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Book reviews

International Trade in Hazardous Waste, by D. Kofi Asante-Duah and Imre V. Nagy. Published by E. & F. N. Spon, London, 1998, pp. xii + 189, ISBN 0 419 21890 4. Price $125.

Australia has a specific interest in international trade in hazardous wastes. It was a reluctant signatory to the Basel Convention restricting such trade and, with its substantial land resources, could conceivably provide an export service in waste disposal. Given strong international opposition to unsafe disposal and a growing illegal trade, Australia might simultaneously be able to develop a promising service export and resolve currently intractable global environmental problems.

However, there is little literature to guide thinking on such issues. Given this book's title, the reviewer was interested in its possibilities and purchased it sight unseen. I cannot, however, recommend it to economists (or anyone else!). The main thesis of this book is that stringent environmental laws and rising disposal costs in industrial countries have made waste disposal in LDCs attractive. LDCs, however, are unaware of the risks, are inadequately compensated and may not have expertise for safe disposal. Wastes therefore flow from developed countries to less regulated LDCs where they are inappropriately disposed of, creating a multilateral case for banning (or regulating) such trade.

Evidence for such trends is provided in this book. However, some data are inconsistent and do not indicate the claimed importance of trade. In some cases it is not stated whether expenditure is in real or nominal terms, making key comparisons awkward. More importantly, the book's authors make errors of logic. Waste generated by Country A and disposed of in Country B is treated as an export of wastes from A to B. It is not: B is exporting a waste disposal service to A which imports this service. Much dubious reasoning results from the failure to make this clear.

The text has useful descriptive material though not on trade. Industrial countries often have 'cradle to grave' controls on waste. A manifest is signed at each waste transfer with regulators managing this record. There are then specific laws governing use of air and water, compensation and liability, particular toxins, transport and wildlife/natural amenity protection. The tendency is toward criminal sanctions for environmental offences — tolerance has disappeared.

National policies do not bear directly on issues requiring international cooperation and subjugation of sovereignty. The authors consider these global issues. A major obstacle, however, is the lack of comprehensive global data on waste production and trade and a lack of theory which might guide the authors in making the judgements that they do.

This book notes that OECD countries account for 93 per cent of industrial wastes, large amounts of which are 'sometimes' exported to non-OECD countries (p. 25). The word 'sometimes' is mischievous since total trade in wastes by OECD countries is claimed to be 4 133 tonnes (p. 73) while total production is 237 388 *thousand* tonnes (p. 22). On the face of it, this suggests trade is negligible (less than 2 per cent of total production) so that policies to control it would have little impact.

Similarly, the authors claim that wastes generated by US industry have jumped from 25 million to more than 500 million tonnes per year from 1970–89 (p. 70). The latter figure here is much higher than the OECD figure of 180 million tonnes for 1994 which the authors also cite. The discrepancy is left unexplained.

The book provides a survey of national waste management and argues that an emphasis on waste minimisation has developed. Again, it states that exports of wastes (correctly, imports of waste disposal services) are 'often' a preferred option and that this 'often' occurs in LDCs where there is 'often' ineffective management.

Some specific observations in this book about LDCs are interesting although they have little to do with trade. Waste in LDCs is often generated by households and small businesses in urban areas where control is difficult and where wastes are unsegregated. No evidence on LDC environmental impacts is provided. All that is stated is that health problems 'may' be more critical than believed and development efforts are fundamentally misdirected. The policy prescription is to take inventories of toxic chemicals, examine the risks associated with use of such chemicals, implement public information programs and design waste management along 'cradle-to-grave' lines. These claims are plausible if unsurprising.

On trade, the argument is that firms will pursue the cheapest disposal options around the world. Recycling or storage may be more economically viable elsewhere. This is true. The argument continues that many shipments find their way around regulations by being designated as wastes for recycling which was true; but an important point is the extent to which the 1994 revisions to the Basel Convention have inhibited this. About the only hard data offered is the claim that 3 million tonnes were shipped from industrial to developed countries between 1986-88 and that 'some' of this was illegal. This aggregate figure is again a small fraction of total waste suggesting (without contrary argument) that trade is unimportant.

There is also a discussion of NIMBY (not-in-my-backyard) ethics. Many waste programs have been located in poor communities where political opposition is weak. Increased resistance has promoted an international spread of this problem. In the United States, notices of intent to export hazardous waste rose from 12 in 1980 to 626 in 1989 which has been criticised as replicating 'environmental racism' (meaning unfair on distributional grounds).

As previously mentioned, part of this criticism has been avoided by shipping wastes under the banner of recycling. Even if it is not sham, the recycling of lead acid batteries has pollution risks. The issue of lead battery recycling is important for Australia and is more competently analysed in BIE (1995). The work reviewed has no new descriptive information or insights.

Another approach to NIMBY is to relocate waste-generating industries in LDCs so issues of waste exporting do not arise. This is an interesting insight which points to problems of making trade bans effective given that they can be offset by foreign investment. Unfortunately, this study does not take this intriguing argument further.

On proposals to control the waste trade the authors discuss OECD and UN initiatives. The OECD have long sought to control and monitor waste movements using 'cradle-to-grave' management and information exchange. OECD members had maintained lists of hazardous substances but these differed between countries, leading to an attempt to compile a core list requiring control. In 1992, the OECD classified this list into Green, Amber and Red sub-lists depending on environmental risk, with stricter controls applied to Amber and Red categories.

