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Inside or Outside? The Role of the WTO in the Settlement of the Transatlantic Trade Dispute on GMOs

The looming transatlantic trade war over genetically modified organisms (GMOs) has revived the debate on the appropriateness of the WTO.[1] In this article, it is asserted that the present WTO remains the appropriate forum for addressing the GM dispute as its science-based approach harmonises members' food safety concerns with free trade interests. Calls for the recognition of consumer preferences by the WTO severely underestimate the dangers of disguised producer protectionism.

As it is increasingly difficult to disentangle trade liberalisation from other domains such as environmental policies, human rights standards, competition policies, intellectual property, and health and consumer protection, WTO disputes involving non-economic issues have gained great publicity. A current example is the looming transatlantic trade war over genetically modified organisms (GMOs).[2] The United States has been challenging the 1998 EU moratorium on market authorisation of GMOs as trade protectionism, and therefore as violating WTO law. The EU refers to unproven long-term health risks and different consumer preferences in Europe and insists on a solution outside of the WTO, while the world's greatest GMO producer asserts that the EU de facto ban imposes an unassailable market barrier for GM imports without presenting any scientific evidence of possible health risks. The dispute culminated in August 2003 in the official US request for a WTO dispute panel on GMOs.

Considering the lack of any WTO administered settlement on the GM dispute during the last four years, serious doubts about the appropriateness of this role have been expressed. The following survey incorporates an unorthodox multi-disciplinary approach for assessing whether the present WTO is appropriate for settling the transatlantic dispute on the EU moratorium. This is regarded as a normative question since the WTO has already been involved, leaving aside the emerging conflict over the EU labelling and traceability draft legislation. In light of a broad survey of the literature and six contrasting interviews with officials from the WTO, WHO, the EU and the US Mission at Geneva in April 2003, it will be argued that the present WTO is the appropriate forum for addressing the GM dispute as its science-based approach harmonises members' right to set non-tariff barriers on grounds of food safety with the legitimate concerns of free trade. Making the recognition of consumer preferences in the WTO agreements a precondition for considering the WTO as an appropriate place for the settlement of GM disputes would open the system to disguised producer protectionism.

The Opening of the GATT/WTO to Non-economic Issues

Even though universal labour rights were debated during the creation process of the GATT and the costs of pollution started to be "internalised" by governments already in the late 1960s, an opening of the GATT to non-economic issues could not be achieved in the following years. In particular, the developing countries feared high social and environmental standards, which they would not have been able to

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[1] See: Forum. New Transatlantic Trade War, in: INTERECONOMICS, Vol. 37, No. 3, 2002, pp. 124-137.

[2] "GMOs" and "GM" respectively are used as a collective term for food and feed deriving from transgenetic modifications which would be impossible under traditional breeding methods.

meet given their limited resources. They were afraid that they would lose the opportunity to catch up in competition and growth and that the industrialised states would take non-economic goals as a pretext to set protectionist trade measures. On the other hand, the industrialised states were determined to avoid any lowering of their high standards in the wake of the establishment of universal standards, which necessarily would involve compromises for high-standards countries. Finally, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the new Agreement on Technical Barriers to Trade (TBT Agreement) and the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) were concluded during the Uruguay Round in 1986-94 when member states realised that intellectual property rights, technical regulations and standards regardless of their objective impede trade as non-tariff market barriers and are often disguised protectionism. Efforts to promote further inclusion of competition, environment and labour standards into the WTO suffered a severe setback during the Seattle Ministerial Meeting in December 1999 and have since failed to be successful.[3]

The debate has been further heated by several controversial Dispute Settlement Body (DSB) decisions on non-economic issues such as the shrimp-turtles case. Many scholars dismiss a significant involvement of the WTO while others call for concluding specific WTO agreements on the environment, labour rights, and competition policy.[4] The latter favoured inclusion as this would prevent further unilateralist trade measures by high-standard countries against low-standard countries in cases of international spillovers. These encompass intangibles such as the rejection of child labour and sweatshops in Western countries. The WTO could emerge as a forum for harmonising both trade and environment interests, and for fostering synergy effects, in particular when adopting D.C. Esty's and D. Geradin's case-by-case "policy mix" of various regulatory instruments.[5] Inclusion is supposed to defuse the "race-to-the-bottom" concerns of high-standard countries. These states often regard lower non-economic standards as illegitimate comparative advantages in increased global competition, which can be levelled out by multilateral agreements in the WTO framework ("levelling the playing field").[6] The opponents of inclusion, however, doubt the downward harmonisation and argue that non-economic standards constitute a comparative advantage that materialises only under unrestricted trade. Once free trade has promoted income growth in these countries, higher social standards can be expected.[7]

Another leading argument against inclusion holds that social and environmental standards belong to the realm of national sovereignty. The unjustified imposition of higher non-economic standards would be particularly virulent if the WTO further opened itself to discrimination on grounds of production methods. Because the traded products are identical, this discrimination would result in a significant deviation from the fundamental WTO principle of non-discrimination of "like products" (Article III of the GATT). For instance, a hypothetical prohibition of child labour would target the production process and would have nothing to do with the quality of the final product.[8]

Moreover, most economic scholars have pointed to the high costs of addressing international spillovers and externalities by means of universally harmonised trade policies. WTO members are so diverse in their natural endowments, and in their social and economic development that it is almost impossible to find an all-encompassing appropriate standard of protection with efficient means of enforcement.[9] In particular, the environmentalist literature challenges the lack of technical competence and flexible rule-making instruments to address such diversity. The WTO is recognised as a

[3] Chantal Thomas: Trade-Related Labor and Environment Agreements?, in: Journal of International Economic Law, Vol. 5, No. 4, 2002, pp. 791-797, 817-819; Daniel C. Esty: Greening the GATT: trade, environment, and the future, Washington D.C. 1994, Institute for International Economics; Bernard M. Hoekman, Michel M. Kostecki: The Political Economy of the World Trading System. The WTO and Beyond, 2nd ed., Oxford 2001, Oxford University Press, pp. 186, 195, 444, 449-451; Trish Kelly: The WTO, the Environment and Health and Safety Standards, in: The World Economy, Vol. 26, No. 2, 2003, pp. 132-133.

