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Harmonizing Health and Safety Standards in the GATT: Proposals and Issues

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Abstract: Each of the tabled GATT proposals includes as a major negotiating item the harmonization of phytosanitary regulations, which function as nontariff barriers to trade. These health and safety standards have proliferated since World War II and are problematic because many are technically complex and contain genuine elements of consumer protection. This paper discusses economic aspects of health and safety standards under autarkic and trade conditions, including health and safety benefits. It then reviews elements of current GATT proposals from Canada, the Cairns Group, the EC, and the USA relevant to phytosanitary regulations, concluding that, despite broad agreement on some general principles, few substantive specifics have emerged, and some significant stumbling blocks remain. Tensions between national autonomy and international conformity in establishing regulations and equivalent versus identical standards mean that careful negotiation will be needed to establish enforceable liberalization. Recommendations for negotiating principles conclude the paper.

Introduction

Each of the major proposals thus far in the new GATT round of multilateral trade negotiations includes as a major negotiating item the harmonization of phytosanitary regulations. Many recognize the significant progress made since World War II in reducing tariff barriers to industrial trade; nevertheless, agricultural trading partners have suffered in international markets from nontariff barriers. One important class of these nontariff barriers is health and safety standards set up in the name of consumer protection.

Phytosanitary regulations (referred to hereafter as health and safety standards or HSSs) have proliferated in agricultural and food trade in the last 40 years despite international efforts to subdue their disruptive trade effects. A premise of this paper is that HSSs have gained such a secure and notorious position as nontariff barriers to trade precisely because of their ambivalent and nontransparent nature: they are the only type of trade barrier having any potential benefit to consumers. This is one reason they are difficult to dislodge. Neither tariffs, quotas, nor voluntary export restraints can be claimed to benefit consumers. At most, rather shallow arguments can be made about protection of infant or transitional industries to generate or preserve employment.

However, proponents of HSSs can and do argue that HSSs may offer benefits of a public good nature, reductions in morbidity or mortality or pain and suffering, in cases where product safety or characteristics are not easily knowable or observable in the market. Further, some argue that such standards may legitimately differ between countries due to differences in dietary patterns and agricultural practices and thus cumulative exposure to foodborne hazards. The potential for alliance between interests of consumers and certain producer groups seeking to protect markets should be noted. In the USA, for example, soyabean interests have recently been pressing for mandatory labelling for imported tropical oils. Do these producer groups seek to protect consumer health or markets?

In tackling conflicts over HSSs, negotiators are often quick to agree that protection of human health is desirable, while unnecessary nontariff barriers are not. Discussions of the legitimacy or lack of legitimacy of a given HSS generally tail off fairly rapidly into genuinely arcane technical discussions of sampling methodologies, risk exposure models, acceptable daily intakes, threshold levels, and such *ad infinitum*, so that free-trading economists and well-intentioned politicians soon lose interest. If and when resolved, these discussions are only a preliminary to equally complex deliberations of international lawyers concerning acceptance of international standards into national law.

Reductions in HSSs impeding international trade will therefore depend on development of a different negotiating model than more conventional types of trade barriers, one which: (1) recognizes the potential legitimacy of particular HSSs and provides for effective representation of consumer and producer interests; and (2) integrates specific technocratic and broader political economic perspectives repeatedly over the course of discussions. Because liberalization of phytosanitary regulations is likely to founder in its implementation

rather than its initiation, continuous monitoring and feedback to international negotiating bodies must accompany agreed statements of general principles.

Economic Aspects of HSSs in International Trade

Most true HSSs are motivated by domestic considerations. Among other costs and benefits, regulatory benefit-cost analysis identifies and values benefits to consumers consisting of reductions in risk of disease or death from the consumption of safer consumer products, in this case food products. Conceptually, willingness to pay for these reductions in risk is the correct measure of benefits to consumers. Frequently, however, assessing the amount consumers would be willing to pay is the problematic step because consumers do not have perfect knowledge and are not forced to reveal their bids for increased safety.² Economists have spent a great deal of time in recent years devising ways in which consumer revealed market bids in one instance may be transferred for valuation purposes to a similar case.

