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Genetically Modified Organisms at the World Trade Organization: A Harvest of Trouble

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I. Introduction

On 13 May 2003, the United States, along with Argentina, Canada and Egypt requested formal World Trade Organization (WTO) consultations on the European Union (EU) moratorium on the approval of genetically modified organisms (GMOs), which was put into effect in 1998, while the EU reformed its biotechnology regulations. With the enactment of a new bylaw on genetically modified food and feed and their traceability in July, the EU announced an end to the moratorium. Yet, despite this announcement the WTO request has not been withdrawn and a trade dispute remains very likely—why? There are two reasons that, while important for the specific GMO trade issue, represent the most contentious current challenges in the development of trade policy.

First, the EU moratorium was a symptom of the much larger trade policy problem of transatlantic regulatory regionalism. The United States and Canada support a particular "North American" regulatory approach to biotechnology-based products that is fundamentally different from the regulatory approach supported in the EU. Even with the recent amendments to the EU regulations, products approved for environmental, feed and food uses in the United States and in Canada will continue to face significant regulatory market access barriers within the EU. In other words, transatlantic regulatory regionalism exists and the United States and Canada would like the WTO to determine whether or not the EU regulatory approach is trade compliant. This, of course, takes the WTO out of its traditional focus on border measures and into the very controversial area of adjudicating on the appropriateness of domestic regulations.

Second, there is more to this trade action than just transatlantic regulatory regionalism. While the EU is the explicit target, an implicit target is the Cartagena Protocol on Biosafety; a Multilateral Environmental Agreement (MEA) that specifies rules for the transboundary movement (trade) of products of modern biotechnology in order to protect biodiversity (Isaac *et al.*, 2002). It was signed in January 2001 and entered into force on 11 September 2003 after 50 signatory countries had ratified. The establishment of the Cartagena Protocol is of concern to the United States and its co-complainants because it multilateralizes the EU regulatory approach meaning that other

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countries might use the Protocol to justify adopting EU-style market access rules. The United States and Canada would like the WTO to implicitly determine whether or not the Cartagena Protocol is trade compliant, hence, sending a signal to all other countries that might attempt to use the protocol to ban GMOs. Similar to the interface of trade agreements and domestic regulations, the interface of trade and environmental agreements takes the WTO into very controversial territory.

Therefore, investigating this single trade action associated with GMOs provides an incisive, simultaneous case study of two of the most contentious new trade policy issues that currently challenge the international trading regime; regulatory regionalism and the trade-environment relationship.

Yet, it may be argued that the timing could not be worse. The challenge of simultaneously dealing with transatlantic regulatory regionalism and the WTO–MEA relationship—formidable at the best of times—is colossal in the current context of transatlantic relations. The end of the cold war marked a decoupling of high politics (security and stability) with low politics (trade relations) allowing many contentious trade issues to emerge on the transatlantic agenda such as conflicts over corporate taxation standards, bananas and hormone-treated beef. More often than not these events were viewed as minor irritants of low politics among good friends. The recent war in Iraq, however, which pitted the high politics of US foreign and security policy against that of "Old Europe" led by France and Germany, marked what may be an unprecedented low in the transatlantic relationship.

Adding to the high stakes nature of this trade action is the fact that it is occurring at a very sensitive time for the WTO's Doha Development Agenda, which is essentially on hold until the United States and the EU prove to the less developed countries that they are serious about global welfare gains by liberalizing their well-protected agricultural sectors. This means both sides will be taking on very powerful domestic interests as they attempt to synchronously ratchet down protectionist policies. Achieving progress in these areas requires willingness for co-operation and compromise, which appears notably absent from the current transatlantic relationship (Gaisford and Kerr, 2003).

