Book reviews

Food safety and international competitiveness—the case of beef

By examining international and domestic food safety regulations, this book elegantly opens the economic dialogue on an ‘optimal’ food safety system for world markets. The four countries selected (Australia, The United States (US), Canada, and The United Kingdom (UK)) are major beef exporters, major importers, or have experienced food safety problems related to beef. The book’s strength is examining the evolving institutional arrangements for food safety, by international associations and in the four countries. Outbreaks of foodborne illness, domestically and abroad, are identified as the major driver for change in national and international regulations and markets. As the world moves towards international markets, even for fresh beef, the responsibility for food safety is shifting among private and public agents. International arrangements, such as the Codex and the World Trade Organisation (WTO), are gaining more oversight over food safety. For example, the WTO’s Agreement on Sanitary and Phyto-Sanitary Standards requires scientific proof of risks, transparency in the regulations, and basing national standards on Codex food safety standards.

Because of the information problems associated with detecting hazards, food safety is a credence good. Firms have an incentive to free ride and under-spend on food safety. The United Kingdom’s cover-up of BSE illustrates imperfect actions by government agents charged with assuring food safety. The authors focus on two ways to stop free riding: legal regulation and market regulation. (Another option, improving food safety information to buyers in the marketplace, is not discussed.)

The authors advocate that the food safety objective for each country should be: “maximisation of the food industry’s long-run international competitiveness, subject to achieving some generally agreed, scientifically-based minimum standards on food safety (p. 6).” To achieve this, each country needs an institutional arrangement “... that efficiently and effectively assesses, manages, and communicates the risk of food safety problems (p. 145).” Spriggs and Isaac are to be commended for thoughtfully integrating risk assessment, risk management, and risk communication into the analysis of food safety regulatory policy and private decision-making. The importance of dealing with actual, and not perceived risks, is emphasised. Setting priorities among the competing hazards (pathogens, pesticides, hormones, etc.), however, is not discussed. Both the precautionary principle and risk assessments using ‘safety factors’ (for example, the US Environmental Protection Agency’s estimates for pesticide and dioxin risks) are designed to overestimate risks. This makes comparisons across all foodborne hazards difficult for a private company or for government regulators allocating scarce resources. To compare foodborne risks across pathogens, pesticides, hormones, and other hazards, it is important to calculate ‘best estimates’ of risk for each hazard. To incorporate scientific uncertainty, confidence intervals can be calculated around this ‘best estimate’.

The general statement that food safety standards, should be generally agreed upon and scientifically based (p. 6), is acceptable to most everyone, but the devil in the details. As the sensitivity of tests for pathogens, pesticides, etc. improves, regulators and companies face the question of the optimal level of safety, the meaning of ‘zero’ risk, and the definition of ‘negligible’ risk. Some examples where different
levels of risk may be appropriate are: is the company one of Michael Porter’s first movers in a niche market providing the highest level of food safety? Are the regulations targeted at the healthy public or the more vulnerable in nursing homes or day care centres for young children? Is the company producing a raw or a cooked product that will be re-cooked to a high enough temperature by the consumer or restaurant? Do micro-waved products inform consumers that the product is raw and needs to be fully cooked? Is the company producing a ready-to-eat cooked meat that will not necessarily be reheated by the consumer, for example, hot dogs?

Spriggs and Isaac commend the UK and Australia for recent food safety innovations:

- The UK wins the prize for increasing the economic incentives for food safety throughout the food production and distribution chain. The ‘due diligence’ clause in the UK’s 1990 Food Safety Act has empowered supermarkets to require suppliers of their private brand foods to exert more control over pathogens, since the supermarkets are now legally liable. The marketplace has responded, and new businesses have been created to certify the food safety efforts of food suppliers.

- Australia earns the authors’ gold star for its exemplary system of co-regulation. “This involves the replacement of government inspectors in meat plants with company inspectors who are overseen by third-party, independent auditors (p. 111).”

In both cases, the critical question is who oversees the auditors to assure no conflict of interest develops. Who should pay the auditors is another issue. MacDonald et al. (1999) review the economic literature on payment of user-fees for food safety and comment that user-fees are problematic, since the public health benefits primarily flow to the general public (p. 17).