In the absence of market bids, an alternative method of evaluating the benefits of HSSs identifies probable cost savings from the regulation. Thus, medical costs saved and productivity losses avoided are the two main measures in this type of evaluation, generally considered an underestimate of what the consumer would actually be willing to pay.

In the absence of economic measures for value of life or lost productivity, public health analysts can sometimes develop scenarios estimating the incidence of disease or disability attributable to a food safety hazard. In many cases, however, information pertinent to each of these types of benefit determinations is not available, and therefore benefit estimates are not available.

Among the costs of the health and safety regulation in the domestic economy are the increased costs of production required to produce products meeting the specifications of the regulation. Regulations may require particular changes in processing techniques (processing standards) or merely specify the required attributes of the final product (product standards). Finally, regulations may require particular product information on labels or in package inserts or advertising (information standards).

While most regulatory benefit-cost analysis is partial and static in nature, one ought to account for changes in exposure to public health risk resulting from regulatory-induced changes in consumption patterns. Thus, if safety regulations raise the price of red meats relative to poultry meat and consumers substitute poultry meat for red meat, a complete analysis of the benefits and costs of the regulation would take into account the net impact on public health of a partial switch towards consumption of poultry meat and away from red meat as well as the altered quality of the red meat itself. Changes in consumer perceptions of the safety of red meat might also expand red meat demand.

As borders are opened to international trade, the calculus of benefits and costs encompassed in an economic analysis of a HSS expands. Consumer gains from free trade include broader product choice and lower product prices due to well-known benefits from specialization in products for which a country has a comparative advantage.

The impacts of a HSS in this case depend on several factors. If the HSS applies only to products produced in country A but not country B, then producers in country A may be at a cost disadvantage (depending on production technology). Consumer actions in this case and whether consumers will benefit from trade or not depend on: (1) the risk inherent in the unregulated imported goods and (2) whether unregulated imported goods are distinguishable from regulated domestic goods. If informed consumers are free to select either good and if the risks from the unregulated goods are minimal, consumers will benefit from trade.

If the HSS applies to all countries, then impacts on consumers depend on which producers can meet the HSS. If exporting countries do not meet the standard, then the situation reverts to autarky in the regulated nonexporting country. Consumers pay higher prices for safer products, and some consumers substitute other less expensive goods. The

impact on world markets depends on whether the regulated country is a significant actor in world markets (Peterson, Paggi, and Henry, 1987). If all countries meet the standards, consumers pay higher prices than before domestic regulations but lower prices than in the regulated autarkic situation.

Consumers in exporting countries benefit from lower prices if exporters are able to sell fewer products in world markets, but exporting producers who do not comply with regulations lose from reduced exports, particularly if the regulating country was a major buyer in world markets. In addition, reductions in trade result in dead-weight losses from loss of economic efficiency.

The critical issues in sorting out the costs and benefits of HSSs that influence international trade are thus the risks of being regulated against and consumer willingness to pay to reduce these risks; efficacy of regulations in accomplishing risk reduction; costs of complying with the regulations; changes in consumption patterns (and exposure to risk) induced by changes in relative prices and by changes in perceived quality of the regulated products.

Potential spillover effects are associated with HSSs if companies seeking to comply with stricter standards in country A no longer produce goods conforming to the less strict standard for countries B and C. This might occur if countries B and C represent smaller markets and country A is less burdened by producing for only one standard. Then, consumers in countries B and C pay for HSSs not chosen by their governments in their behalf.

One problematic aspect of divergent HSSs is the high transaction costs associated with regulatory compliance in international settings. Countries seeking to export to multiple trading partners, each with different HSSs, must invest diverse resources in regulatory affairs, including intelligence, compliance, and legal advice. These transaction costs may be asymmetrically distributed. For example, penetrating the vast US consumer market may be less difficult and more cost effective for an exporter due to its relative regulatory uniformity than attempting to export to the EC or Asia where national standards prevail and individual markets are smaller. This fact means that countries such as the USA may benefit proportionately more from international liberalization of HSSs than the EC.

