

Who's Afraid of the GMOs?
EU-US Trade Disputes over Food Safety and
Biotechnology

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I. Introduction

With the growing internationalization of the food industry, the new products emerging from the mastery of biotechnology, and the firming up of trade rules for agricultural products, trade conflicts over food regulatory issues are becoming more common. Most of these conflicts arise from differences in regulations which are imposed on food trade for the ostensible reason of protecting plant, animal or human health from disease or other affliction as a result of trade. The fear is often expressed that such regulations do little more than protect the livelihood of local producers who would otherwise be unable to compete. As non-tariff barriers to trade, the spotlight has been turned on the elimination of such back-door protective measures. The Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement), adopted as part of the Uruguay Round package, attempted to make it easier to distinguish between legitimate (science based) regulations and those which appear to be protecting producer interests or reflecting irrational consumer fears not based on scientific evidence.

This paper explores some of these issues, in particular in the context of US – EU trade relations, with the objective of determining how one might improve them. The two most prominent trade conflicts are the beef-hormone dispute, which revolves around the EU's ban of the use of hormones in the production of beef, to which the US objects, and the EU's apparently sluggish approval procedure for the introduction of the products of biotechnology into the food chain. Unless these and other similar issues are clarified and resolved, billions of dollars in transatlantic trade could be jeopardized.

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The food industry has a major interest in preventing such conflicts. But industries far removed from food and agriculture could also suffer considerably from the continuation of transatlantic tensions over food trade. One only has to remember the fallout from the Chicken War of the 1960s, which led to increased US duties on light panel trucks, brandy, starch and dextrine as retaliation for the loss of access to the poultry market in Europe.¹

At the international level, these issues have posed problems for the GATT for many years. Under the GATT 1947, sanitary and phytosanitary measures which impinged on trade were covered by Article XX (b), which allows countries to employ trade barriers “necessary to protect human, animal or plant life or health” which would otherwise be illegal so long as “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 as a disguised restriction on international trade” (Josling, Tangermann and Warley, 1996, p.209). But Article XX had no teeth: there was no definition of the criteria by which to judge “necessity”, and there was no specific procedure for settling disputes on such matters. The attempt in the Tokyo Round to improve on this situation through the Agreement on Technical Barriers to Trade (1979), known as the Standards Code, also failed. Though a dispute settlement mechanism was introduced and countries were encouraged to adopt international standards, relatively few countries signed the Code, and a number of basic issues were still unresolved.

Intensive negotiations in the Uruguay Round led eventually to a new SPS Agreement which tried to repair the faults of the existing code. This Agreement defined new criteria which had to be met when imposing regulations on imports more onerous than those agreed in international standards. These included scientific evidence that the measure was needed; assessment of the risks involved; and recognition of the equivalence of different ways of testing and sampling. In addition, the dispute settlement mechanism was considerably strengthened under the WTO to make it easier to obtain an outcome that could not be avoided by the losing party.² The force of the SPS Agreement comes in part from the more precise conditions under which standards stricter than international norms can be justified and partly from the strengthened dispute settlement process within the WTO. In this regard,

¹ The US has announced it's retaliation list if the banana dispute (not a health issue) is not resolved. This includes French handbags, British biscuits and Italian ham.

² The Decision on the Application and Review of the Understanding on Rules and Procedures Governing the Settlement of Disputes (the Dispute Settlement Understanding) provides a framework for the better enforcement of panel rulings. To block the adoption of a Report from a Panel now requires consensus. Any party may appeal the ruling (on issues of law), but the Appellate Body Report is final.

much was expected of the panel report in the Beef-Hormone dispute between the EU on the one hand and Canada and the US on the other. This was widely seen as a test case for the new SPS Agreement.

Correct identification of the underlying problems is an essential first step to resolving the issues. The paper will consider the differences in legal and regulatory systems that might contribute to trade conflicts and the differences in public policy and private interest that exacerbate any structural differences in legal practices and procedures.

The paper begins with a brief account of the current trade conflict between the EU and the US on the incorporation of GMOs into food products. A second section discusses the possible causes for this conflict and attempts to distinguish between fundamental differences in attitudes to risk and technology from issues of market position and commercial gain. A third section looks at some means of resolution to the issues, including the recent developments in the food law of the US, the EU and the UK, the possible re-negotiation of the SPS Agreement, the harmonization of food safety law in a transatlantic relationship and a broader emphasis on international standards.

II. Recent Transatlantic Trade Tensions

No-one seems happy with the present state of affairs in the area of sanitary and phytosanitary measures. A recent study conducted in the US of trade impediments arising from food and agricultural regulations identified a significant number of cases where food safety issues seemed to conflict with attempts to liberalize markets and expand trade (Roberts and DeRemer, 1997). The EU also has its problems in the area of food safety, with the trauma of the BSE crisis laying a heavy hand over the Commission and its dealings with the Parliament, as well as the relations between the UK and the other members. The issues have recently come to a head in transatlantic relations as a result of the findings of the WTO Beef-Hormone Panel, and the subsequent Appellate Body Report, and the slowness of the EU to respond to these rulings.