The United States Department of Agriculture’s HACCP regulations and Salmonella performance standards are criticised. Spriggs and Isaac prefer a specific HACCP system identifying critical control points for all firms. The problem, though, is that companies are then denied the opportunity to innovate and determine if they have a comparative advantage in preventing contamination versus removing/killing contaminants on meat products, and in choosing the mix of equipment and management systems that best achieve microbial control (and meet the Salmonella performance standard).

Left for future research is analysis of how improved food safety information could minimise market failure. For example, the UK posts Hygiene Assessment Scores for all UK meat plants for use by the food industry and consumers (p. 178), but the impact on market performance is not assessed. Three types of food safety information systems that could be analysed are as follows:

1. Government or industry web-site posting data on each food company: its policy toward controlling pathogens, monitoring/testing data on the level of various pathogens found in the firm’s testing programs (for inputs, plant environment, and products), and the company’s actions taken after each test result indicating contamination.

2. A consumer label that identifies foods produced under a superior pathogen control program, such as a ‘gold star for safety’ (this could be an industry program like the Underwriters Laboratory rating for electrical products sold in the US).

3. Improvements in government surveillance systems to estimate more accurately the current level of foodborne disease in a country overall and from specific pathogens and foods.

Not mentioned, and also left for future research, is the impact of food safety institutions on the economic incentives for public and private research and development efforts to improve control of foodborne hazards.

Reference


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The Economics of Nature: Managing Biological Assets

This book, The Economics of Nature: Managing Biological Assets, can be thought of as a guide to the cost-benefit analysis of renewable resources. The authors begin their textbook by stating that they hope it serves three purposes. First, as a textbook for senior level undergraduates and graduate students. Second, as a reference book for economists, ecologists, foresters, and others. Third, to enhance general understanding in order to eventually lead to better policy design and implementation. The authors do a better job in meeting the second purpose—as a reference—than they do in meeting the other two.

The book does not invite use as a textbook for several reasons. For one, it is highly uneven. Some chapters require considerable knowledge of mathematics and advanced microeconomic theory to be read and understood. Others do not. It is clear that some chapters were written earlier without subsequent updating of the references. Some chapters, such as the one on forest management, include phrases such as “most countries are unlikely to adopt large-scale afforestation before the new millennium (p. 401)”, even though the publication date of the book is 2000. Chapters occasionally use concepts that are introduced later in the textbook. For example, the authors refer to the Kuznets debate on page 241, but do not tell the student what this debate is until page 266.

The book will also be a ‘hard sell’ to all but the most advanced student. It begins with a headfirst dive into consumer welfare measurement, without giving the student an intuitive feel for why he or she should care about such measurement—other than to assert that it is necessary for cost-benefit analysis. The book uses concepts such as efficiency without telling the student what these concepts are, what assumptions underlie them, and what limits their application in policy. Indeed, despite their heavy reliance on efficiency analysis, the authors do not include the word “efficiency” in the index.

Because the authors fail to examine the concept of efficiency and its utility in policy analysis, the book does not score well on its third purpose: that of informing policy design and implementation. The authors do not examine distributional issues—arguably at the heart of much policy design. They assume an accounting stance that gives heavy weight to the status quo distribution of assets and wealth. They fail to inform the reader that changing property rights can change the efficient outcome. The reader is not informed that property rights define efficiency or that property rights define what is a benefit and what is a cost (as Warren Samuels notes, “Freedom for the pike is death for the minnow.”)

The authors also explore issues such as tropical deforestation, African elephant conservation, and whale harvesting without incorporating many lessons from ecological science and systems analysis. For this reason, and because of the neglect of distributional issues as well as many non-market benefits, it is not too surprising that the authors conclude that the “economic case for large-scale conservation of nature appears to be weak (p. 3).”

There is also a tone throughout the book that diminishes the validity of “market failures” and enhances the validity of “government failures”. Some quotes to make my point: “It is well known that government intervention to correct market failure may produce a more insidious failure, namely policy failure (p. 2).” The authors do not explain why one type of failure is more insidious than the other. Or: “If governments had to pay compensation in all circumstances, they would be more likely to avoid policies that bring about large wipeouts with few benefits. Therefore, such outcomes would be more efficient, and efficient outcomes are desired (p. 289).” The authors do not discuss that there is both an economic and a policy argument to be made that governments should not compensate for all losses stemming from policy changes, and that some efficient solutions are not considered desirable by the public. The omission of these balancing arguments reduces the usefulness of the book for informing policy debate.

