



## Book Review: Economics of the Oceans: Rights, Rents and Resources

Hallwood, P. (2014). *Economics of the Oceans: Rights, Rents and Resources*. Oxon and New York: Routledge, Taylor & Francis Group. 298 pages. ISBN: 978-0-415-63911-8.

*Economics of the Oceans fills a critical gap between broad environmental economics texts and marine resource texts focused on only one resource. Its major strength is the ease with which Paul Hallwood blends background information, case studies and economic theory. He clearly demonstrates that basic microeconomic principles still apply in the ocean, even out on the anarchic waves of the high seas.*

The general public is becoming increasingly aware of both the importance of ocean resources and the threat to mankind from its overexploitation. Films such as *The End of the Line* and *Captain Phillips*, popular books such as *Cod* and *The Box*, and actual disasters such as the Deepwater Horizon oil spill have exposed a wide audience to the complexities of commercial fishing, shipping, drilling and other economic activities in the ocean. The consequence of this growing awareness is a growing demand from university students around the world for more classes on ocean economics and policy. This trend is being played out on campuses across the world, from the newly created Center for the Blue Economy at the Monterey Institute of International Studies to the MSc in Marine Policy program at Cardiff University.

Before *Economics of the Oceans* came out, teachers of courses on marine resource economics had difficulty finding an appropriate textbook. There are of course a number of excellent environmental and resource economics textbooks such as Conrad (2010), Tietenberg and Lewis (2014) or Kolstad (2010). However, while they convey key microeconomic concepts necessary for understanding the exploitation of ocean resources, they devote little attention to marine resources and a lot more on terrestrial topics. There are also a number of excellent texts focused entirely on marine resource topics but usually only on one marine resource such as Ludicello et al. (1999) and Grafton et al. (2006) on fishing or Talley (2009) and Stopford (2009) on shipping.

*Economics of the Oceans* fills a critical niche between broad environmental economics texts and marine resource texts focused on only one resource. Over fifty percent of the book is on non-fish resources and includes important ocean resource topics such as coral reef protection, mineral extraction, ocean pollution, maritime piracy and shipwreck recovery. The major strength of the book is the ease with which the author blends background information, interesting case studies and economic theory. The book is a great example of just how applicable basic microeconomic principles are to a range of policy issues (even in the often anarchic world of the ocean). One of my favorite examples is the chapter on enclosure of the oceans. Hallwood uses a simple cost-benefit framework to explain the evolution of international boundaries in the ocean from the 3 nautical mile limits first posited in the 1600s through to the Truman Proclamation in 1945 and the present day 200 nautical mile Exclusive Economic Zones. The book does assume some knowledge of basic microeconomic principles but there is a useful appendix that explains the nuts and bolts of cost-benefit analysis. The appendix is helpful to readers with little background in economics.

The general theme of *Economics of the Oceans* is that property rights are what really matter in the ocean. This will come as no surprise to economists but the stark differences in outcomes across settings that differ primarily in terms of rights may surprise even the most ardent Coaseans. As an illustrative example, Hallwood cleverly compares and contrasts oil with fish. Offshore oil is heavily regulated in most countries with clear property rights and generates significant rents for host governments. Fish populations are poorly regulated in the waters of many countries with unclear property rights and generate little economic rents. Why this has come about and what can be done to remedy this situation is one of the key lessons in *Economics of the Oceans*.

With any new text that attempts to capture a growing field, there will inevitably be some omissions that others in the field feel should be included. All of the primary marine resources are covered but I was surprised that there was no discussion of the economics of ports, the cruise ship industry, or competition in domestic and international shipping (e.g. the Jones Act). Some of the examples (primarily in the fisheries section) are a little dated; there is no discussion of "catch shares" in the two chapters on fisheries economics,

which has been a major component of the Obama administration's ocean policy agenda. A glaring omission is aquaculture and associated conflicts over the use of ocean space. This would have been a great opportunity to introduce the concept of "ecomarkets" for dealing with conflicts in the coastal zone (Fujita et al., 2013). Nor is there discussion of climate change impacts on ocean resources or the economic costs of coastal disasters (Lynham and Noy, 2012). Aquaculture and coastal hazards would obviously be topics of considerable interest to readers in Thailand and other developing countries.

These omissions should not be interpreted as any real criticism of the book. It is simply not possible to include every major ocean resource or economic activity in sufficient detail to please everyone. Paul Hallwood should be commended for not only identifying an important gap in the literature but also for doing an excellent job of filling it. The book is adeptly written and sprinkles interesting anecdotes to keep you turning the pages to see what happens next- even when the underlying theory is rather dry. The book will be primarily used as a textbook but I envision many people will read it outside of a classroom setting; not only is it an engaging book, it is the first of its kind and tackles issues that are rising in the public consciousness. I have decided to drop the textbook from last year and am requiring all students to get a copy of *Economics of the Oceans* for my Ocean Economy course. It is the benchmark against which all future ocean economics texts will be measured.

John Lynham

Assistant Professor

Department of Economics and UHERO, University of Hawai'i at Mānoa

Affiliated Researcher

Center for Ocean Solutions, Stanford University

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