On UN initiatives, the authors discuss the Basel Convention which aimed to control trade and ensure safe disposal. It did not initially call for a ban on trade with LDCs but provided for bilateral, multilateral or regional agreements to regulate trade. It required information including the notification of shipments and established a fund to minimise damages in emergencies. In 1994 the Convention was strengthened by prohibiting waste transfers from OECD to non-OECD countries and by banning trade in wastes for recovery.

The last four chapters of the book contain policy material which often repeats work in earlier chapters. Problems of classifying wastes are aired and there is an uninspired discussion of the risks associated with waste. Health issues and associated socioeconomic criteria are explored. A discussion of cost-benefit analysis is included and general comments on trade but I found little that was new. The repetition in these sections (and throughout the book) suggests poor editing and makes for tedious reading.

Generally, this is a disappointing study of a potentially interesting area. There are shorter, locally produced efforts which provide better guidelines

for economists: see Anderson and Drake-Brockman (1995), Berger (1998) and Kellow (1999).

References

Anderson, K. and Drake-Brockman, J. 1995, 'The trade/environment debate and its implications for the Asia Pacific', *Business Council Bulletin*, vol. 118, April, pp. 46–53.

Berger, N. 1998, 'North-South trade in recyclable waste: economic consequences of Basel', seminar paper No. 98-03, Centre for International Economic Studies, University of Adelaide, March.

Bureau of Industry Economics 1995, *Implications of a Ban on Exports of Used Lead Acid Batteries*, Occasional Paper No. 31, AGPS, Canberra.

Kellow, A. 1999, 'Baptists and bootleggers? The Basel Convention and metals recycling trade', *Agenda*, vol. 6, no. 1, pp. 29–38.

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Fisheries Structural Adjustment: Towards a National Framework, by Rebecca Metzner and Peter Rawlinson. Published by the Fisheries and Aquaculture Branch, Dept. of Primary Industries and Energy, Canberra, 1998, pp. xvi + 253, ISBN 0 7306 6261 6.

This report was prepared for the Management Committee, Standing Committee for Fisheries and Aquaculture, Australia. The authors are with Fisheries Victoria and the Commonwealth Department of Primary Industries and Energy. The report evolved out of an earlier discussion paper on the Australian National Fisheries Adjustment Scheme (ANFAS) and presents the findings of a project with three objectives, namely, (1) to develop elements for a policy framework; (2) to develop operational guidelines; and (3) to identify existing mechanisms to facilitate fisheries adjustment. Lest there be any doubt, the context is the usual one of general excess harvesting capacity. In particular:

> Many Australian state, territory and Commonwealth fisheries have been managed under limited access regimes since the late 1960s, where a variety of traditional input control measures have been implemented to reduce effort to deal with increasing fishing pressure on stocks. Despite this, the level of fishing effort in most fisheries around Australia has continued to increase. (p. xiii)

We must presume that the economic problem of input stuffing is even worse than that implied by simple effort indices since, with effort controls, the Le

Chatelier principle and the Averch-Johnson hypothesis would apply: input combinations tend to accelerate catch rate at the expense of deteriorating cost effectiveness. While the context and case studies are Australian, they are of wider interest and the authors devote time to reviews of pertinent experiences around the world.

The report is divided into six chapters (65 pages) plus 10 Appendices (182 pages). Chapter 1 outlines the ANFAS project and the *raison d'être* for the Report. Chapter 2 explains the structural adjustment environment which has jurisdictional, fiscal, political, biological and economic components. This chapter also has a brief explanation of property rights and their interaction with fisheries adjustment, and a section on measures ('skill enhancement', re-establishment grants, extension services, etc.) to assist the adjustment process. Chapter 3 is devoted to methods and outcomes of structural adjustment. Under methods, it discusses input controls, stock enhancement, buyout programs and output controls. Under outcomes, it distinguishes between desired outcomes and actual outcomes; a crucial distinction since, typically, there is a huge disjunction between the normative policies (desired) and positive (actual) results. Chapter 4 discusses the design of structural adjustment programs in the Australian context. While some aspects of this discussion will not transfer well to other contexts, it is always of interest to see institutional differences and to ponder their transferability. Chapter 5 is a case study of the Southern Shark Fishery (many more are in Appendix B) and gives the earlier material a more specific setting. Chapter 6 examines issues in developing a national adjustment framework. These include conceptual, legislative, administrative, financial and political aspects.

The Appendices are:

A. Project brief and methodology
B. Australian case studies
C. Selected international case studies
D. Australian adjustment experiences — non-fishing sectors
E. Australian fisheries legislation
F. Participation in the ANFAS project
G. Tools for program design
H. Assessing regional adjustment impacts
I. Abbreviations
J. References.

Since this is a report, it does not attempt to break new theoretical/conceptual ground, but it does give the reader much insight into the problems of Australian fisheries and public sector attempts to alleviate those problems. Australia is to be commended for this attempt to develop a coherent national strategy. It is in stark contrast to this reviewer's experience

in the United States where fisheries policy is driven by parochialism and a species-bound approach. What good can one possibly say of national legislation which specifies which *vessels* may and may not fish in specific fisheries, while prohibiting rights-based fishing which could limit the continuing problem of growing effort, input stuffing and wasteful regulations on catch composition?

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