

Book Review

Whither the Conflict over Agricultural Biotechnology?

GENES, TRADE, AND REGULATION: THE SEEDS OF CONFLICT IN FOOD BIOTECHNOLOGY. By Thomas Bernauer. 2003. Princeton, N.J.: Princeton University Press. Pp. vi, 229.

*Reviewed by Charles R. McManis**

If you take seriously recent admonitions that Americans (and their government) should devote a bit more attention over the next four years to listening to what Europeans have to say,¹ you would do well to read *Genes, Trade, and Regulation: The Seeds of Conflict in Food Biotechnology*. In this book, Thomas Bernauer, a professor of political science at the Swiss Federal Institute of Technology and a widely published author on international economic and environmental issues, offers a European perspective on the growing global regulatory polarization and trade conflicts that have engulfed the debate over agricultural biotechnology, or “agri-biotech.” Professor Bernauer also explains how and why that regulatory polarization has developed, assesses the likelihood of escalation in the conflict, and concludes with some useful suggestions for policy reform that could help avoid the “seemingly unavoidable trajectory that leads from regulatory polarization to trade conflict to stagnation or decline of agri-biotech[]” (p. 3).

Professor Bernauer is certainly correct that “an increasing gap is developing between agri-biotech promoting and agri-biotech restricting countries, both in terms of approval and

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1. See, e.g., Thomas L. Friedman, *Read My Ears*, N.Y. TIMES, Jan. 27, 2005, at A27.

labeling regulation and at the market level” (p. 8). As he notes, the hardcore promoters of agricultural biotechnology include the United States, Canada, and Argentina, while the opposition clusters around the European Union (p. 8). Many other countries, particularly developing countries, find themselves caught in the middle of this increasingly fractious dispute (pp. 8-9). If you need a quick refresher on how the international controversy over agricultural biotechnology unfolded, Professor Bernauer does a very competent job in laying out the various challenges posed by agricultural biotechnology (ch. 2), the regulatory and market responses to it in a range of countries (ch. 3), as well as the interest group politics, or “bottom up” forces (ch. 4), and the “top-down” governmental interactions (ch. 5) that account for the severity of the regulatory polarization and trade conflicts that agricultural biotechnology has generated.

As Bernauer correctly observes, differences between the European Union and the United States are at the heart of the conflict between agri-biotech promoting and agri-biotech restricting countries (p. 8). He is also correct that this transatlantic conflict is likely to escalate in the near future (pp. 13-15). Indeed, a World Trade Organization (WTO) dispute panel for a proceeding brought by the United States, Canada, and Argentina against the European Union over the latter’s *de facto* moratorium on the approval and marketing of biotech products estimates that it will issue the report to the parties by the end of June 2005.²

At the heart of Professor Bernauer’s book are his predictions in Chapter 6 on the likely outcome of this WTO dispute and its probable consequences (pp. 118-67). He argues that it is far from clear whether the United States will win this case as a legal matter, and even if it does, he believes it unlikely that the European Union will back down and change its regulations in line with American requests (p. 149). Nor does he believe it likely that the European Union will acquiesce in any WTO approved punitive measures by the United States, as it did in an earlier WTO case involving a successful

2. Communication of the Chairman of the Panel in European Communities, European Communities – Measures Affecting the Approval and Marketing of Biotech Products, WT/DS291/27, WT/DS292/21, WT/DS293/21 (Nov. 2, 2004), available at http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm (last visited Apr. 8, 2005).

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American challenge to a European Union ban on the importation of meat from farm animals treated with growth promotion hormones (pp. 149, 160-61). Rather, he predicts a series of punitive measures and countermeasures if the ruling is adverse to the European Union (p. 149). Indeed, Professor Bernauer believes that precisely because WTO rules do not provide clear-cut guidance on who is right or wrong in the case, and because political resistance on the part of the European Union is bound to be strong, the WTO is unlikely to invalidate the European Union's regulations (pp. 149-61). Nevertheless, he also believes that the United States may still opt for escalation (pp. 150, 161-65).