LDCs are also disadvantaged by HSSs due to their limited resources for regulatory intelligence and compliance. Recognition of this fact lay behind formation of the Codex Alimentarius Group of FAO and WHO.

In view of the difficulties inherent in disentangling consumer protection (public and individual health and safety and economic integrity) and market protection elements of a HSS that serves as a nontariff barrier, analysts can expect difficulty in integrating these into computations of overall producer and consumer subsidy equivalents or overall levels of protection. In the current Uruguay Round of GATT, these or similar measures are recommended as the yardstick by which trade protection and agricultural subsidization can be calibrated for disassembly. For HSS to be analyzed in terms of trade or agricultural protection for purposes of international negotiations, an additional procedure is required to determine the nature and extent of consumer benefits from the regulation in question.

Current GATT Proposals

While those GATT proposals currently tabled (the US, EC, Canadian, and Cairns proposals) suggest some relevant principles for forthcoming negotiations, they supply remarkably few details. Among the general statements are: negotiations related to agricultural products are considered extremely important in this round of the GATT; agricultural negotiations will cover products of first- and second-stage processing as well as primary products; and issues of domestic agricultural support are considered of primary importance because domestic excesses drive many of the distortions in international trade—by implication this pressure fosters use of HSS protective devices as well.

The EC considers that "the [GATT] code on technical barriers to trade is not properly suited to the particular case of animal and plant health regulations and barriers." The EC wants "to negotiate a specific framework of rules which should lay down criteria for the harmonization of regulations at international level. This framework of rules should also cover production methods and processes."

The USA has stated: "On sanitary and phytosanitary regulations and barriers we propose: that regulations be harmonized and be based on internationally agreed standards. In addition, regulations pertaining to processing and production methods should recognize equivalent guarantees as opposed to identical methods. ... We believe rules and procedures governing technical barriers to trade should be expanded: to apply more explicitly to processes and production methods; to give greater recognition to the principle of equivalence of laws and regulations; and to provide procedures for early technical and policy consultations on legal and regulatory changes that have a high potential for disrupting trade." President Reagan stated on July 6, 1987, "... our proposal calls for instituting uniform food health regulations around the world to prevent nontariff barriers to agricultural trade." Negotiations should focus on all agricultural commodities, food, beverages, forest products, and fish and fish products. Insofar as animal, plant, and human health and safety are not affected, he called for harmonized health and sanitary regulations based on international standards and processing and production methods on equivalent guarantees.

The Canadian proposal states: "The three major elements of agricultural trade reform which the Punta del Este declaration identifies (access, subsidies, and technical regulations) are inseparable in the sense that failure to deal effectively with one element is likely to prejudice any gains which may be negotiated in other areas. Past GATT negotiations have revealed clearly the limitations of a commodity specific, request and offer approach. The experience of seven previous rounds suggests that adoption of a request and offer approach would doom the agricultural negotiations in the Uruguay Round to failure." Canada calls for "strengthened commitments to prohibit the use of technical regulations as disguised trade barriers, encouraging the use of international standards where possible, and agreeing to minimize the trade effects where harmonization of technical regulations is not feasible."

The Cairns Group proposal suggests that a long-term framework for sanitary and phytosanitary measures be established "which reflects only strict justification to protect human, animal, or plant life or health. The aim shall be to harmonize sanitary and phytosanitary regulations to remove barriers to international trade: and where full harmonization is not technically feasible adverse trade effects of differing regulations will be minimized to the maximum extent." Specifically the Cairns Group calls for: "establishing a procedure of notification and reverse notification to achieve full transparency concerning the application of such measures, with provision for review under the relevant provisions of the General Agreement, clarified as appropriate: harmonizing sanitary and phytosanitary regulations and standards among countries with the aim of removing barriers to international trade. Even where full harmonization is not feasible, countries would give greater recognition to the principle of equivalency of treatment; developing procedures to require any contracting party so requested by another contracting party to set out the precise terms and timetable of steps required to be undertaken to achieve conformity with its sanitary or phytosanitary regulations; providing technical assistance from countries with regulations in place for exporting developing countries would be given to help them overcome the substantive and administrative problems arising from phytosanitary and sanitary measures."