[4] Chantal Thomas, op.cit., pp. 811-812; Daniel C. Esty, Damien Geradin: Environmental Protection and International Competitiveness. A Conceptual Framework, in: Journal of World Trade, Vol. 32, No. 3, 1998, pp. 7, 46; Bernard M. Hoekman, Peter Holmes: Competition Policy, Developing Countries and the WTO, in: The World Economy, Vol. 22, No. 6, 1999, pp. 886-892.

[5] Daniel C. Esty, Damien Geradin, op. cit.

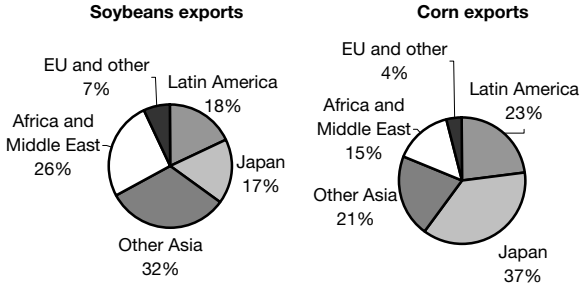
[6] Ibid., pp. 5-7, fn. 7-9, pp. 22-46; Daniel C. Esty, Damien Geradin: Regulatory Competition in Focus, in: Journal of International Economic Law, Vol. 3, No. 2, 2000, p. 237.

[7] See reference in: Kym Anderson: Environmental and Labor Standards: What Role for the WTO?, in: Kym Anderson, Bernard Hoekman (eds.): The Global Trading System. Vol. 4: "New" Issues for the WTO, London, New York 2002, I.B. Tauris Publishers, pp. 16-17.

[8] Jim Rollo, Alan Winters: Subsidiary Challenges for the WTO: Environmental and Labor Standards, in: The World Economy, Vol. 23, No. 4, 2000, p. 569; Gary P. Sampson: Trade, Environment, and the WTO: The Post-Seattle Agenda, Baltimore 2000, The John Hopkins University Press, pp. 18-19.

[9] Bernard M. Hoekman, Michel M. Kostecki, op. cit., pp. 441-442; Jim Rollo, Alan Winters, op. cit., pp. 562-563, 567.

Figure 1
Major Export Markets of US Soybeans and Corn, 1999[a]



[a] The figures are for 1999, when total soybeans export valued $4.5 billion and total corn exports $4.9 billion. Exports were 29% and 18% of production, respectively.

Source: USDA, Economic Research Service.

pool of expertise on trade liberalisation but said to lack knowledge of environment, labour and other issues including GMOs, which are of interest here.[10]

Nature of the Dispute on GMOs

In 1996, the USA approved the first generation of GM crops for commercial production applying the "doctrine of substantial equivalence" and relying upon a voluntary labelling regime for both GMO and non-GMO producers. Since then, the USA has emerged as the world's largest producer of biotechnology crops. In 2001, the US market accounted for 68 per cent of the total GM acreage worldwide. In contrast, the relevant EC Regulation No. 258/97 of 27 January 1997 ("Novel Food Regulation") incorporates a different regulatory approach for food safety regarding GMOs, the "precautionary principle". This is an approach adopted from environmental policy and inherent in the EC Treaty. It embraces the idea that regulation should prevent damage deriving from a particular action rather than first letting it happen and dealing with the consequences later. In cases with insufficient scientific evidence and uncertainty about the dangerous effects of a new technique, human health and environmental concerns prevail over possible economic benefits. By invoking the precautionary principle, six member states brought the authorisation of new GMO products to a halt in October 1998. Such a cautious approach was deemed necessary in order to prevent long-term health and environmental risks and to re-install eroded consumer confidence in food safety regulations after the series of scandals involving "mad cow disease" in Britain, dioxin-tainted meat in Belgium and foot-and-mouth disease throughout Europe.[11]

Concerned by intensive US criticism of the de facto ban, the EU established more detailed and efficient pre-market risk assessments, mandatory post-market monitoring and surveillance in EC Directive 2001/18/EC of April 2001, which entered into force in October 2002. However, despite a final warning and a two-month ultimatum, not only did many member states fail to implement Directive 2001/18/EC into national law, but also the stuck authorisation process has yet to be re-started. In this context, the US administration announced that it would file an official complaint at the WTO on 13 May 2003, arguing that the EU and its member states were taking safety and consumer concerns as a pretext for trade-distorting protection of the already heavily subsidised European farming industry against highly competitive GM crops. The US claim that no scientific evidence supports the "unfounded fears" that resulted in an approximate drop of 70% and 48% in US exports to the EU of corn and soybeans respectively.[12]

Calculations by K. Anderson and C. Pohl Nielsen based on a global, computable general equilibrium model (GTAP Model), back the US position claiming a roughly $300 million loss in welfare gains in North America.[13] If unrestricted GM trade were allowed, both economists estimated a $2,624 million gain for North America as well as a remarkable $2,010 million gain in Western Europe. For the present situation, they calculated a $4,334 million loss in welfare in Western Europe while North America can still maintain a $2,299 million welfare gain by adopting GMOs. Considering such high stakes, the harmful politicisation of the GM dispute including ominous notions such as "Franken-

[10] Claude Martin: The relationship between trade and environment regimes: What needs to change?, in: Gary P. Sampson: The Role of the World Trade Organization in Global Governance, Tokyo, New York, Paris 2001, The United Nations University Press, p. 143; Peter Singer: one world. the ethics of globalization, New Haven, London 2002, Yale University Press, pp. 57-70.

