistency in the assessment of risk linked with importations of product. Such assessment should take into account available scientific evidence, relevant production and process methods, and pest and disease profiles in the exporting country.

GATT recognises three principal steps in sanitary and phytosanitary risk management that may give rise to restrictions on trade, inadvertant or otherwise (GATT 1992). First, risk assessment involves an evaluation of the likelihood of a pest or disease becoming established or its potential consequences; or, in the case of additives, contaminants and toxins, the potential

adverse effects on human or animal health. Second, it involves determining the acceptable level of risk; that is, meeting societal preferences through "negligible risk" levels for food quality, or through acceptable "tolerance" levels for contaminants. Third, it involves the selection and application of health and sanitary risk management measures by Governments. It is the latter which have the potential to impose unnecessary burdens on imported goods.

The agreement seeks to make clearer rules on the so called "onus of proof" between exporting and importing countries. Countries seeking a higher level of protection than one set by international standards would need to provide appropriate justification for their standards. In turn this would need a systematic set of rules and procedures for risk assessment.

The SPS negotiations are seeking to establish ground rules that are acceptable to participating countries. Exporting countries would not have to undergo more rigorous control, testing and approval procedures than those applying to domestic producers. There would be time limits on information processes and consideration of applications for new protocols. Where international standards exist, consideration would be given to allowing interim access on the basis of the relevant international standard until such time as the first country makes a national determination (Rajasekar 1991).

In the meat trade, for example, there is already a great degree of standardisation and harmonisation. This has not always been so. Blackhurst and Subramanian (1992) point out that it took 70 years from the first call for international cooperation in 1834 for the containment of the spread of contagious disease to get an international organisation put in place. International organisations (including scientific organisations) have thus been working in the SPS area for quite a long time. There is an international network of government veterinarians who share similar ideals and standards based on rigorous and uniform scientific training. Difficulties have been worked through and acceptable formulas evolved.

An analysis of the meat protocols in the Pacific basin countries confirms this (Petrey and Johnson 1992). Their survey covers certification procedures, labelling requirements, inspection requirements, byproduct requirements, transshipment requirements, and rules for consumer packs. The majority of measures are related to human health issues and animal health issues. A minority of the protocols surveyed could be related to unashamed protection of domestic producers. An important aspect identified is the interpretation of such protocols at ports of entry. There is plenty of anecdotal evidence that inspectors can interpret the protocols at different levels and thus raise or lower the protectionist device when occasion demands. It is clear also that some areas of certification such as labelling and correct language are very time consuming in negotiation and acceptance. This confirms the GATT view of such barriers to trade.



These problems underlie the GATT initiative to make the measures more transparent. There is a strong case for using international fora to standardise sanitary and phytosanitary measures to lessen the chance of potential abuse.

The GATT negotiations stress the role of harmonisation and risk assessment. International scientific bodies are to be involved and by necessity scientific persons. Technical considerations of judgement form the basis of the existing protocols in the meat trade area. This has implications for trade in the plant and fish areas as well (Major 1992). There is therefore a human component to discussions on nontariff barriers to trade that emphasise the guarantees that one government gives to another. Petrey and Johnson (1992) draw attention to the role of the technical expert in this kind of international negotiation; the end result which emerges is likely to be an amalgam of technical and political considerations.

The GATT rules could be criticised for favouring a domestic country's interests. Article XX(b) provides the necessary powers for countries to take such measures as they consider necessary to protect plant, animal and human life and health. It would be very difficult to argue a case against such domestic measures in terms of this provision (Rajasekar 1991), though the 1990 case on Thai cigarette import bans did uphold that the measure was unnecessary "because other methods were reasonably available" (Charnovitz 1991, p 49).

Criticism from another direction has come from Non-Government Organisations (NGO's) that current attempts to "harmonise downwards" the SPS measures drop to the lowest common denominator and hence reduce the protection to consumers. The NGO's see the hand of the transnational corporations (TNC's) in the movement to lower standards. The Codex standards are observed to be lower than some country standards and hence a movement to their standards is a weakening of protection for the consumer (see, for example, Shrybman 1990, pp 31-33).

Nevertheless the SPS negotiation represents a mature international agreement where the necessary structures have been put in place, where there is common agreement on terms, and where there is an agreed scientific rationale and appeal system. Trade in many agricultural products has expanded under the current regime and these gains need to be protected from the introduction of further trade-sensitive technical measures.

### Environmental Issues

As previously discussed, the market system and pricing structures do not internalise the full resource cost of environmental inputs. Some government interventions like excessive price support can exacerbate the problem by moving in the opposite direction. Some policy instruments proposed that might reflect the true social costs, like border taxes and trade bans are the same instruments that GATT reforms are trying to remove. In addition, these instruments do not fully internalise the relevant

costs (Sinner 1993).

The compatibility of freer trade and environmental protection will thus depend upon the acceptance of an international system that recognises the appropriate social costs. In such a system traded prices would recognise these costs and the international division of labour and resources would be more environmentally optimal. Country policies on the other hand would be required to use appropriate instruments like polluter pays to internalise the the environmental costs and to refrain from border devices which impeded any sort of exchange or trade.

This proposition is a conceptual answer to the problem. The difficulty is that there are poorly defined property rights in many countries, inappropriate exchange rates, differing levels of development between nations and therefore different discount rates, differing national priorities, and differing interpretation of scientific evidence. These complicate the establishment of appropriate social prices and hence the achievement of any environmental optimum through this route.

Nevertheless the concept points in the direction which some harmonisation of environmental standards might go. Negotiations could concentrate on those global issues like water and atmospheric pollution where international agreement is paramount. Given the above difficulties there has to be an agreed approach to social pricing so that marked discrepancies between countries do not develop (Sinner 1993).

