and positive approach to natural-resource management are refreshing. He also shows that doomsday prophecies will be proven wrong in the twenty-first century as well. Though it contains a fifth of the world’s population, China has and will maximize its ability to feed itself, for example by shifting some cropland from staples to horticulture. However, Lindert’s definition of soil quality, based primarily on soil chemistry, is narrow. There is no mention anywhere in the book of the importance of physical factors affecting soil quality. Relevant among these are soil structure (affecting crusting, compaction, waterlogging, and root growth), available water holding capacity, permeability to air and water, and infiltration capacity. Similarly, the author has completely ignored biological quality as influenced by microbial biomass carbon and by the activity and species diversity of soil fauna. Without the benefits of changes in soil physical and biological qualities, the interpretation may be biased and conclusions speculative. Overgeneralization may also lead to complacency, and thereby to the misuse of fragile soils and ecologically sensitive eco-regions. A cautious optimism, rather than Lindert’s “can-do” attitude, would be a more prudent approach to sustainable management of natural resources.

The data made available in the book have numerous ancillary benefits. The information on temporal changes in soil organic matter and nitrogen contents is useful to estimate the amount of C (as CO2) and N (as N2O) emitted into the atmosphere due to agricultural activities. The estimates thus obtained provide a reference point with regards to the soil C-sink capacity upon conversion to an improved management or an appropriate land use. Contrary to the author’s contention that agricultural intensification leads to depletion of organic matter and nitrogen pools, the upward trends in these constituents since the 1970s show that increased use of fertilizer and adoption of recommended agricultural practices have increased both C and N pools in soils of China and Indonesia. These trends show that conversion of croplands to horticultural, pastoral, and silvicultural land uses can sequester C and N in soil and reduce the risks of accelerated greenhouse effect (see for example Rattan Lal, “World Cropland Soils as a Source or Sink for Atmospheric Carbon.” Adv. Agron. 71 [2000]: 145–91).

This book will be of interest to soil scientists, agronomists, geographers, economists, land managers and policy makers interested in food security and the sustainable management of soil resources.

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AUSTRALIA AND LATIN AMERICA


In 1901 six of the seven British colonies in Australasia federated to form the Commonwealth of Australia. The collaborative volume edited by Irving is one of a number of recent scholarly publications marking the centennial of that event. It chronicles a federation movement that began in the middle of the nineteenth century, with different contributors telling the story from the perspective of each colony. Emphasis is given to the role of colonial leaders in the drawn-out saga, for this book is designed for readers interested in the political and constitutional dimensions of the process. (It also contains over 100 pages
of “short entries,” in the style of a compendium, and reproduces associated documents such as the 1901 constitution.) Although economic issues were important, in Irving’s book they are only indirectly recognized.

Federation was prompted in substantial part by growing feelings of nationhood among the colonies: an increasing sense of distinctiveness from British culture and society, and heightened awareness of the geographical isolation that these fragments of empire shared. For example, the influx of Chinese gold miners, and Germany’s colonizing activities in the South Pacific, had alerted the European settlers to their Asian-Pacific location and triggered uncertainty about the stability of their immediate neighborhood. Hence immigration and defense were functions listed by advocates of federation as better undertaken by a united Australia than by the colonies acting separately.

On the economic front, the Australian colonies were already highly integrated. They were members of a wider currency union, the sterling area, and they had managed through intercolonial bargaining to harmonize many arrangements affecting business, finance, and intercolonial trade—though not, infamously, the gauge of their railroad systems. More difficult to resolve in the context of political union were the issues of taxation and external tariffs. The colonial governments differed in their dependence on various revenue bases, especially regarding the sale of crown lands and tariffs. New South Wales had remained relatively free-trading while Victoria had erected protective tariffs. Since federation required free trade between the states and a common external tariff, there were predictable alignments (both party-political and private-interest) into free-trade and protectionist groups. These issues surface constantly in the contributions to the Irving book, but unfortunately they are not systematically addressed. Nor is there discussion of the economic effects of federation: what difference did it make in the welfare of Australians, and when?

Some attention is, however, paid to the role of economic factors in explaining the timing of federation. The eastern Australian colonies suffered a severe and lengthy depression in the 1890s, which heightened awareness of their economic interdependence. In contrast, at that time the remote and sparsely settled colony of Western Australia boomed under the influence of its gold rush. Not surprisingly, this colony was the least enthusiastic about the benefits of federation.