To understand better the issues at stake it may be useful to look more closely at a specific case that has caused tensions across the Atlantic in recent years. The beef-hormone case is probably the most contentious, and has been around for several years. The issue of genetically-modified organisms (GMOs) is much newer, but potentially affects much more trade. It raises the most interesting issues for the future of trade relations.

GMOs

Biotechnology holds an ambiguous place in the food and agricultural system as both the potential driving force behind new technology, which will provide “designer” plants and animals, and the *bête noir* of consumers and environmentalists, posing untold threats to the safety of our food supply.³ At first, the trade issues appeared more of a curiosity, but as more and more crops are planted which incorporate some form of genetic modification, the greater is the likelihood of a major confrontation between trading partners. At present the expectation is that about 40 percent of the corn and soybean crops in the US will soon be from varieties that have been altered using bio-technical methods. Such plant varieties are

³ A third link runs from biotechnology to intellectual property rights, ensuring that controversy will continue in the area of patents for new organisms as well as the more traditional issues of the rights to use new varieties from older plant and animal breeding methods. In this respect it is encouraging that the EU Parliament has recently approved new rules regarding the patenting of new biotechnology processes. (See “Europe Approves Move on Biotechnology Patent Laws”, *Financial Times*, Thursday 13 May, 1998, page 12).

know collectively as “genetically-modified organisms” (GMOs), and the products are often referred to as “novel foods”.

In contrast to the beef-hormone case, products containing GMOs are not banned in Europe, though their acceptance has been slower than in the US. Several GMOs are at present in goods in circulation and indeed are available for use by producers. An early use of such bio-techniques was launched on the market in 1995, where FlavrSavr tomatoes saved processing costs and gave consumers cheaper tomato paste. Other products where genetic modifications have been developed include potatoes, cotton, squash and rapeseed. But two products have attracted the lion’s share of attention. One is a genetically modified corn variety, developed by Novartis, which is resistant to the European corn borer. This pest, which reduces yields, is difficult to control by other means such as insecticides. Another is a soybean plant engineered by Monsanto that resists a herbicide (Roundup, made by the same company) that can then be sprayed on the crop to control weeds. Both have found widespread acceptance by farmers and their use is spreading. However, environmental and consumer groups have protested in sometimes dramatic ways and are still trying to slow the process of adoption. In this they have been helped by certain member states which have taken positions which differ from the EU.

The process of approval of GMOs varies from country. In the US, the FDA indicates, after what it deems adequate testing, that it will “not oppose” the use of a particular product. The USDA likewise has to be convinced that the “new” plant is not going to be a pest, but then allows its use. Approval, as such, is not required of a GMO. This process is fairly speedy, and over 30 such crops have been cleared in this way. The EU, by contrast, has yet to find an expeditious approval process. The authorization has to come through the Commission (Directive 90/220 “On the deliberate release into the environment of GMOs”) rather than through the national governments, but the procedure can take up to 18 months and delay the adoption of new technology. The European biotechnology industry shares an incentive with US companies and other firms to have this process speeded up.⁴

Health fears stem from the characteristic of bio-technology to introduce genetic material from plants in a way that would not occur in nature.⁵ Allied to this are fears of “out-crossing” as the new plants breed naturally with other crops. Herbicide-resistant soybeans

⁴ A new Directive is under consideration which may help to speed this process.

⁵ One major advantage of bio-technology over traditional plant breeding is the ability to introduce genetic material into species that would not be able to cross-breed in nature. This is also the major cause for concern by those that fear unpredictable consequences from such unnatural crosses.

may accidentally produce herbicide-resistant weeds. Only time will tell whether any of these concerns are justified.⁶ For the present the concern of industry is that the regulatory process does not hamper their development plans and cause trade conflicts which might polarize opinion and add xenophobic elements to an already emotional debate.⁷

III. The Reasons why Food Safety Conflicts with Trade

Why have these issues such as GMO acceptance been so difficult to resolve? Three possible explanations come to mind. The first would emphasize the legal differences between the US and Europe, pointing to the impact of different systems of law. Such differences would range all the way from the political structure to the laws of product liability. The second explanation lies in the murky realms of political culture, and emphasizes the differences between the consumer reaction to risk and novel foods. As Tangermann puts it “[the] progress that was hoped to be made in the Uruguay Round through a new arrangement for sanitary and phytosanitary measures is in danger of being lost again, due to the reluctance of European consumers and policy makers to accept scientific judgements” (Tangermann, 1998, p.22). There are two variants to this explanation. One emphasizes the difference in consumer tastes as such while the other puts more weight on the inability of the EU to take firm decisions in the area, thus leaving the way open for groups ostensibly concerned with consumer health to infiltrate the process. A third explanation that might be advanced rests on different commercial interests across the Atlantic rather than different attitudes to risk. Actors in the market, including governments are doing no more than following their economic noses, even when doing so leads them into deep water in political relationships. This is the most optimistic of the three explanations, as the same actors can move in a different direction if the incentives are adjusted.

Legal Differences

Most regulatory systems are taken for granted, as a part of the infrastructure provided by public authorities. As such they do not enter explicitly in the economic analysis of trade. But differences in regulations can cause trade impediments, in areas of food law as in other

⁶ Observations of this out-crossing have been reported, but not confirmed by independent research.