[11] Ian M. Sheldon: Regulation of Biotechnology: Will We Ever Freely Trade GMOs?, in: European Review of Agricultural Economics, Vol. 29, No.1, 2002, pp. 155-160. See, for instance, the latest environmental risk assessment of three herbicide-tolerant GM crops on behalf of the UK government. Press release of 16 October 2003, available at http://www.defra.gov.uk/news/2003/031016a.htm (last accessed 25 January 2004).

[12] Press release of 13 May 2003. Available at: http://www.ustr.gov/releases/2003/05/03-31.htm (last accessed 25 January 2004). See figures in: Peter W. B. Phillips: Policy, National Regulation, and International Standards for GM Foods. Research at a Glance. Brief 1, Washington D.C. 2003, International Food Policy Research Institute, p. 2. Available at: http://www.ifpri.org/pubs/rag/br1001/biotechbr1.pdf (last accessed 25 January 2004).

[13] Kym Anderson, Chantal Nielsen: Economic Effects of Agricultural Biotechnology. Research in the Presence of Price-distorting Policies. Working Paper, Adelaide 2002, Centre for International Economic Studies, pp. 3-10.

WTO Case Law

The WTO cases on health and safety listed below may serve as leading cases for any DSB decision on the GM dispute and are therefore summarised here.

In the asbestos case, France's ban on asbestos products was upheld by the DSB. The appellate body recognised France's right to set its own risk levels under the GATT health safety exemptions, as long as scientific evidence documents a health risk. Since medical literature and also the labour standards of the International Labour Organization (ILO) warned of asbestos products, France was entitled to resort even to a very restrictive trade measure such as a full-fledged ban on asbestos products.[1]

The outcome of the asbestos case stands in clear contrast to the other three cases in which no scientific justification for the import restrictions was presented. The first challenge of food safety measures under the new SPS Agreement constitutes the 1997 beef hormones case. US beef imports were severely affected by the EC ban on beef treated with synthetic growth hormones as circa 90% of all US beef cattle were fed with such hormones. In their main finding, both the Panel and the Appellate Body ruled that the EC ban on hormone-treated beef fell under the SPS Agreement and violated Article 5.1 of the SPS Agreement. According to the rulings, the EC had failed to undertake the necessary risk assessment and to produce scientific evidence of any identifiable health risk. By these WTO accords the EC was denied the resort to the precautionary principle as a basis for overriding the obligation of Article 5.1 SPS Agreement. Due to non-compliance on the part of the EC the USA was entitled to exercise retaliation mounting to $ 116.8 million.[2]

In neither of the two other cases on food safety, i.e. in the Australian salmon case contesting Australia's ban on fresh, frozen or chilled salmon on grounds of possible diseases, and in the US-Japan agricultural products case, dealing with Japan's quarantine and fumigation restrictions on eight products, was the DSB satisfied by any submitted scientific evidence. Referring to the precautionary principle alone without conducting a risk assessment, as done by Japan in the US-Japan agricultural products case, does not meet the criteria set forth in Art. 5.1 SPS Agreement and hence cannot serve as a justification for permanent trade restrictions. Consequently, the DSB suggested in both cases that protectionism rather than genuine health and safety objectives accounted for the ban.[3]

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[1] Bernard M. Hoekman, Michel M. Kostecki: The Political Economy of the World Trading System. The WTO and Beyond, 2nd ed., Oxford 2001, Oxford University Press, pp. 85-86; Trish Kelly: The WTO, the Environment and Health and Safety Standards, in: The World Economy, Vol. 26, No. 2, 2003, pp. 138-139.

[2] Kevin Kennedy: Resolving International Sanitary and Phytosanitary Disputes in the WTO: Lessons and Future Directions, in: Food and Drug Law Journal, Vol. 55, 2000, pp. 93-96; Mark A. Pollack, Gregory C. Shaffer: The Challenge of Reconciling Regulatory Differences: Food Safety and GMOs in the Transatlantic Relationship, in: Mark A. Pollack, Gregory C. Shaffer (eds.): Transatlantic Governance in Global Economy, Lanham, Maryland 2001, Rowman&Littlefield Publishers, pp. 161-162.

[3] Trish Kelly, op. cit., pp. 140-141; Kevin Kennedy, op. cit., pp. 97-99.

foods" and the US accusation that African starvation was being prolonged due to the EU position is not surprising. Such a confrontational situation makes a conciliatory solution at the WTO extremely complicated as do domestic actors like farmers, environmental and consumer pressure groups who abuse the public debate for their vested interests.