Moreover, supposing that the consultation becomes a trade dispute what are likely to be the consequences? Assume first that the United States and Canada win. A WTO decision against the EU regulatory approach will be portrayed as both a decision for biotechnology (and the large multinational companies that have championed its commercial development) and against human, animal and environmental health and safety regulations in the EU as well as a decision against the Cartagena Protocol and the protection of biodiversity. As a result, this trade action has all the ingredients necessary to have significant consequences well beyond just the international trade of products of modern biotechnology. In general, it would represent another decision against the EU—like the hormone-treated beef case[1]—and decrease the willingness of the EU to

[1] See Kerr and Hobbs (2002) for a discussion of the beef produced using growth hormones case.

undertake the real reform of its Common Agricultural Policy required to kick start the Doha Agenda. Such a decision would also amplify concerns about the WTO's legitimacy embodying the fears of its harshest critics that the WTO is an unaccountable international force that reaches deep into domestic policy competence by constraining health and safety policy options. The decision against the Cartagena Protocol would also embody the more general criticisms of environmentalists that trade liberalization is only achieved at the expense of the environment. Simply put, transatlantic relations, the Doha Agenda and the legitimacy of the WTO are at stake.

Assume instead that the EU wins. This would represent a decision against the science-based, rules-based trading principles at the heart of the WTO. Rather than injecting certainty and predictability into the international trading system, this decision would legitimize the use of discretionary, protectionist measures and it would be difficult to not only prevent the use of such measures well beyond agri-food trade but to develop frameworks for their removal. In short, the potential consequences of this trade action are significant.

In what follows, the new trade policy challenges of regulatory regionalism and the trade–environment relationship is assessed in the context of GMOs. First, the transatlantic differences in regulatory philosophy and the nature of the conflict over GMOs is examined. Second, an examination of the trade-environment relationship is provided. Next, a brief account of the process and likely decision of a WTO dispute settlement panel is outlined. Finally, the specific and general consequences and implications of a panel ruling are discussed.

II. New Trade Policy Challenges

Historically, trade policy has been a subset of foreign policy far removed from domestic concern and focused squarely on removing border measures such as tariffs and quotas through the rules of international diplomacy (Johnson, 2000; Stairs, 2000; Milner, 1998). Given the general success of trade liberalization—border measures on manufactured goods have fallen steadily—the attention of the international trading regime has increasingly turned to new trade policy challenges including regulatory regionalism and the appropriate relationship between trade and the environment.

A. Transatlantic Regulatory Regionalism: The Case of GMOs

The first new trade policy challenge inextricably linked with the GMO trade action deals with the market access barriers that arise not because of border measures but because of differences in domestic regulatory approaches (Isaac, 2002). Regulatory regionalism is created when regulatory approaches differ not just with respect to the detail of various regulations but with respect to the systemic principles and frameworks that provide the foundation for the regulations. The trade policy challenge is to bridge the differences in order to develop a rules-based trading regime (as opposed to a

discretionary regime) creating certain and predictable market access rules for various goods and services. Illustrative of regulatory regionalism are the regulatory differences between the United States and Canada on the one hand and the EU on the other hand, with respect to GMOs.

In order to understand how GMOs are regulated, it is important to understand the basis for regulating technology in general. The Risk Analysis Framework (RAF) was developed to deal with the regulation of advanced technology products (which were characterized by a large information gap between the producers of the innovation and the intended consumers) where the goal was to credibly inject science into public policy development (National Academy of Sciences, 1983).[2] The language of risk analysis is found in regulatory guidelines for the research, development and commercialization of advanced technology products—including GMOs—in many countries, including both the EU and the United States, and in various multilateral agreements and treaties.[3]

However, it became very clear in the late 1980s, that there existed significantly different views on how to actually operationalize the RAF in North America relative to the European Union when it came to GMOs. The problem is that two quite distinct regulatory trajectories have come to dominate GMO regulations—the scientific rationality trajectory and the social rationality trajectory (see Table 1). These distinct perspectives generate regulatory debates over proper procedures for risk assessment (i.e. type of risk targeted by regulators, the principle of substantial equivalence, appropriate regulatory hurdles and the precautionary principle), risk management (i.e. risk tolerance, role of non-scientific information as well as regulatory structure, focus and participation) and, finally, risk communication (i.e. role for labeling regulations).