⁷ Most of the genetic improvements so far have been aimed at the producer, lowering costs or reducing past risks. Many of the improvements that are “on the drawing board” will be aimed at consumers, making foods more healthy or convenient. It remains to be seen whether such products will find a more rapid acceptance by consumers.

sectors of commerce. Some of these impediments are a reflection of different circumstances and different attitudes toward food safety in different countries. Like environmental regulations, these can often reflect different income levels. One would expect stricter health and safety standards where consumers are less worried about the absolute availability of food and can focus more on its quality. But many of the differences in food law are arbitrary, reflecting not different circumstances but different legislatures writing regulations in different ways to the same end. Some of the differences are significant enough to generate strong vested interest in their perpetuation. Trade policy issues arise when regulatory differences both interfere with trade and are less-than-obviously justified by different circumstances.

One recent discussion of regulatory differences as they impact upon trade emphasizes the innovations that the EU has been forced to make in its own attempts to facilitate trade among member states (van Scherpenberg, 1998, citing Stephen Woolcock). This “integration” approach is contrasted with the more traditional approach followed by the US in NAFTA. This shows up in the treatment of national policy differences, regulatory competence, the coverage of agreements and the system of enforcement. North America relies on *national treatment* rather than *mutual recognition* to deal with national policy differences; employs *host country control* rather than *home country control* for regulation; chosen *request and offer* type approaches to the coverage of integration, rather than the *comprehensive* approach favored by the EU; and opts to enforce agreed rules through *national* laws rather than *supranational institutions* which are the hallmark of the EU. This analysis gives a useful starting point to an exploration of the differences in food safety legislation, though such an exploration is not attempted here.

Political Differences

The second explanation of the many conflicts between the EU and the US in food safety issues is one that is commonly heard on both sides of the Atlantic. It rests on the assertion that Europeans have lost confidence in both science and their governments, and therefore react irrationally to food scares, novel foods and unfamiliar farming methods. The impression is given that the “Old Continent” has lost its taste for adventure and risk, and settled down into a comfortable existence where safety is a paramount consideration. This notion is bolstered by the existence of active environmental and consumer movements in many EU countries which might be tempted to exploit public feeling for their own agenda, often targeting foreign multinationals corporations and the process of globalization as the root causes of many of the problems.

The same argument paints US consumers as more technologically sophisticated and willing to accept change. Environmental groups such as Greenpeace have not focussed their attention on GMO issues in the US as they know that there is less public distrust of science. Regulatory bodies such as the FDA have kept consumer confidence, and the initial doubts about new foods or new production methods soon are dispelled. Of course such acceptance can mask complacency, but over the decades scientific and technical progress have been associated with positive advances in the quality of life rather than added hazards and disasters.

There is superficial support for the notion of a critical difference between consumers in the US, who expect and even embrace changes in foodstuffs introduced by technology, and those in Europe, who think that science is in league with the devil. There certainly seems to be a greater reluctance in Europe to adopt novel foods, along with continued resistance to the use of hormones in beef raising. But this distinction between a paranoid European consumer and a scientifically literate US counterpart is easily overdone, and may in fact lead to inadequate policy conclusions. US consumers have shown themselves to very sensitive to food safety issues, as is documented below.

Nor is it helpful to categorize Europe as the fount of all trade-disruptive national legislation. Conflicts between trade policy and domestic politics are universal. Several issues that have defined the debate over standards in the US have shown a scant regard for the niceties of international trade rules. One only has to recall the intense debates in California over the issue of pesticides, which threatened the completion of the GATT Uruguay Round (the voters rejected the Big Green proposition and thus averted the problem). The Tuna-Dolphin controversy also was a clear example of US courts, at the request of consumer and environmental groups, adopting a position in violation of trade rules.⁸ The sequel to the Tuna-Dolphin case is that of Asian shrimp fishermen who have been catching sea turtles in their nets: in order to sell shrimp in the US market they must convince the US authorities that they are helping to preserve the turtles. The operation of various other sanitary and phytosanitary regulations in the US has been the subject of controversy (European Commission, 1997). The US has queried fumigants used in wine manufacturing in Europe, and prohibited the import of unpasteurized milk products, though several states allow the

⁸ The Marine Mammal Protection Act of 1972 aims at restricting the number of dolphin caught accidentally by the tuna fleets in the Pacific. In enforcing this law, a US Court authorized embargoes on items of trade from countries which did not meet the standards. A GATT Panel requested by Mexico found against the US, but was never adopted. Mexico changed its own regulations to be similar to those of the US, and the industry adopted “dolphin-safe” indications on retail packages to allow consumers to choose.

domestic production and marketing of such products. Fresh dairy products such as yoghurts are also effectively banned as a result of US legislation. All-in-all it does not seem as if the fears and fads of consumers, and the forays of other interests into food safety issues, are any the less “unscientific” or “democratic” than those of their European counterparts.