The Appropriate Place for Settling the GM Dispute

Claims for settlement of the GM dispute outside of the WTO seem justified if the WTO has no mandate for the GM dispute, the WTO provides no efficient mechanism for settling the GM dispute, and/or other overriding concerns make a settlement outside of the WTO necessary. To address these challenges, it is important to look at the relevant SPS and TBT Agreements, at the inter-organisational cooperation in biotechnology and at the WTO dispute settlement mechanism.

The SPS and TBT Agreements

The highly relevant SPS and TBT Agreements are often praised for their effectiveness in removing market barriers and preventing disguised producer protectionism. Several opponents of the WTO involvement in the GM dispute, though, take both agreements as a point of departure for their criticism. The 1994 Sanitary and Phytosanitary (SPS) Agreement must be seen in the light of Article XX of GATT that legitimises trade-restrictive measures in order to protect human, animal or plant health and life as well as public morals. Restrictions such as product criteria, approval procedures, risk assessment methods and labelling requirements,

however, endanger the benefits of the GATT's efforts to abolish any form of market barriers once they are abused as hidden protectionism. They can only be considered as legitimate under the SPS Agreement if they are grounded on protecting human, animal or plant health from risks deriving from pests and diseases, from additives or contaminants on foodstuffs, or from other damage posed by the establishment or spread of pests (Annex A, P1 (a)-(d)). In addition, the SPS measures may not violate the fundamental WTO principles of non-discrimination and proportionality (Article 2.3). They should be in compliance with international standards, guidelines and recommendations (e.g. the Codex Alimentarius Commission) (Article 3.1. and Annex A:3). However, if member states stick to their own higher, and hence more trade-restrictive, standards these must be grounded in science and in risk assessment (Article 5.1-8). But it is not enough that the risk assessment shows any possibility of a health danger; it needs to evaluate the "likelihood" of injury to health. In terms of risk management, WTO members are free to choose their own level of protection leading even to a "zero risk" level, as long as the risk assessment produced scientific evidence of minimum health risks in the first place (Article 2.2). This implies that except for very limited temporary measures in Article 2.3 and 5.7 a full-fledged "precautionary principle" as adopted by the Cartagena Biosafety Protocol is not incorporated into the SPS agreement.[14]

The Agreement on Technical Barriers to Trade (TBT Agreement), concluded during the Tokyo Round in 1973-9 and later modified during the Uruguay Round in 1994, aims to prevent producer protectionism by non-tariff restrictions such as quality, safety and labelling measures. The SPS Agreement is lex specialis, i.e. the TBT Agreement covers only those technical regulations (obligatory), standards (voluntary) and conformity procedures which are not already encompassed by the SPS (Art. 1.5). While the TBT Agreement encourages states to adopt international standards (Art. 2.4), it is more lenient in terms of justification for higher technical regulations, standards and conformity procedures for reasons of environment, public safety and other objectives such as consumer protection. Importantly, the TBT does not require scientific justification and risk assessment. Instead, it has recourse to the principle of non-discrimination and proportionality to determine impermissible protectionism.[15]

Trade-relatedness and the Trade Consequences

Supporters of WTO involvement like R. Bailey[16] and T. Cottier[17] hold that by obliging member states to produce scientific evidence for maintaining or imposing higher health, food safety or consumer protection standards and by neglecting other non-economic justifications, the SPS Agreement effectively targets disguised producer protectionism. However, if scientific evidence shows real health dangers caused by GMOs, the SPS Agreement subordinates trade interests and entitles member states to introduce the necessary safety regulations in spite of their negative trade implications. R. Bailey[18] fears that any opening up of the SPS and TBT Agreements to hardly contestable consumer preferences would endanger this balanced WTO mechanism by making it almost impossible to detect when states have been captured by producer protectionist interests. He also emphasises that because GM farming techniques significantly increase productivity and the United States has an estimated 5-year advantage in know-how, the establishment of an EU market barrier deprives US farmers and the biotech industry of the gains from new production techniques. Considering the trade relevance, the WTO with its enforcement mechanism seems the appropriate forum for solving the dispute. As trade advantages in an innovative field like biotechnology often stand or fall within considerably a short time, the WTO panels offer at least some hope that protectionist market barriers will be speedily abolished.[19]

Recognition of Consumer Preferences

N. Perdikis et al.[20] most prominently criticise the SPS and TBT Agreements as insufficient because their main objective – the prevention of producer protec-

[14] Kevin Kennedy: Resolving International Sanitary and Phytosanitary Disputes in the WTO: Lessons and Future Directions, in: Food and Drug Law Journal, Vol. 55, 2000, pp. 84-88; Mark A. Pollack, Gregory C. Shaffer: The Challenge of Reconciling Regulatory Differences: Food Safety and GMOs in the Transatlantic Relationship, in: Mark A. Pollack, Gregory C. Shaffer (eds.): Transatlantic Governance in Global Economy, Lanham, Maryland 2001, Rowman&Littlefield Publishers, p. 160.

[15] Kevin Kennedy, op. cit., pp. 90-92.

[16] Ronald Bailey: The Looming Trade War over Plant Biotechnology, Trade Policy Analysis No. 18, Working Paper, Washington D.C. 2002, Cato Institute's Center for Trade Policy Studies, pp. 12-14. Available at: http://www.freetrade.org/pubs/pas/tpa-018.pdf (last accessed 25 January 2004).

[17] Thomas Cottier: Risk management experience in WTO dispute settlement, in: David Robertson, Aynsley Kellow (eds.): Globalization and the Environment: Risk Assessment and the WTO, Cheltenham, UK, Northampton MA 2001, Edward Elgar, pp. 57-58.