[2] The RAF was first codified in 1983 by the US National Academy of Sciences. Science (which meant natural or hard science) was deemed to be a superior baseline for policy making for two reasons. First, it was argued that natural science strove to disentangle normative dimensions from positive dimensions during the inquiry process in a way just not possible with social sciences. As a result, natural science could produce facts about the actual safety of a product that were not embedded with risk perceptions. Second, it was argued that disagreement in scientific results sets in motion an accepted methodology for debate and reconciliation of results. For instance, if two scientists assessing the actual risk of a product arrived a much different conclusions, then a comparison of the scientific protocols, controls, materials and procedures used is launched. The RAF has three components. The first, risk assessment, is designed to provide (to the extent possible) an objective and neutral product risk profile identifying the actual risk (not the perceived risk). The second component, risk management, is designed to make a regulatory decision based upon the product risk profile established by the risk assessors. Finally, risk communication is designed to ensure transparency; a two-way flow of information between both the risk assessors and the risk managers but also between the RAF and affected stakeholders.

[3] GMO regulations based on the Risk Analysis Framework (RAF) can be found in many countries such as the United States, the European Union (as well as in the Member States), Canada, Australia and Japan. The RAF is also supported by international organizations such as the Organization for Economic Co-operation and Development (OECD), the World Trade Organization (WTO) and several United Nations agencies including the World Health Organization (WHO), the Food and Agriculture Organization (FAO) and the Codex Alimentarius Commission.

TABLE 1: GMO REGULATORY TRAJECTORIES

	The Risk Analysis Framework (RAF)	
General regulatory issues	Scientific rationality	Social rationality
Belief	Technological progress	Technological precaution
Type of risk	Recognized Hypothetical	Recognized Hypothetical and speculative
Substantial equivalence	Accepts substantial equivalence	Rejects substantial equivalence
Science or other in risk assessment	Safety Health	Safety Health Quality "Other legitimate factors"
Burden of proof	Traditional: Innocent until proven guilty	Guilty until proven innocent
Risk tolerance	Minimum risk	Zero risk
Science or other in risk management	Safety or hazard-basis: Risk management is for risk reduction and prevention only.	Broader socio-economic concerns: Risk management is for social responsiveness.
Specific regulatory issues		
Precautionary principle	Scientific interpretation	Social interpretation
Focus	Product-based, novel applications	Process- or technology-based
Structure	Vertical, existing structures	Horizontal, new structures
Participation	– Narrow, technical experts – Judicial decision making	– Wide, "social dimensions" – Consensual decision making
Mandatory labelling strategy	Safety- or hazard-based	Consumers' right to know-based

The differences between the scientific rationality perspective and the social rationality perspective begin with a fundamental difference in the belief about the appropriate role of science and technology in society. According to the former, technology yields innovations and enhances efficiency that produces economic development and growth, and, in turn, produces higher incomes. As incomes go up, demand increases for more stringent social regulations in areas such as food safety and environmental protection. The result is a regulatory race to the top made possible by

scientific advancements (Blackhouse, 1994; Grossman and Helpman, 1991). Hence, the goal of this perspective is to set regulatory policies that maximize technological progress, subject to achieving certain standards of safety. Moreover, this foundation creates a regulatory trajectory focused on the novelty of the GMO, not how it was produced.

In contrast, the social rationality perspective begins with a much different view on the role of technology in society. Rather than being viewed as objective "drivers of economic development", science and technology are viewed as normative activities that by nature bring change to what is a delicate social balance of the preferences and concerns of all constituents. Given that change disrupts the balance, the social rationality perspective supports regulatory policies that ensure technological precaution; if science is going to bring change, then it is important to make sure that all impacts of this change are dealt with in a socially responsive manner (Wendt, 1999; Giddens, 1994; Beck, 1992). According to this perspective, progress in science and technology cannot be left to the competitive economic forces of the market. This focus on technological precaution creates a regulatory trajectory focused on the technology or the process of modern biotechnology rather than on the novelty of the GMO.