Commercial Interest

Another set of explanations can be derived from political economy, that branch of economics that deals with the motivation of public and private actors and the incentive system set up by particular policy options. The alternative explanation of the resilience of “non-scientific” SPS barriers to that of the paranoid European consumer is that of rent-seeking by producer groups. This was indeed a common explanation for the beef hormone ban in the early years. Beef producers were supposed to have captured the regulatory process, presumably through their influence on the European Parliament and the Agricultural Directorate General (DG VI). Problems do, of course, arise for the trade system when SPS mechanisms are captured for protectionist purposes. This can come about through influence on the regulatory authorities by interest groups and through the design of regulations in such a way that foreign suppliers have less chance of meeting the criteria. The SPS Agreement introduced the science test as a way to be able to distinguish such cases from genuine protection of animal, plant and human health. But even the most valid regulations can be misused to give economic protection to an industry rather than health protection to the consumer.

More interesting at present is a variant of this explanation that suggests that the system is biased in favor of ultra-cautious consumers – in both the US and the EU. This form of capture has very different implications for trade. For one thing, the domestic producer is even more likely to be a target than the overseas producer. The hormone ban applied first in Europe, to domestic producers. The fact that there were reports of widespread cheating does not invalidate the argument that the legislation was aimed at the domestic industry. The imported beef was naturally treated the same way: “national treatment” demands no less. The debate on BST is largely confined to domestic milk markets, though no doubt some trading firms have been effected. Irradiation is also a domestic issue, though some irradiated foods cross borders. The debate is not on whether to allow in irradiated foreign food but to allow the sale of such food on the domestic market regardless of its provenance. Even the GMO debate is not primarily about trade but about food safety regulations themselves. The

solution is different in the case of “consumer capture”. The consumer can be made to pay through the market for conservative policies and highly risk averse regulations. The consumer can be expected to take some responsibility for choosing goods (the labeling option, widely touted as the panacea for “unscientific” SPS problems). And both the domestic and the foreign producer are “on the same side” in trying to keep up confidence in a particular product and maintain demand.

The key question is whether such a bias towards consumer protection causes damage to the trade system. It is not clear that this is necessarily so. After all, the consumer ultimately decides on his or her consumption pattern. The more specific the consumer is in expressing preferences the easier it is for the producer to craft the product to meet consumer demand. The growth of differentiated trade in foodstuffs has been the most dynamic element of the market for agricultural goods. Fussy consumers pay top dollar for the right product: they may try to get the authorities to ban products that they don’t wish to buy, but that is a burden to all those that are less fussy. The problem arises when the market does not reward the producer for such market differentiation. Too often that is the result of poorly designed food laws.

A third actor with an interest in the food safety regulations, in addition to the domestic producer and the consumer, is the business firm in the exporting country. Here we would assume there to be some degree of ambivalence to the issue of food safety regulations. On the one hand exporters prefer not to have to hurdle different barriers to each market, based on inconsistent standards. Harmonization will tend to benefit the exporting firm. But on the other hand firms are not averse to differentiating the product to gain a higher price from the more discriminating part of the market – regardless as to whether the criterion for differentiation is “scientific” or not. Thus the business interest will be more concerned with the cost of meeting importer regulations and less concerned with the political pressures that fall on the importer government. But *exporters drive trade talks*, and tend to set the agenda for such negotiations. This is at the heart of the typical conflict between trade policy and food safety. It is not that exporters do not care for the safety of the overseas consumer. But they can afford to be much more adamant in the advocacy of strict scientific principles, and thereby to encourage harmonization and lower compliance costs.

This argument can be summed up in the phrase “foreigners don’t vote”. In other words, governments feel obliged by domestic political pressure to set food safety rules for consumption at home that may incorporate irrational (or unscientific) motivations. The attitude to food irradiation (in the US as well as in the EU) is a good example, where such a process would significantly reduce the risk of food-borne pathogens. When confronted

with trade issues, governments push naturally for rules that help their export sectors.⁹ Thus the phenomenon that we see, both in the case of beef hormones and of genetically-modified organisms, is not traditional producer-protection, hiding behind phony technical barriers (the issue the Sanitary and Phytosanitary Agreement of the Uruguay Round was meant to resolve). Instead it is a new form of consumer-protection, whereby public authorities vie with each other to guarantee higher levels of safety than strictly necessary in order to maintain consumer confidence in the food system. What we see is a clash over the costs and rewards of market differentiation, and much of the objective is to capture the rents from consumers who demand qualities and characteristics over and above those deemed basic by the health authorities. Much of the battle is therefore likely to be fought over issues of consumer access to information, in particular through labeling.

⁹ In effect this is a part of the “mercantilist trick” familiar to trade policy economists by which export interests take the lead in trade negotiations, though the biggest benefit is from the import liberalization which is reluctantly conceded as the cost of getting market access abroad. Exporters lead in pushing for removal of unjustified SPS, though the beneficiary is the consumer in the importing country who does not have to pay the cost of unnecessary regulations.