These are dire-sounding predictions indeed. But how likely are they to come to pass? And, even if matters do unfold as Professor Bernauer predicts, are the consequences of an escalation of the dispute as dire as he makes them sound? As American baseball icon Yogi Berra is famously rumored to have said, "It's tough to make predictions, especially about the future."³ Berra is also credited with saying, "You can observe a lot just by watching."⁴ If the accuracy of Professor Bernauer's predictions was all that was at stake, perhaps the most prudent course for both reviewer and reader of his book would be to withhold judgment until the report of the WTO dispute panel issues. However, the urgency of the policy reforms that he lays out in Chapter 7 for avoiding a further escalation of this global controversy depends, not just on how accurately he has predicted the outcome in the current WTO dispute, but also on the severity of the consequences flowing from any resulting escalation of this or other trade disputes. Thus, Professor Bernauer's predictions are useful, if only to identify what these consequences might be.

Professor Bernauer himself hedges a bit on his prediction as to the likely outcome in the WTO dispute, stating at one point that it appears "all but certain" that the United States would win the legal case (p. 155). Bernauer bases his prediction on the outcome of three previous food safety cases resolved by the WTO dispute settlement procedure, each at least partially invalidating national regulations (p. 155).

3. See, e.g., Humorous Quotes Attributed to Yogi Berra, at http://www.workinghumor.com/quotes/yogi_berra.shtml (last visited Feb. 27, 2005).

4. *Id.* But in fairness to Berra, see *id.* ("I never said most of the things I said.").

However, he quickly reverses field, arguing that the evidence in these three cases instead suggests that the United States would not prevail in its dispute with the European Union, at least in part because there is no formal moratorium in the European Union, but only a slowdown in approvals that is temporary (albeit now in its seventh year) (p. 155).

More to the point, Professor Bernauer apparently embraces public choice theory to back his claim that the WTO is unlikely to rule against the European Union, arguing that both national and international courts “usually behave as strategic actors that attempt to strike a balance between legal consistency and political support” (p. 157).⁵ Indeed, he believes that the outcome of the growth hormone case, in which the European Union initially refused to make any concessions leading the United States to impose punitive measures on the order of \$120 million per year on European Union countries (p. 161),⁶ is likely to deter WTO decision-makers from ruling against the European Union in a comparable case (p. 161). Yet as Professor Bernauer himself recognizes, public choice theory cuts two ways: while courts that rule too often and in costly ways against politically influential actors risk undermining their long-term viability, courts that bow too much to political pressure risk losing their legitimacy as independent and impartial arbitrators (p. 157). Bernauer estimates that the non-compliance with an adverse WTO ruling will cost the

5. Public choice theory, which is said to have originated with the publication of James M. Buchanan and Gordon Tullock's *The Calculus of Consent: Logical Foundations of a Constitutional Democracy*, applies the same principles that economists use to analyze people's action in the marketplace to analyze people's action in collective decision-making. See Jane S. Shaw, *Public Choice Theory*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS, THE LIBRARY OF ECONOMICS AND LIBERTY, available at <http://www.econlib.org/library/Enc/PublicChoiceTheory.html> (last visited Feb. 27, 2005).

6. Interestingly, however, on November 10, 2004, the European Union requested consultations, and on January 14, 2005, filed a request for establishment of a panel to examine the continued suspension of obligations in the hormones dispute, claiming to have removed the measure found inconsistent with its obligations, thus rendering the American suspension of obligations no longer justified. The request states that the United States disagrees and denies that the new European Union measure is “based on science” or that it implements the Dispute Settlement Body's recommendations and rulings. See Requests for Consultations by the European Communities, United States – Continued Suspension of Obligations in the EC – Hormones Dispute, WT/DS320/1, WT/DS320/6 (Nov. 8, 2004), available at http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm (last visited Apr. 8, 2005).

European Union something on the order of \$300 million per year (p. 162), or slightly more than twice the yearly cost of non-compliance with the growth hormone decision. However, it is not obvious to this observer that this prospect alone will be enough to deter the WTO from ruling against the European Union, particularly now that the European Union claims (though not to the satisfaction of the United States) to have complied with the WTO mandate in the growth hormone case.⁷ To the contrary, if the WTO dispute panel concludes that the two cases are indeed comparable, European Union reluctance to comply with the earlier order would seem to provide all the more reason for the WTO not to back down in this case.