To elaborate on these different perspectives, consider the role of the precautionary principle within each perspective. At first glance they appear to be similar as both interpret the precautionary principle as essentially meaning that in the face of uncertainty, when scientific evidence is insufficient, regulators must employ precaution. Yet, the similarities are only superficial as the two perspectives operationalize the principle in fundamentally different ways.

The scientific rationality perspective operationalizes the precautionary principle as a risk assessment tool. It is the risk assessors—with their scientific credentials—who can pull the precautionary trigger. When evaluating a new technology there is, of course, an absence of data on the risks and, hence, risks are calculated according to causal-consequence models built from the accumulated peer-reviewed scientific literature. There are two scenarios when the precautionary principle can be invoked. First, suppose there is an absence of scientific literature. Risk assessors would be unable to build their causal-consequence models of risk likelihood and therefore the precautionary principle would be invoked and the technology would not be allowed to proceed through the regulatory review process. Second, when sufficient scientific literature exists and a causal-consequence model can be built precaution is often exercised by specifying risk-averse assumptions or parameters within the likelihood functions, essentially over-estimating risk. Therefore, as a scientifically rational risk assessment tool, the precautionary principle is grounded in sound science where the precautionary trigger can only be pulled by risk assessors who hold a required amount of scientific credibility thus producing a *rules-based* approach.

The social rationality perspective operationalizes the precautionary principle as both a risk assessment tool and also as a risk management tool. According to this perspective, the precautionary principle can be used by risk assessors as above, and, in

addition, it can also be legitimately employed by risk managers to ensure precaution in the face of non-scientific perceptions and concerns. In other words, using the precautionary principle as a risk management tool potentially increases the social responsiveness of regulations but this also increases the discretionary nature of regulations.

Practically speaking, the regulatory approaches to biotechnology products found in the United States and in the co-complainants are consistent with the product-based, novelty-focused scientific rationality perspective. In contrast, the regulatory approaches to agricultural biotechnology products found within the EU are consistent with the process-based, technology-focused social rationality perspective. Transatlantic regulatory regionalism has been created as GMOs approved under the scientific rationality perspective in the United States and Canada are delayed or denied access to the EU because it operationalizes the precautionary principle in a manner consistent with the social rationality trajectory. The challenge for the WTO is to identify which interpretation of the principle is consistent with trade rules.

This trade policy challenge from regulatory regionalism is significant. It must deal with an issue that reaches deep into domestic regulatory competence—regulations for advanced technology products that have raised significant risk perceptions among some members of the general public—and determine when these regulations are appropriate from a trade perspective. Choosing appropriate regulations will create winners and losers and, hence, erode support for the constituent nature of international trade rules. Further, it must do this in the presence of significant transatlantic disagreement on how to properly operationalize the RAF. Indeed, this ground has already been tested. In 1995, Canada and the United States launched a WTO dispute against the EU ban on the use of growth hormones in beef production, claiming that the ban was inconsistent with the rules of the WTO's newly established Agreement on Sanitary and Phyto-Sanitary Standards (SPS Agreement). The WTO found in favour of the complainants and requested that the EU remove its ban by late 1998. It has not and to this day the EU remains in contravention of the WTO decision (Kerr and Hobbs, 2002). This case should stand as an important warning that there are domestic regulatory issues that are so politically crucial that the EU is willing to remain in permanent contravention of a WTO decision. In fact, the EU enjoys considerable domestic support for its position while the WTO has been vilified as an unaccountable tool of multinational corporations that aims to undermine European health and safety regulations. Given the significant politicization of the GMO issue in the EU, it must surely stand that this trade action against the moratorium will create similar support for the EU and further undermine the legitimacy of the WTO.