IV. Possible Solutions on the Horizon?

National Food Safety Law Changes

The possibility that the proliferation of conflicts over food safety is not just the result of wimpy European consumers mistrusting science (and the government agencies that interpret that science in terms of food regulations) is supported by the emergence at the same time of new proposals for changes in Food Law on both sides of the Atlantic. The changes are in many ways remarkably similar, suggesting that the same pressures are being felt on both sides of the Atlantic. In Europe, the EU Commission recently brought out a Green Paper discussing the issue of regulation of the food chain in the interests of safety (COM(97) 176). This was followed by the identification of DG XXIV as the locus within the Commission for food safety concerns to be addressed (European Commission, 1997). In the UK, a new Food Standards Agency is in the process of being set up which also aims to reassure consumers of the safety of the food supply (Ministry of Agriculture, Fisheries and Food, 1998).

In the US, where consumers are supposed to be so fearless and rational, the President has announced a new initiative on food safety to address mounting criticism from the public increasingly concerned about the health risks of food consumption (Food and Drug Administration, *et al.*, 1997). An almost continuous series of food scares, from Chilean grapes and Alar tainted apples, to Guatemalan raspberries and Mexican strawberries, to several outbreaks of E. coli traced to meat processing plants, have sensitized the public in a dramatic way to the issue. US consumers want action, even where that means inspection of foreign production, processing and handling facilities. Trade partners will no doubt face similar pressures, and on occasions trade rules may have to bend a little in the face of such over-riding domestic concerns.

The watchwords of these new food safety initiatives are comprehensive coverage, “from plough to plate” or “from stable to table”, and independence from the agencies that have responsibility for producer affairs. These new food agencies will have to deal with trade issues directly and be largely objective, in the sense that they will be staffed by experts not beholden to producer interests. They will have to provide accurate information, through labeling and other techniques, to inform consumer opinion. National treatment will need to be the dominant principle, with advantages to mutual recognition of testing and harmonization on international standards where possible.

US and the Food Safety Initiative

In large part as a response to the public concerns about E. coli outbreaks 1993, 1996 and 1997, each traced to contaminated meat, along with an outbreak of Hepatitis A from Mexican frozen strawberries and Cyclospora in Guatemalan raspberries, President Clinton requested those Federal agencies with responsibility for food safety to prepare a comprehensive plan for upgrading the level of food safety in the US. The result was the Food Safety Initiative launched in May 1997 (FDA, et al, 1997). Entitled Food Safety from Farm to Table, the initiative called for a new inter-agency strategy for preventing foodborne disease; set up an early-warning system for surveillance, outbreak containment and response coordination; and spelled out how the six agencies concerned would spend the \$43.2 million reserved in the 1998 budget for food safety enhancement. This by no means exhausts the action by the Federal Government in this area. In August 1997, Secretary of Agriculture Dan Glickman announced an enhancement of the authority of the USDA in implementing food safety regulations on meat and poultry, including the ability to make mandatory recalls of foods deemed hazardous (Glickman, 1997). This has followed more recently by an announced intention to overhaul the procedures for inspecting fruits and vegetables, including those that were imported.

All this activity by the Administration has been matched by Congressional action. No fewer than six bills were introduced within a few months in an attempt to improve food security – or at the least to convince the consumer that food security was being given top priority. The measure proposed by Senator Durbin and Congressman Fazio aims to consolidate the federal governments food safety functions under a single independent agency, to be known as the Food Safety Administration. Somewhat less drastic action was envisaged by the other lawmakers tabling proposals. All seemed to be motivated more by the public concern over foodborne diseases than the unforeseen effects of bio-technology.¹⁰

Table 1: US Food Regulatory Agencies

U.S. entity	Primary food-related responsibility	Products covered
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¹⁰ The consensus of scientific evidence suggests that there are indeed a number of improvements which can be made to the way in which food is handled to make it safer for consumers. The latest approach is known as Hazard Analysis Critical Control Point (HACCP). These systems are being phased in based on new rules from the US Department of Agriculture (Crutchfield, et al, 1997). Similar procedures are being employed by the EU and other industrial countries as a part of their food safety improvements. Evidence of the types of pathogenic illness caused by foodborne bacteria is found in Busby (1996), Busby (1997) and CAST (1994).

USDA/AMS	Certifies the quality of a broad range of products through grading and inspection services. Regulates the marketing of products under federal marketing orders.*	Wide range of products except grains and seafood (primarily quality).
USDA/APHIS	Protects U.S. animal and plant resources from pests and diseases.	Live animals, some animal products, and all plant products.
USDA/FSIS	Ensures that the U.S. supply of meat, poultry, and some egg products is safe and wholesome.	Meat, poultry, and some egg products.
USDA/GIPSA	Grades the quality of grain products.	Grains (quality and some diseases).
FDA	Regulates food safety and labeling (except meat, poultry, and some egg products), use of animal drugs including setting and enforcing limits for animal drug residues in food, and in animal feed and pet food.	All food (except meat, poultry, and some egg products), animal feed, pet food, animal drugs, food and color additives, food labeling.
EPA	Regulates the use of pesticides in the United States. Establishes tolerance levels for pesticide residues in or on food.	Any products affected by pesticides (FDA and FSIS enforce EPA pesticide tolerances).

Source: GAO, 1997

AMS= Agricultural Marketing Service.

APHIS= Animal and Plant Health Inspection Service.

FSIS= Food Safety and Inspection Service.