Nor do the probable consequences of an escalation of the dispute—irrespective of how the WTO rules—appear to this observer to be as dire as Professor Bernauer makes them out to be. The punitive measures that he predicts if the European Union loses the WTO case turn out to be “imposing all sorts of economic costs on the United States in other areas, for example, in the form of escalating other trade disputes” (p. 162). However, because neither the European Union nor the United States has a particularly commendable record in taking its own international trade obligations seriously or complying speedily with WTO rulings,⁸ the escalation of these disputes through the formal dispute resolution mechanisms of the WTO would not necessarily be a bad thing. Professor Bernauer also suggests that an adverse ruling might strengthen opposition in the European Union to further liberalization of agricultural trade, causing the current talks on this sensitive issue to

7. *See id.*

8. For American non-compliance, see generally United States - Section 110(5) of US Copyright Act, WT/DS160, *available at* http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm. In February 4, 1999, the European Community brought a complaint challenging the 1998 Fairness in Music Licensing Act of 1998 as inconsistent with Article 30 of the WTO TRIPS Agreement. *See* Request for Consultations by the European Communities and their Member States, WT/DS160/1 (Feb. 4, 1999), *available at* http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm. On June 15, 2000 the United States was given until July 27, 2001 to comply. *See* Report of the Panel, WT/DS160/R (June 15, 2000), *available at* http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm. On November 9, 2001, the European Community was awarded \$1.1 million for nullified or impaired benefits. *See* Award of Arbitrators, WT/DS160/ARB25/1 (Nov. 9, 2001), *available at* http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm. As of Feb. 15, 2005, Section 110(5) of the 1976 Copyright Act, as amended in 1998, remains unchanged.

“almost certainly collapse” (p. 162). But notwithstanding the deadlock at the 2003 Cancun Ministerial Conference,⁹ caused in part by disagreements over liberalization of agricultural trade, that deadlock was subsequently broken on August 1, 2004 with the announcement of the approval of a package of agreements, including a framework to be used to complete the “modalities” on agricultural liberalization.¹⁰ It is not clear to this observer that an adverse WTO decision in the United States-European Union agri-biotech dispute would endanger the July 2004 package, particularly as the liberalization of agricultural trade appears to be more important to developing countries than it is to the United States. As Professor Bernauer himself recognizes, the European Union, like the United States, is busily seeking developing-country allies in the escalating global dispute over agricultural biotechnology (p. 164).

While Professor Bernauer does not specify what consequences, other than the possible escalation of other trade disputes, will flow from a WTO decision adverse to the United States, he does observe that the United States’s case against the European Union is apparently targeting not just the European Union agri-biotech regulations but *all* European environmental and consumer risk regulations based on the precautionary principle rather than on what the United States calls “sound science” (p. 167). Certainly, this conclusion seems to be confirmed by the latest developments in the European Union-United States growth hormone dispute. But whether or not the United States wins the agri-biotech case against the European Union, it will undoubtedly continue to pursue the growth hormone case. Beyond pursuing this and other trade disputes through the WTO dispute settlement process, it is not clear what other means of “escalation” are available to the United States as a practical matter, short of abandoning the WTO framework altogether.

Even if the consequences of possible escalation of this or other trade disputes are not as dire as Professor Bernauer

9. See WORLD TRADE ORG., CUNCUN DEADLOCK: SEPTEMBER 2003, *at* http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd22_cancun_e.htm (updated Dec. 1, 2004).

10. See WORLD TRADE ORG., THE JULY 2004 PACKAGE AND AUGUST DECISION, *at* http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd23_julypack_e.htm (updated Dec. 1, 2004).

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implies, the policy reforms he lays out in Chapter 7 for avoiding a further escalation of the global controversy over agricultural biotechnology nevertheless bear careful examination. He is certainly correct that regulatory polarization and trade conflict threaten the global prospects for agricultural biotechnology, due to possible exacerbation of domestic controversies involving the technology, fragmentation of markets, reduction of investment in the market, and stagnation of the market (p. 168). He is also probably correct that the reforms he proposes are a reasonable price to pay for long-term consumer confidence and investment in the technology (p. 173).