B. Trade and the Environment: The WTO and the Cartagena Protocol

The second important trade policy challenge inextricably linked with the GMO trade action deals with the trade-environment relationship. Environmental protection

measures disciplining certain process and production methods (PPMs)such as emission controls or restrictions on the use of certain inputs—are put in place to reduce the environmental impact of particular activities. While such measures may be appropriate for domestic producers at a given level of development and technological competency, what about foreign producers who might not be at the same level? Environmentalists tend to argue that the onus is on the foreign producers to achieve the more stringent domestic environmental standards. Trade agreements, however, do not typically adopt this position. Instead, the focus of trade agreements is on like products that are groups of similar products based upon their end-use characteristics not upon the product's PPMs. The reason for this approach is to prevent differing levels of technological development from being used as barriers to trade; a situation that would always unfairly punish less developed countries. As long as the products were similar in their end-use characteristics, then they would be treated the same under trade agreements regardless of the differences in their process and production methods.

To see how trade and environment conflict, consider the following example. First, assume that country A has recently put in place an environmental protection measure permitting organic agricultural production and banning intensive agricultural production practices. Next, consider two cotton shirts where one is produced under organic standards of cotton production and the other is produced under intensive agricultural conditions. In country A according to the environmental measure only domestically produced organic cotton shirts would be permitted. Now consider two countries—B which produces organic cotton shirts and C which produces intensively produced cotton for shirts—who both wish to export to country A. The environmental position in country A would be to allow country B's exports, but deny country C's exports. However, the trade position is much different. According to the principle of like products B's and C's exports would be determined to be similar because their different PPMs do not create different end-use features; they are both cotton shirts. Hence, the trade position to allow both B's and C's exports into country A would clash with the country A's PPM-based environmental objectives. Trade dispute results in both the *Tuna-Dolphin* and the *Shrimp-Turtle* cases confirm these results.[4]

Decisions where the WTO decides in favor international commerce at the apparent expense of environmental protection are, however, very unpopular and have led to significant criticism of the international trading regime. To deal with this trade-environment controversy, the Doha Round's Ministerial Declaration includes three articles outlining work that needs to be done in order to reconcile the competing objectives.

Of particular concern is the relationship between the WTO and MEAs, such as the Cartagena Protocol. Given the attention, it is tempting to conclude that there must be a history of conflict between the international trading regime and MEAs. Yet, this is

[4] See Isaac *et al.* (2002) for a discussion of the *Tuna-Dolphin* and *Shrimp-Turtle* disputes.

not the case. While many are trade incompliant they currently co-exist with the WTO raising the question as to why the Cartagena Protocol should be any different.

The MEAs which are, in fact, trade incompliant on a number of dimensions and yet go unchallenged under the WTO include the Convention on the International Trade in Endangered Species (CITES), the Montreal Protocol on Substances That Deplete the Ozone Layer (Montreal Protocol), and the Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal (Basel Convention). They tend to share two characteristics. First, they are very specific, pertaining only to the transboundary movement of very select products and substances (e.g. hazardous wastes and endangered species) and not to broad arrays of products with quite disparate end uses such as GMOs. Second, transatlantic agreement exists. The United States and the EU, as signatories to these MEAs, share common domestic preferences and technologies reflected in similar regulatory approaches; that is, there are no significant transatlantic differences in the systemic principles and frameworks that provide the foundation for the regulations. The result is that given the shared belief in the objectives of these MEAs, neither side is likely to launch a trade action, resulting in a peaceful co-existence with the WTO.

These commonalities do not exist with the Cartagena Protocol, as it is different from the Montreal Protocol, the Basel Convention and the CITIES on two counts. First, it is not a specific agreement, instead, it pertains to all "living modified organisms". Second, significant differences in systemic principles and frameworks that provide the foundation for GMO regulations exist with the United States and Canada on one side of the spectrum and the EU on the other. In addition, the protocol is part of the Convention on Biological Diversity (CBD), the feature agreement resulting from the 1992 Earth Summit. The CBD is not a specific environmental convention, rather it is an overarching framework agreement. Also, the CBD lacks the transatlantic co-ordination as it was never ratified by the US Congress and protocols to come from this overarching convention, such as the Kyoto Protocol, have not been well received in Washington.

Given these characteristics of the Cartagena Protocol, the trade tensions are created because, while the EU socially rational regulatory approach is consistent with the protocol and its focus on PPMs, the scientifically rational North American regulatory approach is consistent with the WTO and its focus on end-use products.