Such agreement would enable international production to move to a less distorted and environmentally friendly regime. Economists would prefer that "first best" solutions are sought to both the trade and the environmental problem. Solutions to problems in one area should not be sought through second best interventions in the other. National policies should combine the best attributes of both.

From a public choice point of view, wider reasons should be sought for market failure (Hickman and Laidy 1992). Environmental policies should not be regarded as arising in a passive and benevolent fashion to correct such failure; instead, they should be seen to take shape through an engagement between interest groups, mediated by existing political institutions. Solutions are unlikely to be optimal in an abatement sense, but would reflect the current trade-offs among the groups involved.

Current discussions of these issues in the OECD focus also on matching environmental and policy targets or standards with appropriate instruments. Such policies would be a first best solution. It would be desirable that policies should minimise distortion to market signals while remaining environmentally neutral. Where policies cannot be kept neutral separate environmental policies might be justified. The latter should be kept trade neutral in turn except in exceptional circumstances.

A multilateral approach to trade problems should follow so that

governments pursue similar policy targets. It may be necessary for individual countries to be allowed freedom to achieve similar targets by equivalent instruments and not necessarily by a harmonisation of instruments. This would allow for difference in resource endowments and conditions by using similar but not necessarily the same policies to achieve these ends, and not be penalised by nontariff barriers in doing so.

In summary there is more potential compatibility between trade and environmental objectives than is generally recognised. A first best solution is to match targets and instruments. An openness and transparency is crucial to all instruments. The contracting parties to GATT have a challenge to formulate new articles that recognise that the Article XX exemptions provisions could be more accommodating. Current discussions in GATT and the OECD seek to meet this challenge.

How can the GATT take account of these broad principles? The rules of the GATT agreement are primarily concerned with limiting the extent to which countries can discriminate in trade; trade between home goods and imports, between imports from different countries, and between home goods and exports. A non-discriminatory environmental policy should therefore not be subject to any GATT constraint under these rules (GATT 1992, p. 7).

The debate is about resource allocation and prices. Countries need to move towards managed resource allocation in which costs do more fully reflect environmental externalities. Recognising and correcting for the difficulties of pricing externalities is consistent with the GATT principles of legitimacy, non-discrimination, national treatment and transparency, while avoiding unnecessary technical barriers to trade.

Runge (1990) discusses the setting of standards which may or may not be "unnecessary obstacles to trade". He refers to the case heard by the Panel set up under the US/Canada Free Trade Agreement to examine Canadian restrictions on exports of Pacific Coast unprocessed salmon and herring. The Canadians held that they were pursuing "conservation and management goals" for the fish by requiring them to be landed in Canada. Essentially the Canadians sought to justify under Article XX of the GATT (section g) that conservation of exhaustible natural resources was involved. The US view was that the restriction was an environmental policy acting as a disguised restriction on international trade.

The panel found against the Canadians as the conservation measures could have been achieved in some other way, and a previous panel had established that such measures should be primarily aimed at conservation (Charnovtitz 1991, p 50). Runge generalises from this case that it might be possible to envision the development of criteria based on (a) estimated costs of health, safety and environmental regulations; (b) evidence of who bears the costs, and (c) judgements of whether such measures would be imposed in the absence of any trade effects. The latter

seems to be particularly important as a test of an appropriate non-tariff barrier.

Of four other cases heard by panels in recent years (GATT 1992, p 26), one complaint involving a proposed US prohibition on Canadian tuna imports in response to Canadian landing requirements was rejected because no controls were placed on US fleets; one involving a proposed Thailand prohibition on cigarette imports was rejected because no restriction was placed on domestic production; one complaint involving US taxes on petroleum (brought by Canada and others) to fund clean-up of toxic sites was rejected as it was found consistent with the GATT rules; and one brought by Mexico against the US for a proposed labelling requirement of "dolphin-safe" tuna, was accepted because it imposed one country's environmental law on another. If the latter was permitted, the potential for trade abuse would be greatly enlarged. Thus the Articles are not informative on the scope for protecting resources outside a state's jurisdiction; further discussions are continuing, however, to provide some form of international agreement on the relationship of environmental standards in one state to other states.

This has been a very abbreviated discussion of environmental issues and trade. Some issues are further developed in Sinner (1993). As far as GATT is concerned, the mechanisms for dealing with environmental issues are similar to those for dealing with SPS measures (ie through Article XX). A great deal depends on future actions of national governments in introducing appropriate domestic environmental control policies. The few cases which have reached the dispute stage indicate that uniform treatment of domestic and foreign producers is a major requirement, and that one country cannot attempt to control resources outside its territorial jurisdiction by imposing environmental laws on another under existing GATT provisions.

#### Summary

This discussion brings out the direct relationship between domestic policy formation and trade impacts. Yesterday's domestic policy becomes today's nontariff barrier.

Technical barriers to trade were widely examined in the GATT Tokyo Round and are an important part of the Uruguay Round. The focus on sanitary and phytosanitary measures is giving way to a focus on environmental measures. At international borders, both types of measure can operate as a nontariff barrier.

Both sets of measures would be improved by international action on harmonisation, equivalence and transparency. The role of the international scientific agencies is common to both and is crucial to a successful outcome.

As Charnovitz maintains, Article XX does encompass environmental measures adequately. He maintains that GATT should get on with what it does best, i.e. judging the legitimacy of non-tariff barriers proclaimed under the banner of the environment (ibid,

p 55).

First best solutions to environmental issues lie in countries internalising their own externalities. In areas such as global physical spillovers (greenhouse gas, for example), international cooperation is required to reach satisfactory resolution of developing problems.

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