The Cairns Group also calls for effective procedures for verification and settlement of disputes. "Countries should provide binding commitment to implement agreed schedules including an undertaking not to resort to any measures to circumvent commitment ... [they suggest] need [for a] surveillance mechanism ... No introduction of new sanitary or phytosanitary regulations operating as a disguised barrier to trade and inconsistent with the long term objectives of negotiations."

The common threads that emerge from the four proposals seem to be a recognition of the need to deal with phytosanitary and sanitary regulations in a broad manner; a recognition that full harmonization may not be possible and that, in such cases, trade distorting effects should be minimized; and a general consensus that international standards

should provide the basis for agreement. Other common themes are the request for early notification of regulations with trade disrupting effects and agreement that no new regulations should be instituted as other barriers are reduced. Uniquely mentioned by the Cairns Group are provisions for technical assistance in meeting standards.

In addition, whereas a commonality appears in the call for recognition of equivalency of nonequal standards and systems, a point of some difference or ambiguity between the US and EC positions relates to procedures and processes. Reading between the lines, while both parties mention procedures and processes being brought under the aegis of an expanded code of standards applying to technical barriers, the implications as seen by the USA and EC may diverge, if recent experience is any guide. The USA calls for recognition of equivalency of laws and regulations. The EC asks that procedures and processes be dealt with by the standards. In recent months, the USA and EC have disagreed strongly on principles of equivalency as related to safety standards. In the so-called meat wars, the EC has issued two broadsides at the equivalency of US safety standards: one concerning use of hormones in livestock production, the other concerning sanitation within US meat plants. In each case, the EC has chosen to attack a production process through nonequality of production standards rather than the final characteristics of the food product in question.

Thus, tensions between those advocating principles of national flexibility in standards setting versus global conformity will complicate forthcoming negotiations. A corollary is the predictable tension between technical negotiators trained to focus on a particular situation and political negotiators seeking a broader concurrence and therefore prepared to trade off costs and benefits.

Institutional Design and Negotiating Prognosis

An institutional design for progress in future attempts to harmonize phytosanitary regulations was left largely unspecified in the four initial GATT proposals. Equally important are new incentives that must be provided by GATT encouraging national acceptance of international rules. Currently, several international organizations participate to one degree or other in food standardization. The valuable work performed by the 129 member countries of the Codex Alimentarius, particularly, offers substantive analysis from which to begin. Weaknesses, however, include lack of enforceability and the rather slow pace of progress in deliberation and incorporation of Codex standards into national rules. One promising avenue may be to integrate the priorities of GATT (once determined) and Codex to guide preparation of draft standards and to expand GATT rules with respect to integrating these standards into rules of international trade. The Codex is currently organized into 28 subsidiary bodies, 5 that deal with general policy and coordination, 6 with subject matters relevant to work of all commodity committees, and 17 with specific groups of foods. The USA, for example, hosts the Committees on Food Hygiene, Processed Fruits and Vegetables, Cereals, Cereal Products, Pulses and Legumes, and Residues of Veterinary Drugs. The conformation of these groups often reflects trading concerns that are still relevant. Others may be needed when stock is taken of those commodity or product groups with the most burdensome phytosanitary regulations.

The Codex works through the use of technical expert committees, consensus building, and voluntary compliance. Standards developed by the group may be accepted by member nations on one of three levels or not at all. Codex acceptance options are: "full acceptance," "target acceptance," and "acceptance with specified deviations." In the third case, a country may agree to abide by its existing regulations but not limit the entry of goods from another country complying with the Codex standards. Application of this principle may be a negotiating goal.

Other international groups currently set food standards, not necessarily related to the Codex. The most significant of these may be the EC, which issues binding regulations and less binding directives, each of which may pertain to food standards in selected cases.

Once established for the EC, an EC standard is often applied to third countries seeking to export to the EC. Because EC countries are struggling with their own harmonization problems, they may be less likely to accept what they consider noncomplying goods from third countries.