Similar to the case of regulatory regionalism, the trade policy challenge from the WTO–MEA relationship is significant. If it goes forward, this trade action challenging not only the EU but also the Cartagena Protocol essentially means that the WTO will decide to what extent trade liberalization objectives should override environmental protection objectives.

III. GMOs AT THE WTO

There is certainly much at stake with this trade action. As discussed above, the current regulatory regionalism across the Atlantic is created by differences in the systemic principles underlying the regulation of GMOs and not simply differences in regulatory detail within very similar frameworks. To avoid a dispute, the EU would essentially have had to respond to the WTO's request for consultation with commitments for change that are satisfactory to the United States and its co-complainants. This means a commitment to a complete overhaul of the EU regulatory approach, shifting it from a process-based system to a product-based system. Given the weak consumer acceptance of GMOs in the EU such a commitment was not part of the new regulatory regime announced in July 2003, hence, a dispute is likely to ensue.

Therefore, it is worthwhile to consider the likely outcome of a GMO trade dispute at the WTO.[5] As a first step, the WTO separates market access barriers predicated on safety related justifications from those predicated on non-safety related justifications. Consider first the safety related justification. This dispute would fall under the auspices of the WTO's SPS Agreement. If the EU can provide acceptable evidence of human, animal or environmental safety and health risks, then according to the SPS Agreement, the EU can ban GMOs and the complainants are left with no recourse. Acceptable evidence means that the EU justification meets either the standards or the standard-setting guidelines of one of three international scientific organizations that are deferred to under the SPS Agreement: the Codex Alimentarius Commission (human safety and health); the International Office of Epizootics (animal safety and health); and the International Plant Protection Convention (flora and fauna safety and health). Yet, if such evidence existed, then surely this would not be a trade dispute because the complainants would ban GMOs domestically as well. Similar to the hormone-treated beef case, there is simply no evidence of such risks according to the standards and standards-setting procedures of the three scientific organizations identified above. Of course, an EU strategy may be to argue the appropriateness of using these scientific organizations as the global standards setters, which, of course, is a dispute over the appropriateness of the SPS Agreement and not a dispute over the safety of GMOs.

Given the complications with justifying the trade ban as a safety related issue, this trade dispute will be one associated with non-safety related justifications for the GMO trade barrier. In this case, the WTO separates these types of justifications into those that are product related and those that are non-product related. Consider first the product related, non-safety justifications that imply that the use of the GM technology per se has some demonstrable effect on the end-use product so as to differentiate it from non-GM products of the same end-use. This is an issue for the WTO's Agreement on Technical Barriers to Trade (TBT Agreement) and it is here where the regulatory differences

[5] See Isaac and Kerr (2003) for a more detailed discussion of this issue.

clash. In the United States and Canada, the agricultural crops facing the EU ban have all been approved as substantially equivalent to conventional end-use products, meaning that there are no product related differences caused by using the GM technologies. Basically, GM corn is still corn and is sold unsegregated into the same commodity supply chain as non-GM corn. In the EU, on the other hand, where there are process-based regulations, the GM corn is considered to be a distinctly different product and segregation from non-GM corn is required. Therefore, the TBT Committee will have to clarify to the dispute resolution panel if the use of the substantial equivalence principle is consistent or not with trade agreements. It is likely that the TBT Committee will rule that the substantial equivalence principle is WTO consistent because it is intuitively the same concept as the trade principle of like products discussed earlier. Recall, like products are those products that despite having different PPMs share similar end-use characteristics. In this sense, the GM corn is like the non-GM corn. Indeed, this would be very similar to the *Tuna-Dolphin* and the *Shrimp-Turtle* trade dispute cases whereby the rulings rejected the imposed bans.

Now consider the non-product related, non-safety related justifications. The nature of these arguments is that certain products must be banned from domestic markets even though neither safety nor product-related reasons can be cited. Such arguments have no standing under the WTO's dispute settlement mechanism; basically Member countries cannot impose such bans at all.