Despite my concerns about the book, I recommend its purchase for personal and institutional libraries. This is because the second purpose of the book is well fulfilled. That is, it serves as a good reference book for the efficiency analysis of renewable resources. True, my multidisciplinary classes would find this book difficult to use and would engage in long arguments over
the authors’ conclusions about the wisdom of most investment policies designed to protect biological assets. True, many policy practitioners would be frustrated with the narrow cost-benefit analysis perspective presented. Yet, I can see myself pulling this book from the shelf to clarify the distinction between the precautionary principle and the safe minimum standard, to advance the argument as to why willingness to pay may diverge so much from willingness to accept, or to find succinct discussions of non-market valuation techniques. I am also hoping that the next edition will correct some of the problems, so that all intended purposes are met and I can encourage my colleagues to adopt this book as their text without reservation.

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The Microfinance Revolution: Sustainable Finance for the Poor

The microfinance revolution of the 1990s sparked a major debate between the poverty oriented lending and the financial systems approach for providing financial services to the poor. The first focuses on reducing poverty largely through credit provided by institutions funded by donor and government subsidies and other concessional funds. The primary goal is to reach the poorest of the poor, but mobilising voluntary savings is normally not an important objective. In contrast, the second approach focuses on commercial financial intermediation among poor borrowers and savers, and emphasises institutional self-sufficiency. The author has written an excellent review of this debate and draws heavily on her extensive field experience, especially in Indonesia, to present well-reasoned arguments in support of the second approach.

The author defines the microfinance revolution as the large scale profitable provision of microfinance services—small savings and loans—to economically active poor people by sustainable financial institutions. The Grameen Bank in Bangladesh is identified as the first large scale specialised bank for the poor, but the author believes that its subsidised approach is inferior to the commercial orientation pursued by the unit desa system of Bank Rakat Indonesia (BRI) and BancoSol in Bolivia. They not only serve a large number of clients, but also cover their costs and risks and earn profits for the institutions.

The book is subdivided into two main parts. The first summarises the shift from the old subsidised agricultural credit paradigm to the new paradigm of sustainable commercial finance. It includes a chapter with rich insights about how poor people use and value financial services. In the second part, the author presents a critique of four sets of literature: the supply-leading rationale for directed credit, the imperfect information paradigm, informal moneylenders, and the role of savings in microfinance. Her critique of this literature provides the underpinnings for her views about commercial microfinance. She argues that there is scope for large-scale and profitable microfinance because commercial moneylenders often extract monopoly profits from their borrowers and microfinance institutions (MFIs) are more capable of sorting clients and enforcing contracts than predicted by the adverse selection and moral hazard arguments of the asymmetric information paradigm.

One of her widely recognised contributions to microfinance is her understanding of the value of savings for the poor that derives from extensive field work in Indonesia and other developing countries. This experience is evident in the last chapter in which she describes the many forms of informal saving mechanisms used by poor people and explains how microfinance institutions can design and price instruments to capture these savings. These arguments represent her most important and unique contribution to the microfinance debate and are crucial for her view that unsubsidised financial intermediation is possible for MFIs that serve the poor. The 10:1 relationship between the number of savers and borrowers in the BRI unit desas and the surplus of funds transferred from rural to urban areas in Indonesia is the key empirical data in support of this view. This observation also leads to
her view that most MFIs put too much emphasis on lending and overlook the fact that attractive saving services are also useful and important for the poor.

This book is the first of three that she is writing on these general themes. The second one promises to explain why the microfinance revolution emerged on a large scale in Indonesia, the way it occurred, and the lessons for other countries. It will focus heavily on BRI up to the financial crisis in 1997, with an update through year 2000. The third volume will analyse the history and performance of institutions that played key roles in the microfinance revolution—village banks, credit unions, NGOs, banks, regulatory institutions, donors, etc.—and the emergence of best practices for the new paradigm. It will also present a forward-looking view of the industry as it will appear in 2025.