[18] Ronald Bailey, op. cit.

[19] Ibid.

[20] Nicholas Perdikis, William A. Kerr, Jill E. Hobbs: Reforming the WTO to Defuse Potential Trade Conflicts in the Genetically Modified Goods, in: The World Economy, Vol. 24, No. 3, 2001, pp. 381-382.

tionism – excludes the recognition of consumer preferences. As the binding dispute settlement mechanism does not allow for an exit from WTO obligations, member states are apt to get trapped between their international WTO obligations and domestic consumer demands. These authors illustrate that such a locked-in situation is alien to the more than 50-year history of the GATT/WTO and that it is endangering the political compromise between the interests of export-oriented firms in the removal of market barriers and that of politicians in accommodating the demands for some form of trade protectionism. For these authors, renouncing this political compromise seems unjustified in the light of the dilemma between perceptions of the true objectives of the EU moratorium. This is because the genuine objective of non-tariff restrictions is very difficult to identify in practice. On the one hand, they may be established deliberately in order to set a disguised market barrier which needs to be avoided by the GATT/WTO. This is what the US observers perceive when considering the beneficial effects of the GM moratorium for EU farmers and the EU biotech industry. On the other hand, non-market barriers could be set accidentally, in which case the rigid rules of the SPS and TBT Agreements aimed at producer protectionism seem misplaced as they show no commitment to consumer preferences.[21] This is particularly conflict provoking when, due to fundamentally different cultural and regulatory approaches, consumer preferences are perceived as a universal truth concerning everybody and therefore an issue on which it is worth taking an uncompromising standpoint. In this case, "trade protectionism – not trade liberalization – is largely seen as a valid and socially acceptable goal".[22]

Finally, the science-based approach under the SPS Agreement has been generally criticised by J. Atik, who emphasises that while the "risk assessment involves frankly political choices, it pretends to be a rational and testable methodology".[23] This is why he challenges the neutrality and universality of science-based risk assessment.

Different Perceptions

The argument that producer protectionism is not the driving force of the EU de facto ban does not hold as a valid reason for demanding a settlement outside of the WTO. What is consumer protection to Europe looks like producer protectionism to the USA. Nicholas N. Perdikis et al.[24] very illustratively expose this core dilemma of the GM dispute by examining the different perceptions of the objectives pursued by the EU ban. The EU is undoubtedly concerned about food safety and consumer rights. In some respect, the EU simply cannot exercise producer protectionism as, according to an EU official, some agricultural products like soybeans must be imported anyway, regardless of their conventionality or genetic modification. Nonetheless, the same EU official admitted that there was an element of producer protectionism at the early stages of the beef hormones dispute which was officially fought under the banner of food safety and consumer protection. For this reason the US scepticism in this similar GM dispute is understandable. The European biotech industry is commonly said to lag five years behind in research and development and therefore strives to lobby for an opportunity to catch up with its US rivals. Besides, R. Bailey is right when he emphasises that the latest European efforts to cut agricultural subsidies may be torpedoed if the world market price of crops falls in the wake of more productively grown GM crops from the USA.[25] Consequently, the GM dispute mirrors a mixed picture of consumer protection as well as some degree of producer protectionism. As the prevention of producer protectionism falls under the fundamental functions of the WTO, the latter must be involved.

WTO involvement is also necessary due to the significant impact of the EU restrictions on the US export industry. This seems somewhat underestimated by opponents such as B.M. Hoekman and M.M. Kostecki, and M.A. Pollack and G.C. Shaffer, who are too concerned with conflicting biotechnology regulation.[26] However, even when stakes are not as high as estimated by K. Anderson and C. Pohl Nielsen,[27] even more conflict potential would arise if the existing trade forum was unfairly denied on the grounds of different cultural perceptions of biotechnology. When controversial disputes with far-reaching trade implications are artificially kept away, the raison d'être of a trade forum is undermined. The power of the WTO to en-

[21] Ibid.

[22] Grant E. Isaac, William A. Kerr: Genetically Modified Organisms and Trade Rules: Identifying Important Challenges for the WTO, in: The World Economy, Vol. 26, No. 1, 2003, p. 32; Mark A. Pollack, Gregory C. Shaffer, op. cit. p.174-175.

[23] Jeffrey Atik: Science and international regulatory convergence, in: Journal of International Law, Vol. 17, No. 2/3, 1996/7, pp. 737.

[24] Nicholas Perdikis, William A. Kerr, Jill E. Hobbs, op. cit.

[25] Ronald Bailey, op. cit., pp. 10-11.

[26] Bernard M. Hoekman, Michel M. Kostecki, op. cit., pp. 455-458; Mark A. Pollack, Gregory C. Shaffer, op. cit., pp. 174-175.

[27] Kym Anderson, Chantal Nielsen, op. cit.

[28] Nicholas Perdikis, William A. Kerr, Jill E. Hobbs, op. cit.

force trade liberalisation would be weakened, resulting in trade-distorting unilateralist measures.

Any opening of the SPS Agreement to consumer preferences as suggested by N. Perdikis et al.[28] would reduce the clarity of the WTO law for identifying producer protectionism. The vague, hardly contestable and verifiable notion of "consumer preferences" would open the floodgates for misuse. Consumer preferences have hardly been made operational in order to produce revisable and comparable findings. In this respect, the proposal by N. Perdikis et al. to establish a professional international organisation for evaluating the soundness of consumer preferences appears noteworthy but would meet considerable difficulties in practice. It would need a considerable deal of mutual understanding and resources. In light of the recent escalation of the GM conflict and the great divide in perception, these proposals bring little hope for quick relief from the above-mentioned dilemma.