IV. The Consequences of GMOs at the WTO

While the arguments put forward by the United States and its co-complainants are more consistent with the WTO's obligations and, therefore, likely to be supported by the dispute settlement panel, such a victory would be detrimental on many levels. Rather than helping those that have invested heavily in the development, commercialization and production of biotechnology, this decision may significantly undermine support for biotechnology for two reasons. First, it may decrease the already weak level of consumer acceptance of modern biotechnology in the EU, which could spread to North America. It will be relatively easy for critics to construe the decision as technology being forced into markets at the expense of human and environmental health and safety. Indeed, if the technology is so beneficial, then why do biotechnology firms need the WTO to force open foreign markets for their GMOs? More generally, a ruling in favour of the United States will support the arguments of some of the WTO's harshest critics that the trade organization reaches deep into domestic policies and prevents Members from establishing their own regulations subject to their own—perhaps unique—political economy situation. Second, given that GMO products require access to as many markets as possible to recoup the enormous research and development costs that are sunk into product development, any fragmentation of international markets will be harmful. Yet, this decision will basically force countries to choose between a North American/WTO-style approach or an EU/Cartagena

Protocol-style approach to regulating GMOs, depending upon which side of the Atlantic is deemed the more important market. Countries wishing to export their own products to the EU will not welcome either GMO products or GMO technologies, thus reducing the scale benefits arising from international market access.

Beyond the negative impacts upon biotechnology, however, a WTO decision against the EU moratorium on GMOs may significantly undermine multilateral trade liberalization efforts by entrenching transatlantic regulatory regionalism specifically, and, consequently, proving that regulatory regionalism, in general, is a powerful countervailing force to the intrusive reach of the multilateral WTO. With respect to the former, the lessons from the hormone-treated beef case are illustrative. It is unlikely that the EU will comply with the ruling, even in the face of US and Canadian trade sanctions. Instead, adding to the already strained relations between the United States and "Old Europe", tit-for-tat transatlantic trade actions could ensue spilling over into other areas of economic and political relations. Such antagonism would prevent progress on US–EU agricultural policy reform, thus hindering the Doha Development Round.

More generally, and perhaps more importantly, multilateral trade liberalization may be undermined because the inability to deal effectively with transatlantic regulatory regionalism will send two important signals to the international community. First, that a pillar of the international trading regime—the EU—is willing to ignore its WTO obligations. Why, then, should any other Member not simply pick and choose the parts of the WTO Agreements that are domestically suitable and reject the rest? This would be a step backwards toward the situation that prevailed prior to the creation of the WTO, when countries simply adopted the parts of the General Agreement on Tariffs and Trade (GATT) that were domestically beneficial and ignored the rest. The second adverse signal is that when a Member does not agree with a WTO ruling, they can simply revert to a regional approach among like-minded countries aimed at protecting them from the reach of the WTO. Regionalism will emerge as a protectionist stumbling block to multilateralism rather than a constructive stepping-stone. Together, these two signals are likely to decrease incentives for Members to expend any more than token resources on multilateral trade liberalization negotiations and redirect resources toward regional agreements.

Finally, the indirect challenge to the Cartagena Protocol that this decision would represent, will polarize the trade-environment issue. Rather than encouraging the coordination and cooperation between trade agreements and MEAs (as outlined in the Doha Ministerial Declaration) this decision will justify MEAs as a countervailing force to the environmentally insensitive WTO.

Clearly, there is much at stake from this potential trade action. The very legitimacy of the WTO hinges on its ability to ensure that Members meet their obligations while enjoying the rights afforded by membership in the organization. When trade tensions associated with regulatory regionalism and the trade-environment relationship arise, complainants must recognize the potential for these tensions to drive a wedge between

Members and their WTO obligations. Given that the issue of GMO market access is essentially a transatlantic grudge match, the optimal approach would have been to employ aggressive transatlantic economic diplomacy rather than the WTO; a relatively nascent organization whose legitimacy is at a crucial crossroads and whose competency in adjudicating on matters of domestic human health and environmental safety regulations is questionable.

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