GIPSA= Grain Inspection, Packers and Stockyards Administration.

In addition to concerns about the effectiveness of US domestic food safety laws, the General Accounting Office has identified institutional weaknesses in the US in addressing the range of SPS issues at home and abroad (GAO, 1997), pointing to the plethora of agencies which have responsibilities in this area. The attack on foreign “unfair” trade barriers is likely to prove a popular part of any US strategy for the next round of trade negotiations on agriculture, with the identification of barriers based on “pseudo-science” being a major target.

EU and the Green Paper

The structure of food safety legislation in the EU is no less complex than in the US. Most regulatory instruments are now at the Union level, as the competency for food and agricultural regulations has been a natural complement to the management of internal trade and the operation of the Common Agricultural Policy. The original obligation in the Treaty of Rome to protect public health in internal market transactions (Articles 30-36) and to maintain high standards of consumer protection (Article 100a) have been supplemented by the Maastricht Treaty which mandates the EU to be concerned with human health, consumer

protection and the environment (Articles 129, 129a and 130r). Far from being an easy assignment, the European Commission has had its hands full with SPS issues in the past few years. First the establishment of the Single Market called for a massive overhaul of the existing national legislative instruments in the area. The approach until 1986 had been largely that of harmonization, leading to proposals for such bureaucratic absurdities as Euro-bread and Euro-beer. The strategy changed in the late 1980s to one of a few horizontal directives (i.e. applying across the board to a number of sectors) combined with some vertical directives (which were specific to particular sectors). Coupled with the inspired legerdemain of “mutual recognition”, this effectively gave the EU a workable if complex food safety system (Table 2).

What this system could not accommodate was a food safety scare of the proportions of Bovine Spongiform Encephalopathy (BSE, or Mad Cow Disease). The disease was recognized as a serious epidemic in the cattle herd in the UK in 1986 and it spread until reaching a peak in 1993, when 37,000 cases were reported.¹¹ The EU took steps in March 1989 to protect cattle from the spread of the disease from the UK. Trade in adult cattle and beef from cattle older than 30 months from the UK was banned, both within and outside the EU, to the chagrin of the British government and farm organizations. Then, in March 1996 came the announcement that a link between BSE and a variant of Creutzfeldt-Jacob Disease (CJD variant) “could not be ruled out”. The EU closed the borders to all movement of British beef and widened the ban on offal. In June 1996 the EU adopted a plan for the restoration of trade following a selective slaughter program, animal identification and movement records; and an exclusion of meal from older cattle from the food chain.

The impact on the confidence of consumers of beef was quite noticeable, with a fall in consumption of beef and veal to the benefit of pork and poultry producers. The impact on the credibility of food safety agencies and the pronouncements of scientists was even more salutary. The suspicion was planted, both in the UK and in Europe that the agencies that had responsibility for food safety in meat products were capable of putting a gloss on information from their scientific advisors in order not to scare the consumer. This tactic, so far as it was employed, proved counterproductive.

The response of the EU was twofold. First, DG XXIV was rejuvenated and given the task of overseeing the food safety legislation and the various committees that served as expert

¹¹ The British government took a number of steps to stop the spread of the disease, including the banning of the feeding of ruminant material back to ruminants. In 1989 the UK government banned the use of “specified bovine offal” (later known as “specified risk material”) consisting of the tissues of the central nervous system in human food, following this with a ban of these materials in animal feed the next year.

advisors. Secondly, the EU published a Green Paper on Food Law which attempted to bring together some of the individual initiatives that the Commission had up its sleeve. The Green Paper aimed to simplify and rationalize food legislation but at the same time to endorse the idea of a “science based” system, to improve EU competitiveness abroad, and incidentally to extend responsibility for defective products to include primary producers.

Table 2: EU legislation and Major Policy Documents, Food Safety Law

Articles 30-36 of EC Treaty	Movement of goods and protection of public health
Art 100a (3)	High level of base protection of health, safety, environment
Maastricht Treaty	Articles 129, 129a, 130r
Directive 79/112/EEC	on the labeling, presentation and advertising of foodstuff
Directive 83/189/EEC	National draft technical regulations relating to foodstuffs have to be communicated to Commission
Directive 85/374/EEC	principle of producers' liability for defective products to be made obligatory for primary agricultural production
Directive 85/374/EEC	Liability for defective products excludes primary agricultural products
Directive 89/109	Framework Directive on Food Packaging
Directive 90/220/EEC	On the deliberate release into the environment of GMOs
Directive 92/59/EEC	Rapid alert system for immediate risks to health and safety of consumers, on information provided by member state
Directive 92/117/EEC	Protection against zoonoses (animal diseases transmitted to humans)
Directive 92/59/EEC	General product safety
Directive 93/43/EEC	On the Hygiene of Foodstuff (HACCP etc.)
Directive 93/99/EEC	Additional Food Control Measures (sets up liaison body for trans-border complaints)
Directive 97/35/EC	Amends 90/220 to introduce labeling
Directive 97/258/EC	Novel foods
Regulation 2082/92	Special production quality requirement
Regulation 2081/92	Areas known for traditional production
Regulation 374/97	on novel food and novel food ingredients
Regulation 1813/97	covers labeling for modified soya and maize
Draft Commission Regulation	To replace 1813/97 (3 December 97)
Com (85) 603 final	Completion of the internal market in the foodstuffs sector
Com (97) 176 final	The General Principles of Food Law in the European Union (Commission Green Paper)
Communication from the Commission	Consumer Health and Food Safety (30 April, 1997)