Finally, the chance to solve the GM conflict in a highly institutionalised framework with a balanced set of rules would be forgone if consumer preferences were recognised. The science-based approach, as R. Bailey[29] points out, does guarantee the harmonisation of legitimate interests in health and food safety protection on the one hand and trade interests on the other. There seems to be some universal agreement on recognised scientific methods for risk assessment among the scientific community. In this respect, G. Sampson's[30] concerns that the science-based approach only pretends universality seems somewhat exaggerated. His criticism is particularly misplaced when considering that the DSB in its rulings pays considerable attention to individual scientific evidence that deviates from the bulk of the evidence submitted. It must be also noted that once the prerequisite of any scientific evidence for a safety risk is fulfilled, each member state is free to decide its own risk management. This leaves ample room for the diverse socio-economic considerations.

Lack of Technical Expertise

Many scholars have opposed placing the GM dispute settlement within the WTO because of the latter's lack of technical expertise. This claim, however, has been countered by those who regard the WTO as embedded in the emerging international biotechnology regulatory system. D. Buckingham and P. Phillips[31] stress that the WTO executives can rely on standards supervised by other international organisations which feed into the SPS Agreement by means of cross-reference. Beside the above-mentioned Codex Alimentarius Commission, OIE and IPPC, other international organisations such as the OECD with broader objectives including political and socio-economic goals have successfully fostered the scientific research and proliferation of its findings. The latest Biosafety Protocol, which entered into force as recently as 11 September 2003, marks one of the latest international efforts to regulate the transborder movements of living modified organisms. However, it has been countered that while there may be institutions for food safety at the international level, none has a specific mandate for socio-economic issues such as consumer preferences. Most other international organisations provide less developed dispute settlement mechanisms, if any. As a result, member states attempt to put these disputes over non-economic issues on the WTO agenda. This aggravates fears that the WTO could slip into a default position for all cases in which solutions over these issues cannot be found in other international forums.

More specifically, some scholars question the expertise of the DSB panellist in determining whether there is sufficient scientific evidence to legitimate health and safety regulations under the SPS and TBT Agreement. Thus, T. Christoforou[32] challenges the fragmentary and vague procedural Dispute Settlement Understanding (DSU) rules. He contends that it is eventually the three panellists who rule on the plausibility of the member's risk assessment. While the panel generally consists of two diplomats and a trade lawyer, scientific experts are frequently called in to present their professional opinion in their individual capacity. Instead of relying on a review group of experts, as proposed by T. Christoforou and provided for but not practised in WTO law, all panels have to evaluate each individual report by scientific experts. In contrast to a review group in which the scientists have to come up with a common opinion in the form of a final report, scientific experts in their individual capacity present their findings separately. T. Christoforou implies that the panellists then have to evaluate these findings as

[29] Ronald Bailey, op. cit.

[30] Gary P. Sampson, op. cit.

[31] D. Buckingham, P. Phillips: Hot potato, hot potato: Regulating products of biotechnology by the international community, in: Journal of World Trade, Vol. 35, No. 1, 2001, pp. 9, 25-29. Note that new legal disputes are to be expected when some WTO members do not agree upon the standards of other international organisations such as the Biosafety Protocol in the case of the USA.

[32] Theofanis Christoforou: Settlement of Science-based Trade Disputes in the WTO: A Critical Review of the Developing Case Law in the Face of Scientific Uncertainty, in: New York University Environmental Law Journal, Vol. 8, No. 3, 2000, pp. 622-630, 638-639.

scientific laymen and asks how they are able to decide in cases of conflicting expert opinion.

Inter-institutional Approach

D. Buckingham and P. Phillips[33] legitimately assume that the complexity of biotechnology, which makes the GM dispute extremely difficult to solve, is best epitomised by an inter-institutional approach in an emerging international system of biotechnology regulation. Long-term cooperation between the WHO, the FAO and the WTO looks promising, particularly in the work of the WHO Task Force Committee where the WHO/FAO members approved general principles for risk assessment, as well as the recent holistic initiative by the WHO and FAO Executive Boards.[34] However, it became clear during my interviews in Geneva that an agreement has yet to be reached on the crucial issue of "other legitimate reasons" which could justify the claim of a "risk". The interviewed WTO officials univocally appreciated the existing cooperation with other international bodies and called for enhancement in order to encompass the diversity and complexity of the dispute. While at first glance it may seem as if the WTO is monopolising biotechnology at the international level, it becomes clear that the WTO, in contrast to other international organisations, provides the only efficient dispute settlement mechanism. Because of this "default option", states are likely to bring a case concerning biotechnology before the WTO in order to achieve a solution unobtainable in the other institutional frameworks. However, this prominent role of the WTO does not mean that it will deal with biotechnology irresponsibly.

On the contrary, WTO panellists do not presume to play the role of professional experts but, rather, trust the individual assessment of the scientific experts as discussed above. Indeed, T. Christoforou[35] legitimately expresses some concern that panellists have to decide with binding force on some issues pertaining to scientific questions. However, this is commonly practised in national and international courts where judges do not possess scientific knowledge. Arguably, as T. Christoforou has pointed out, the consultation of scientific review groups rather than experts in their individual capacity seems preferable. It must be noted, however, that such a procedure is provided for in the DSU procedural rules and cannot therefore serve as a convincing argument against the settlement of the GM dispute inside the WTO.