In the end, due to the varying legal, social, economic, and production conditions and traditions among countries, acceptance of essential equivalency of trading partner standards without actual identity is perhaps the most critical requirement for progress in the harmonization of standards. Secondly, the agreement to use product standards rather than process standards whenever possible permits countries the flexibility to produce satisfactory products in distinct, innovative ways. Finally, when consumption risks are minimal, information remedies such as ingredient or process labelling should be used to permit consumer choice and reduce efficiency losses from barriers to trade.

Notes

¹National Center for Food and Agricultural Policy, Resources for the Future.

²Indeed, a theme in the economics of public goods is that consumers actually have an incentive to disguise their willingness to pay in the hope that they may become free riders while others pay.

Reference

- Peterson, E.W.F., Paggi, M., and Henry, G. (1987) "Quality Restrictions as Barriers to Trade: Case of European Community Regulations on the Use of Hormones," *Western Journal of Agricultural Economics*, Vol. 13, No. 1, pp. 82-91.

DISCUSSION OPENING—Ewa Rabinowicz (Swedish University of Agricultural Sciences)

The paper consists of three parts. The first part discusses welfare economic foundations of HSSs, focusing on market failures, the second part reviews current proposals of various nations in GATT, and the third part formulates proposals for the process of negotiations. My main critical point is that these three parts are not related to each other. In the last part of the paper, the author recommends that product standards rather than process standards should be used. However, the relative merits of the former as compared with the latter are not discussed anywhere in the paper. In the first theoretical part of the paper, HSSs are discussed from a very general point of view.

To continue on this line of lack of correspondence between the parts of the paper, in the second part the author describes positions taken by various countries. This is a positive approach as compared with the basically normative way of reasoning used in parts 1 and 3. This descriptive part of the paper could be related to the rest of the paper in at least two ways. One would be to analyze the political feasibility of the recommendations made by the author in the light of current positions of different countries in GATT. The second, which I find particularly interesting, would be to ask why differences exist between different countries in their opinions on HSSs and whether these can be explained in terms of the market-failure approach used by the author in the first part of the paper. The author mentions that HSSs may legitimately differ between countries. However, the question if, or to which extent, the actual differences are legitimate is not asked. One can otherwise suspect that HSSs are, at least partly, deliberately used as an impediment to trade.

This leads me to my second critical point, namely the lack of the public choice perspective. Pointing out possible market failures as a justification for regulations is only

one side of the coin. Government failures should be considered as well. An obvious danger of government failures exists in formulating HSSs. Consumer protection is most vigorously argued by *producers* facing competition; e.g., pesticide residues in imported vegetables are often discussed in Sweden. No controversy exists over the use of pesticides in production of coffee. Another group that is obviously interested in pursuing the regulatory effort beyond the point where it is economically sound is the bureaucracy—lots of people make a living by formulating, applying, and controlling standards. This group is also likely to insist on national rather than international standards.

So where does that leave us? Both market failures and bureaucracy and government failures exist in using HSSs, and we should be aware of that. Our role as economists should be to define the point where the legitimate consumer protection ends and the protectionistic trade policy starts. Hopefully, this point should not be different for different countries, and we should be able to arrive at international standards. In this context, we should distinguish between food safety and food quality, which are often confused, since the case of consumer protection is much stronger for safety reasons. The quality aspects can be left to the market, where the institution of “trade marks” can solve a lot of quality problems. Information is also a way of coping with quality issues, as the author points out in the final part of her paper.

GENERAL DISCUSSION—*Bill R. Miller, Rapporteur* (Department of Agricultural Economics, University of Georgia)

One participant asked for further comments on the need for equivalence of laws and product standards, and whether they will really help. Kramer replied that the conflict between internal autonomy and international standards is a serious obstacle to harmonizing health and safety regulations. Although the benefits are obvious, a great deal of subjectivity is involved in the establishment of each country's standards. Perhaps the best to hope for is the establishment of a common process to determine standards.

Another participant asked if standards to protect safety of the workforce were ever a factor in trade relations. Kramer replied that the subject was beyond the scope of her paper.

Kramer agreed with the discussion opener that protectionism arises from political as well as market failure. Objective data will be needed as the basis of both political and market developments. Although additional testing adds cost, it might provide the information required for least costs of production for those items to be traded.

Participants in the discussion included D. Southgate and S. Thompson.