Source: various publications from the European Commission

Rewrite of SPS Agreement

The SPS Agreement is up for review this year. The US is not likely to wish to tamper with a hard-won agreement that has “science” at its core. The EU has let it be known that a few amendments would not be out of place. The desire to build in the reaction to consumer confidence is natural: presumably it could be argued that the beef-hormone case would be rendered moot by a well-crafted clause written into a revised SPS Agreement. The question

as to whether the trade system can tolerate regulations which take into account subjective or irrational consumer demand shifts is one of the most contentious issues in trade policy between the US and the EU. It is worth exploring both sides of the argument in anticipation of the heated debate to come.

The case for ignoring consumer irrationality might go as follows. The trade system should be based on rules which are understandable, transparent and reasonable constant. Scientific justification provides that basis, since the relevant scientific evidence is available to all, can be widely understood and changes only slowly with new discoveries. Scientists are respected by the public as impartial and non-political. Groups of scientists from different countries will tend to agree on issues related to their field, except on the margins of discovery where competing explanations may persist for some time. If the public have lost faith in science, the public authorities have an obligation to restore that faith by public education. Any wavering from that position is the first step on a slippery slope to a world where any group can, for their own reasons, use the banner of “consumer” concerns to promote an agenda. Not only would this politicize the trade system but it would make it relatively easy for domestic producer groups to influence demand for the imported good. Under this argument, the SPS Agreement should stay as it is.

The contrary argument gives primacy to the consumer interest rather than the health of the trade system *per se*, and emphasizes the need to take action to preserve markets threatened by fears however irrational.¹² Consumers ask their elected representatives to set up a food system in which they can have confidence. In the affluent economies, they are prepared to pay for extensive regulations and the higher costs that are entailed. Though they like a bargain, and much of the demand for food is still price sensitive, enough substitute commodities exist that imported food from a particular source is unlikely to be deemed a “necessity”, consumed because no alternatives exist. The scientific assessment of the risk of illness to consumers, and of the market consequences of that illness, does not capture the full impact on demand of a drop in consumer confidence. First, calculating the scientific risk of illness for a population is not at all the same as calculating the willingness of individual consumers to take a risk in food purchasing. The risk may be one-in-a-million that a consumer will eat a poisoned grape or a bad hamburger. The proportion of consumers that choose not to buy grapes or hamburgers following an adverse news story may be one hundred thousand-in-a-million. Second, the economic consequences of a poisoned grape

¹² Consumers, of course, have an overwhelming interest in the trade system. Economists base their arguments for liberal trade predominantly on the consumer benefits of such policies. So in a sense the issue is one of “what is the appropriate specification of consumer interest”?

may be the loss (hopefully only temporarily) of the consumption of one individual, say one bunch of grapes or a pound of meat a month. The economic consequences of a “consumer boycott”, organized or not, may be several thousand tons of grapes or hamburger meat.

Thus the issue is whether authorities can take into account fluctuating demand as expressed by consumers who need not take risks. In the SPS Agreement such market effects can be taken into account in the case of animal and plant health (SPS Agreement, Article 5, paragraph 3, :WTO, 1995), Would such an amendment open a floodgate of “pseudo-science” trade barriers based on the presumed public reaction to irrational food scares? Or would it defuse the current controversies by allowing those cases where consumer resistance seems to be threatening the credibility of the trade system to be dealt with in a different way from the vast majority of SPS issues over which there is no disagreement over the basic scientific justification.

US-EU Co-operation

One of the most elusive tasks for the Transatlantic partnership has been to define and improve commercial relationships between the US and the EU. This issue has been revived in recent years by a Europe concerned that the US is drifting into isolationism or an obsession with Asia. As a result, there was considerable discussion in the early 1990s on the need for a new Transatlantic Treaty to keep the US engaged in Europe.¹³ This Treaty, by common agreement, would have to have an economic component. What this economic component could be is less clear. Some argued at the time for a Transatlantic Free Trade Area (TAFTA), but Governments did not seem to be willing to go this far.¹⁴ Instead the EU and the US signed at the end of 1995 a joint declaration for a New Transatlantic Agenda, including an Action Plan which promises action on economic as well as security issues. More recently the issue has opened up again, with Frost’s suggestion of a North Atlantic Economic Community (NATEC), the counterpart to NATO, and Sir Leon Brittan’s proposal for a Transatlantic Marketplace.¹⁵ This would apply the APEC style approach to

¹³ A Transatlantic Declaration was signed in 1990, but the lack of any action to go along with the declaring merely highlighted the need for a more significant manifestation of commitment.

¹⁴ Presumably, the enthusiasm for a TAFTA will rise and fall to the extent that APEC achieves trade liberalization within the Asia-Pacific region to the exclusion of Europe. The EU is unlikely to be willing to accept less favored access into the US market than that enjoyed by Japan.