The policy reforms Professor Bernauer proposes are of three sorts—1) strengthening national and supranational regulatory authorities; 2) promoting market-driven product differentiation; and 3) providing greater agri-biotech support for developing countries (pp. 174-84). As for the first, he recommends the establishment of politically independent and science-oriented regulatory authorities with substantial regulatory powers along the lines of the United States Food and Drug Administration (FDA) (p. 174). While he acknowledges that the FDA has been widely criticized for close industry ties, deficiencies in involving non-industry interest groups, and lax regulation of agricultural biotechnology based exclusively on the principle of substantial equivalence, he nevertheless believes that the FDA can still serve as a role model for other countries.¹¹

Professor Bernauer believes that it is equally important that the government more actively support market-driven product differentiation, key elements of which are identity preservation and labeling (p. 175). He makes a strong case for the proposition that voluntary negative labeling—that is, allowing producers, subject to certain constraints and quality controls, to label their products as free of genetically modified organisms—is not an adequate solution, as it would impose labeling costs exclusively on producers and consumers of non-genetically engineered (GE) crops (p. 177).¹² Instead, he

11. For a discussion of proposed principles governing the assessment of environmental risks posed by agricultural technology, see Charles Benbrook, *Principles Governing the Long-Run Risks, Benefits, and Costs of Agricultural Biotechnology*, available at <http://law.wustl.edu/centeris/Confpapers/benbrook.html> (last visited Feb. 27, 2005).

12. For a discussion of the current state of American law regarding labeling, see Neil D. Hamilton, *Forced Feeding: Inventorying New Legal Issues*

proposes that the cost of identity preservation and labeling be spread evenly, by developing three categories of products: 1) those containing no GE organisms (with tolerance levels close to zero percent); 2) those containing small amounts of GE organisms (with tolerance levels lower than one percent); and 3) those containing GE organisms for specified purposes (p. 178). He concedes that this proposal will require substantial reforms in the United States and other countries with lax agri-biotech regulations (p. 179),¹³ and that it might also exacerbate existing market concentration, as large United States producers and food processors would be better able to adapt to the new regulatory environment than would smaller United States-based processors and farmers, thus necessitating either stricter regulation of market concentration or government support for on-farm storage facilities and movement of grains directly to processors (p. 180). Professor Bernauer also notes that market-driven product differentiation will thrive only if the products, product related research and development, and production processes are safe and GE products confer obvious benefits on consumers (p. 180).

Finally, Professor Bernauer notes that increased investment in research and development and marketing of GE products that provide compelling benefits for developing countries would help increase public acceptance of the technology, which thus far has primarily benefited industrialized world agricultural producers, rather than promoting food security in the developing world (p. 182-83). Public-private research partnerships would contribute to alleviating concerns, particularly in the developing world, about "enclosure of the genetic commons" and dominance of the food supply by "gene giants" (p. 183). Many developing countries will need financial and technical assistance from the industrialized world in establishing effective regulatory mechanisms; however, avoiding regulatory failures there and elsewhere is clearly in the long-term interest of the producers of GE products (p. 183).

Professor Bernauer is certainly correct when he states that neither the proponents nor the opponents of agricultural biotechnology will likely embrace the implementation of his

in the Biotechnology Policy Debate, 17 WASH. U. J.L. & POL'Y. (forthcoming 2005), available at <http://law.wustl.edu/centeris/Confpapers/hamilton.html> (last visited Feb. 27, 2005).

13. *See id.*

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proposals with much enthusiasm, but he is also correct that this his proposals are probably the best that either can realistically hope for (p. 184). Europeans would do well to heed his admonitions about the naivety of efforts to establish complex and costly regulations that are difficult to implement and increasingly divorced from scientific evidence of health and environmental risks (p. 184). At the same time, Americans who take seriously the need to listen a bit more closely to what Europeans have to say over the next four years would do well to heed his admonition that it is equally naïve, and even dangerous, for the promoters of agricultural biotechnology “to assume that bullying agri-biotech critical countries into more permissive regulation, pouring millions of dollars into pro-agri-biotech public relations campaigns and promising ever greater benefits and low risks of future GE products will resolve the current crisis” (p. 184).