Cases of Non-Compliance

Finally, the settlement of the GM dispute outside of the WTO has been advocated on the basis of a growing number of cases of non-compliance after a final DSB ruling on food safety (see box). Most prominently, the EU has ignored the DSB accords in the beef hormones case which resulted in an authorisation to retaliate to the tune of $124 billion.

The legally binding DSU is often regarded as constituting the strength of the 1994 WTO as well as stressing the limits for conflicts with larger regulatory, political and normative differences. What D. De Bièvre calls "constitutional rules" cannot be solved by litigation, but have to be agreed upon in a multilateral negotiation context.[36] It is argued that only this setting can lay a broad foundation for public support of WTO rules. Otherwise, member states are compelled not to comply, as there is great pressure from the electorate, which does not accept the DSB decision. Due to the highly politicised character of the dispute and the absence of such a multilateral negotiation approach on GMOs, scholars expect that the EU will surrender to US retaliation rather than comply with a DSB ruling on GMOs.[37]

Retaliation in the GM case, though, would undermine the DSU as such and produce even more trade distortion. In particular N. Perdikis et al.[38] fear that the authority of the DSU rulings will be endangered if a growing number of states do not comply with the judgements. This is likely if surrender to retaliation is regarded as a pay-off because it is less costly than compensation. The relevant amount of authorised retaliation would be calculated on the basis of export values forgone through the EU trade barrier. Importantly, those exports of the offending state (EU) that are affected by US retaliation can still be diverted to other markets and produce revenues. At least the resources for these export goods can be used otherwise. In other words, the true loss constitutes a lower net value than compensation, which is based on a

[33] D. Buckingham, P. Phillips, op. cit.

[34] Question 20 (What is WHO doing to improve the evaluation of GM foods?), in: 20 Questions on Genetically Modified (GM) Foods. Available at: http://www.who.int/fsf/Documents/20_Questions/q&a.pdf (last accessed 25 January 2004).

[35] Theofanis Christoforou, op. cit.

[36] Dirk De Bièvre: Redesigning the Virtuous Circle: Two Proposals for the World Trade Organization Reform. Resolving and Preventing United States-European Union, and other Trade Disputes, in: Journal of World Trade, Vol. 36, No. 5, 2002, pp. 1006-1009; Claude Barfield: WTO Dispute Settlement System in Need of Change, in: INTERECONOMICS, Vol. 37, No. 3, 2002, pp. 132-134.

[37] Mark A. Pollack, Gregory C. Shaffer, p. 175.

[38] Nicholas Perdikis, William A. Kerr, Jill E. Hobbs, op. cit., pp. 394-395.

gross value.[39] Still, regardless of the possible diversion of trade flows, trade clearly becomes increasingly distorted by retaliation rather than compensation.

Critique

It is true that another spectacular case of non-compliance would damage the authority of the DSU. However, concluding that this is reason enough to abandon the tight DSU is not fully convincing. Generally speaking, it would revert the great benefits of the quasi-judicial system, with equal rights for all members regardless of how powerful a state is. With more relevance to the GM dispute, it would overlook the fact that just the threat of filing a WTO case often serves as a catalyst and urges states to enter into negotiations during the obligatory mediation stage or bring their legislation into line with the WTO rules. The latest EU Directive 2001/18/EC can be seen as a reaction to frequent US threats of challenging the de facto ban before the WTO. Regardless of lengthy procedures, the DSU allows for some hope and provides a focal point for final settlement of the GM dispute.

This does not mean that the compensation aspects of WTO rulings should not be more strongly emphasised. N. Perdikis et al.[40] and D. De Bièvre[41] illustrate the harmful effects of retaliation for world trade. However, there are promising proposals in the literature on how to avoid retaliation. I. M. Sheldon has suggested rebalancing the trade loss of non-compliance by lifting trade barriers of comparable value in other sectors.[42] N. Perdikis et al. proposed automatic compensation, which could easily be multiplied to intensify the pressure on the non-compliant member.[43] Compared to the self-help means of retaliation which is solely dependent on the retaliating state, however, these proposals seem to lack the necessary enforcement power.

Conclusion

While it is argued here that the WTO is the appropriate forum, this discussion demonstrates that the US move to challenge the EU moratorium inside the WTO is highly contested. N. Perdikis et al.[44] have legitimately emphasised the great danger that the absence of the newly emerging consumer preferences in the 1994 SPS Agreement have led to a high politicisation of the conflict, making a genuine settlement within the WTO less likely. It is also true that an international organisation with a specific mandate for biotechnology would have a higher technical expertise on GMOs than the WTO, the expertise of which undoubtedly lies in trade relations. Finally, the WTO, and hence undistorted international trade as a whole, suffered from severe setbacks in the beef hormones case when the EU refused compliance with the appellate body's decision.