Thus, it is possible that the best is yet to come, as she fills in the significant gaps in the Indonesia story that remains unexplained at the end of this volume. More information is needed in order to fully evaluate the idea that the unit desa system is the model for the entire microfinance industry. Two important features of the system make it unique. First, the transformation of BRI from loss-making agricultural lending to profitable microfinance is a rare example of the successful turnaround of a government-owned financial institution in developing countries. Part of the BRI success can be attributed to the huge investments in financial infrastructure made by the government and donors over many years. Second as a government-owned institution, it has enjoyed a near monopoly in some local markets so it mobilises savings from all types of savers for use in financing loans to poor borrowers. Large amounts of surplus funds are transferred to its urban operations and lent to corporate borrowers. By being government-owned, it benefited from the perception by savers that their savings were insured. Therefore, its savings volume increased relative to other banks due to the flight to safety that occurred during the 1997–1998 financial crisis. By comparison, many MFIs in developing countries are perceived as being too new, weak and unstable to trust with savings, and most are not regulated by financial authorities. An argument can be made that in these more typical circumstances, a preferred financial strategy would be to encourage commercial banks to use their networks to mobilise savings and lend them to other types of MFIs that specialise in lending to the poor.

This book delivers a powerful message to policy makers to re-evaluate their bias towards lending and start thinking about the importance of savings services for the poor even if the Indonesian model has limited applicability in their countries. It is an important addition to the microfinance literature for students in development and finance courses who want a good summary volume to place the abundant literature about the Grameen Bank in a broader perspective. It has an excellent and large list of references that includes most of the key literature in the field.

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doi: 10.1016/S0169-5150(03)00023-9

Contracting for Agricultural Extension: International Case Studies and Emerging Practices

Contracting for agricultural extension provides a new and important contribution to the world-wide discussion about the design and functioning of agricultural extension service approaches. The editors present a selected sample of case studies, from all over the world, which show a variety of contractual extension arrangements that may help secure sustainable funding for efficient extension service delivery. After a short introduction and a first chapter reviewing the results of the international debate on organising and financing agricultural extension, the 18 case studies are arranged in six sections, followed by a concluding chapter that provides an overall analysis of the cases.

The first section, with the heading “Offloading public sector extension delivery services,” describes examples from Chile, Germany, Estonia and The Netherlands. The unifying theme of these cases is how former public (state- or country-wide) extension systems have partially or totally shifted extension delivery to private or privatised suppliers. These delivering organisations are still funded for parts of their services by the public treasury. But their development clearly has been in the direction of full
independence from the state and hence full cost recovery through clients' payments. The most interesting cases are Chile and The Netherlands, where the move towards contracting out and privatising extension delivery started some 10–20 years ago, and where changing political frameworks and experiences with implementation have led to remarkably steady adaptation to customer demands and political objectives.

The second section, titled “Contracting to promote environmental services,” presents two examples, one from Australia and the other from Madagascar. Both cases describe regionally limited but very interesting programmes for environmental protection and development extension. An important part of these programmes is the involvement of NGO or citizen associations that are contracted by the government to give advice to individuals or to initiate programs on how to organise effectively to sustainably manage natural resources.

“Contracting for input services” is the heading of Section 3, which provides cases from Bangladesh, Mali, and the US (Illinois). The common theme of these examples is extension program content rather than organisation or methodology. All three are about the provision of strongly production-related, specialised extension packages on the efficient use of specific inputs (hybrid seeds, veterinary drugs, precision agriculture inputs). But while the US case is a classic farmer-paid extension program, interesting for its clear-cut information and service packages that an individual farmer can order, the Mali case illustrates a state-financed extension program that is delivered by private input suppliers (veterinarians). Readers should be interested in following the development of this case, as well as the Bangladesh case, in which public project funds support farmer training and the input supply services of a medium-sized private seed-trading enterprise. As publicly funded extension services are delivered by private input suppliers or are closely linked to the interests of one specific trading enterprise, unfair competition may lead to imbalances in the input supply markets.

Section 4 is headed “Contracting for specialised services,” and the cases from Colombia, Trinidad and Tobago, and Vietnam illustrate how private or semi-private organisations can successfully take over specific extension tasks that an existing public extension department can not handle. In the case of Trinidad and Tobago, a mass-media campaign was contracted out to private media producers, who, in co-operation with the subject specialists from the extension department, produced powerful formats that directed the interest of the whole population to a very dangerous pest problem.

Section 5, titled “Farmers contracting for commercial advisory services,” cites two cases. One of them, similar to the already-cited US example, describes the functioning of commercially-run production consultancy in the Lousiana cotton growing area. Information and service delivery packages are purchased by individual farmers or farm enterprises. The other, an example from Portugal, describes the implementation of an EU programme on Integrated Pest Management (IPM) through a farmers association.