It is timely to be reminded by Irving’s contributors of New Zealand’s participation in some stages of the negotiations that led to federation. Perhaps because the New Zealand economy revived more rapidly from the downturn of the early 1890s than did eastern Australia’s, the New Zealanders decided to stay out. In the last quarter of the twentieth century, by contrast, as its relative economic fortunes slipped, New Zealand entered first a free-trade agreement with Australia, then pursued more comprehensive economic integration. With discussion of a possible currency union now underway, the centenary of New Zealand’s decision not to join Australia in 1901 looks—at least on the economic front—to have been substantially reversed.

The book by Meredith and Dyster has quite a different audience in mind. It is a revised edition of a text on Australian economic history, directed at introductory undergraduate courses (there is a glossary of elementary economic terms) and focusing primarily on the twentieth century. As hinted in the title, the treatment is designed to emphasize the interrelationships between the Australian and international economies—a desirable approach to the study of a small, open economy whose development has for 200 years been closely bound to fluctuations in, and opportunities offered by, global economic forces. As the only recently published survey text available, it offers both students and the general reader a convenient summary of events and of most major issues in the literature.

Less satisfactory, at least for readers seeking a comprehensive introduction to the development of Australia’s economy, is that there are really two books packaged in parallel. The
international economic context of the Australian story is not integrated into the domestic narrative. Rather, in each of the five subperiods considered, separate chapters on the world economy precede discussion of the domestic economy. Thus almost half the book is not about Australia. This may be useful for the teacher wishing to cover both Australian and international economic history in the one course. But the result is a necessarily thin coverage of both sets of material. If bringing the story into the 1990s is not essential, readers may thus prefer to consult fuller, if older, accounts of Australian economic history.

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The tropical forest of Brazil has been a symbol of America’s abundance, potential, and mystery ever since the Portuguese first landed there in 1500; but harvesting its potential has never been easy. The complex reality of the forest has always made its exploitation complicated. Whereas the history of the Brazilian forest has previously been studied from an ecological point of view, particularly in Warren Dean’s With Broadax and Firebrand: The Destruction of the Brazilian Atlantic Forest (Berkeley: University of California Press, 1995), the present book is less interested in what the Europeans should have done to save the forest than in what they actually did to turn the forest into the exploitable resource. Miller does not wish to condemn the colonists for exploiting the forest, nor does he think that slash-and-burn farming or timbering were wholly to blame for the resulting destruction. Instead, his story is centered on the negative effects of the real corte, a royal monopoly of the most attractive wood-bearing species, the so-called madeiras de lei, and on the long-term results of government monopoly on the economic development of the timber industry. In this, Miller follows the lead of F. W. O. Morton (“The Royal Timber in Late Colonial Bahia.” Hispanic American Historical Review 58 (1978): 41–61), but he expands the boundaries of that important study both geographically and chronologically.

Miller begins with a discussion of the colonial landscape, including analyses of soil types and of the amazing variety of tree species in the Brazilian forests. (He provides a very useful appendix on timber types). Early colonists and the crown were not only interested in exploiting the dyewood pau brasil—which gave the colony its name—but also the many varieties that could be used for naval construction, and that gave ships built in Brazilian yards a reputation for soundness and durability. He then demonstrates how the Portuguese policy of claiming for the crown all trees—even those standing on private land—suitable for naval construction and cabinet-making, which began in the mid-seventeenth century, was far in excess of what was done by other colonial powers at the time. It set the crown in direct competition with the local sugar planters, who were voracious consumers of firewood, and with those colonists who wished to clear fields or exploit the wood themselves. This competition intensified in the 1790s, as the crown passed new legislation to appropriate all forested areas within about thirty miles of the coast. Portuguese royal forest policy, its limitations on the timbering and shipbuilding industries, and its overall failure in the colonial context, together form the core of the book.

Miller is at his most informative in describing the regional timbering economies, the process of tree selection and felling, the techniques and technology of timbering, the transatlantic shipping of timber, and in calculating the industry’s output. Here he is somewhat a prisoner to his sources: he is forced to depend on the balanças do comercio, which exist for the period 1796–1819 but not earlier. Thus the book is focused on this period and