¹⁵ See Frost (1997) and, for the more recent initiative, Pelkmans (1998).

regional trade agreements, encouraging others to join in the agreed liberalization to avoid the introduction of preferences.

Could such an agreement include anything meaningful on agricultural trade? In agriculture any discussion of US-EU relations carries with it the fear of failure and frustration, borne of the experience with the Uruguay Round and the previous twenty years of tension. However, the opportunity should not be lost for an improvement in trade relations in such an important area. An agreement on the mutual development of quality and health standards and on mutual recognition of each others sanitary and phytosanitary measures.¹⁶

If the transatlantic partnership could encourage the development such independent agencies, of which the US Food and Drug Administration (FDA) is the closest example at present, and if a spirit of cooperation rather than confrontation could be established among these agencies, then this would offer an alternative to the prospect of endless conflicts over food standards across the Atlantic. Unfortunately there has not yet been the required political push to make such cooperation a reality. Attempts to craft “mutual recognition agreements” to recognize each others testing have proved difficulty, in part because of the reluctance of the FDA to change established ways. The “veterinary equivalence” agreement, which would have recognized many practices on each side of the Atlantic as equivalent, was sidelined for months by an outbreak of hog cholera in Europe which made the issue more sensitive than usual. But with each side using HACCP systems more and more, eventually there may come the possibility for real coordination across the Atlantic.

¹⁶ These ideas are developed further in Tim Josling (1996)

V. Conclusion

Trade rules have increasingly come into conflict with food safety law, as the food industry has become global. The question of the moment seems to revolve around a simple but fundamental choice: should one take into account consumer sentiment (as opposed to hard scientific evidence) when setting import (and domestic) standards.¹⁷

The two sides of the argument are clear. From the point of view of trade policy, any rule-based system has to guard against implementation that reacts to the headlines of the day and pressure from those groups looking to manipulate consumer opinion for other purposes. The SPS agreement appeared to put in place the principle that scientific evidence is required to justify a stricter standard than those in international use. From the point of view of politicians, however, consumer confidence and voter sentiment are not unconnected. It may not be wise to appear to be bowing to a ruling from a panel of trade policy experts (themselves possibly swayed by evidence from vested interests) in the face of adverse public opinion. Politicians are the servants of the public and not answerable to trade dispute panels.

Why the big discrepancy between consumer purchasing patterns and rational calculations based on medical risk assessments? Consumers are clearly not just using scientific evidence, or if they are they are interpreting it in different ways. One explanation is that consumers are exceedingly risk-averse. Wishing to avoid any possibility, however remote, of getting ill from (say) a poisoned grape, they stick to other foods. But this is not particularly satisfying an explanation in societies where people smoke cigarettes and drive cars, two activities much more risky than eating grapes, without apparent fear. The answer must have to do with the discretionary nature of the consumption of most “non-essential” foods, which are consumed for pleasure not for nutrition or basic sustenance. Under such circumstances, the remotest hint of health risk, dimly recalled from a newspaper article or a television show, may be enough to counter the pleasure of consumption.¹⁸ This in turn may lead the consumer to play safe.

¹⁷ The SPS Agreement already allows countries to take account market impacts in the case of animal and plant health.

¹⁸ This argument is probably confined to purchases of food for home consumption, in particular where the purchasing is done by one person on behalf of others. In restaurants, one would guess that consumers take far greater risks, in the hope that others have shouldered the responsibility of avoiding contamination. When purchasing for oneself, again one may take much greater risks for the sake of gustatory gratification. Thus the Japanese businessman eating shellfish in a restaurant may accept more risk than the German homemaker buying beef for his family.

Under this argument, the attempt to use scientific evidence to regulate what governments can do may be at best controversial and at the worst counterproductive. Indeed, it poses the threat that the trade rules may forgo the necessary support and credibility for their effectiveness. If the average politician cannot stand up in her constituency and explain the logic behind a trade regulation then that regulation is unlikely to endure.

The circle can be squared by ensuring that each national regulatory body has the confidence of consumers and the public and is neither under the influence of self-interested local producers nor captured by political movements that have agendas broader than public safety and information. These national bodies should themselves be involved in the dissemination of information reflecting scientific consensus. They should also assist in the construction of international standards that they can recommend to governments to accept. They should work with the industry to devise appropriate labeling systems that would give consumers the choice when controversy surrounds the properties and consequences of particular foods. In other words, if the national regulatory agencies adopted a science-based approach, the problem would not show up as a trade friction. This is only likely to happen if those bodies themselves are free of direct influence from vested interests (on both sides of the issue) and have their independence guaranteed by governments.¹⁹

The hope for the future therefore rests with the establishment of bodies that have the confidence of the domestic consumer. In this they may not go far beyond accepted views of novel foods and food risks. But to the extent that the consumers are sophisticated and trusting, a science base should make communication between regulator, consumer and the industry more productive. Trade relations will improve as a consequence of this communication.

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¹⁹ Of course how the participants in these national "FDA-type" agencies are chosen will be important in

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determining whether they will really solve the dilemma.