Nonetheless, these arguments cannot prevail. This paper argues that the WTO is an appropriate forum for settling the GM dispute. None of the three above-mentioned criteria justifying the verdict of inappropriateness (no mandate; no efficient settlement mechanism; other prevailing concerns) could be identified. It must be recognised that the EU moratorium has significant trade distorting effects by imposing a non-tariff market barrier for more productive US imports. Removing such market barriers is one of the core functions of the WTO mandate. The fact that non-economic aims are involved does not exclude a matter from the WTO mandate. It has been shown that the SPS and TBT Agreements are not blind to the food and health safety concerns of member states. As shown in the asbestos case, this is true for the law as well as for its implementation practice. Neither is the WTO mandate exceeded because consumer preferences are not addressed in the relevant SPS and TBT Agreements. Refraining from the recognition of consumer preferences as a legitimate basis for non-tariff barriers constitutes a great strength and a guarantee of the smooth functioning of the WTO setting in the future. R. Bailey[45] makes an important point when arguing that consumer preferences are extremely fuzzy, highly controversial, and without a clear method for verification. Due to the high potential of distorted protectionism on the grounds of consumer preferences, the WTO would tend to be hindered from fulfilling its mandate. Hence, the recognition of food safety and health concerns on the one hand, and the dismissal of mere consumer preferences on the other, reflect a balanced system under the WTO mandate for internalising legitimate non-economic concerns with the interest of free trade.

Blaming the WTO with having an inefficient dispute settlement mechanism, the above-mentioned second criterion, does not seem justified either. It must be admitted that the GM dispute is still looming after four years. However, taking this as a valid argument for ineffectiveness would ignore the fact that trade con-

[39] Ibid.

[40] Ibid.

[41] Dirk De Bièvre, op. cit.

[42] Ian M. Sheldon, op. cit., pp. 173 ff.

[43] Nicholas Perdikis, William A. Kerr, Jill E. Hobbs, op. cit., pp. 395 ff.

[44] Ibid.

[45] Ronald Bailey, op. cit.

flicts are typically very long-lasting and slow to solve. Besides, doubts about the potential for a "genuine" settlement, i.e. the compliance of both parties, seem too pessimistic. The bad experience of the beef hormones case must not be seen as a predetermination for all forthcoming cases. Only the future will show whether the EU will refuse compliance. In most cases, members do comply, not only because of their obligations, but also because they understand the DSU as a "repeated game," implying that they could be the plaintiffs in the next dispute. This is particularly important for the US-EU trade relationship, which produces several trade disputes under the DSU every year. Finally, it must be emphasised that the DSU offers at least some chances to settle a dispute while other international forums lack such opportunities.

Finally, this paper could not identify any prevailing concern which excludes the appropriateness of the WTO. P. Singer's challenge of the prioritisation of the trade interest is rooted in a deep suspicion that the WTO is trade-biased.[46] Why various concerns must be subjugated to those of trade is hardly a trivial question. Behind this question stands a legitimate fear that the 21st century will be governed by the principle of "trade first, human beings second". In other words, is the great danger of producer protectionism that the SPS and TBT seek to prevent actually so important that it can override the health concerns and consumer interests of the people of Europe?

P. Singer's[47] criticism, however, seems to be too unrefined for the case of the GM dispute. It must be re-stated that the WTO does indeed accept, in theory as in practice, trade distortions in cases of health risks that are supported by scientific evidence. But the GM dispute is apparently not a dispute on health safety. This means that legitimate interests, which would override the trade concerns, are not relevant in this conflict. What remains is whether consumer preferences are deemed so important that they can override trade interests, too. This paper assumes that consumer preferences are indeed subordinate because they affect only habits and customs but no full-fledged rights that deserve highest protection. Preferences are fuzzy and volatile. Hardly anybody can estimate with certainty which preference will prevail in society. Polls in times of high politicisation give a rather unreliable indicator. Furthermore, it can be expected that everybody who wants to stick to their preferences can do so in a voluntary, WTO-conforming labelling system ("GM-free"). That means that consumers can still live according to their preferences, but that some may have to pay more for this. Otherwise, the producers in other countries whose exports are affected by the EU ban will suffer unfairly. This would, as shown above, also lead to unnecessary consumer welfare losses.

Outlook

This paper has argued that the present WTO setting is the appropriate forum for addressing the GM dispute because its science-based approach harmonises members' right to set non-tariff barriers on grounds of health and food safety with concerns of free trade. It has been shown that the GM dispute stands in a tradition of disputes involving non-economic issues. This contribution illustrates the significant trade distortions deriving from the EU moratorium and the specific difficulties in settling the conflict due to diverging perceptions of the nature of the conflict. The discussion on the appropriateness of the WTO regarding the GM dispute concludes with a firm dismissal of the arguments favouring the settlement outside the WTO.

The fact that formal DSU proceedings have started does not necessarily mean that future conciliatory agreements will not be reached in the future. In most cases, both parties use the obligatory mediation stage for settling their disputes without a panel decision. Such an outcome may be fostered by the fact that most observers, in the surveyed literature as well as among the interviewed WTO officials, expect a DSB accord clearly in favour of the US complaint. As indicated in the paper, the SPS and TBT Agreements provide no justification for trade distortions solely on grounds of consumer preferences. However, even in a worst case scenario, i.e. the EU refuses to comply with an unfavourable DSB accord, this would not automatically mean the breakdown of the WTO, as some scholars have feared. The interviews in Geneva have clarified that the GM dispute is only one among many other trade disputes and will be processed according to the standard procedures of several WTO bodies. It will be a lengthy process but this also implies chances to de-politicise the dispute over time. Under such conditions even a specific WTO agreement on GMOs seems possible. Such an agreement could be of particular relevance for the highly contested issue of labelling and traceability.[48]

[46] Peter Singer, op. cit., pp. 57-70.

[47] Ibid.

[48] See the latest EC Regulations 1829/2003 and 1830/2003 of 22 September 2003, which entered into force on 7 November 2003.