In the last case study section, titled “Other contractual arrangements for extension services,” the editors combine four interesting examples of contractual arrangements that they found hard to place under a unifying headline. The four cases are from:

- China, with an example of a government-dominated extension effort in one prefecture, implemented to spread the introduction of hybrid rice;
- Finland, with a national extension system, which, since its emergence 100 years ago, was a contracting system with independent Rural Advisory Centers delivering state-financed extension. Of specific importance is the adaptation of this system to decreasing public funds and changing demands from its clientele;
- Mozambique, where extension to a majority of farmers 15 years ago was non-existent and where a mixed system of public funding and public and private delivery is projected and yet to be implemented;
- Uganda, where the under-financed public extension system is considered by rural development projects and NGOs to be a unique source of extension skills and subject knowledge and therefore has been contracted for the implementation of their specific rural development programmes.

With the 18 case studies, this book provides an almost overwhelming impression of the variety of contractual arrangements for agricultural extension around the world. The reader can find examples of still very recent moves towards more participatory and decentralised approaches, whose conceptions integrate the latest conclusions of the international
extension services debate (Mozambique), and examples in which considerable practical experience with contracting already has led to various adaptations and changes in the system (The Netherlands, Chile, Finland). The reader can find examples of nation-or state-wide extension systems as well as regionally limited pilot or project approaches. Extension content ranges from participatory forestry planning (Madagascar) to the selling of clearly defined information and service packages for precision agriculture (US). It is striking how even with very similar and clear-cut objectives such as the broad introduction of hybrid seeds, the programs are approached very differently under different geographical and political conditions (Bangladesh, China). This diversity of approaches underlines one of the editors’ conclusions for practitioners: that no simple single recipe for contracting arrangements can be given.

The authors of most studies discuss the advantages and the problems that were experienced with the planning and implementation of the described contracting arrangements. However, as most cases are still very “young”, many of the real problems may not have appeared yet, and the visible and envisaged advantages seem to outweigh experienced difficulties in most cases. In that respect, it is the already long-term tested cases of Chile, Finland, The Netherlands, and the US that may provide the most realistic picture of the pros and cons of contracting. In Chile, the only long-term example with contracted advisory services under the conditions of subsistence agriculture, two findings seem striking:

1. It takes a long time and a lot of patience and will of all stakeholders to develop a well functioning advisory system on a contract basis.
2. Under the conditions of subsistence and small-scale farming, an effective advisory system, whether delivery is contracted or conducted by state employees, needs considerable public funding.

The richness of the characterised approaches makes the reading sometimes tiring, and even though most of the case studies follow a similar sequence in description (case and context description, impact analysis, sustainability and replicability of the example and lessons learned), the kind and structure of information under the headings differ strongly from example to example. Given the big differences in conditions and time horizons, comparability is sometimes a problem. As the editors note in their introduction, the reader may not always agree with the arrangement of the case studies in the given sections.

The first and last chapters of the book, written by the editors, are excellent. Chapter 1 gives a comprehensive overview of the results of the recent debate and developments in the agricultural extension sector, and provides the reader with most relevant questions and criteria for evaluating the case study examples. It also helps the reader who only wants to focus on one or two case studies. With the first chapter, the most relevant considerations for the design of contracting approaches are presented, including policy issues in contracting extension services, requirements for successful contracting, and recommendations for policy and planning practitioners. Chapter 20 provides a summary and an analysis of the most important findings, cross-cutting the whole sample of case studies. Thus, it provides an overview and adds a most valuable general perspective to the individual analyses. However, given the diversity of cases and descriptions, and the generally positive findings, especially on social and environmental issues, the reader may be provided with an overly optimistic picture of the potentials of contracting.

All in all, this book is an important contribution for discussion and for practice, as it gives a range of inspiring examples for contracting and at the same time provides the relevant questions and criteria for comparison and evaluation. Thus, it can help practitioners to better design contracting arrangements and to influence more effectively the ongoing process of privatisation and outsourcing of tasks hitherto considered public. Reading carefully the results of the analyses in the first and last chapters should provide ideas to political decision makers about the potentials, and to some extent the limits, of such processes in their specific situations.

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doi: 10.1016/S0169-5150(03)00042-2