

ECONOMICS OF THE OCEANS

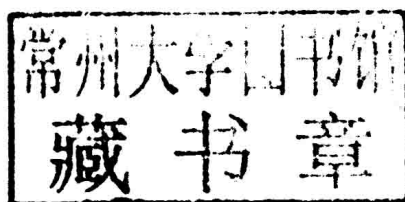
RIGHTS, RENTS AND RESOURCES

PAUL HALLWOOD

ECONOMICS OF THE OCEANS

Rights, rents and resources

Paul Hallwood



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ECONOMICS OF THE OCEANS

It is an unfortunate truth that our oceans offer valuable resources that are too often used unsustainably. Time and again this is due to the failure of international law to provide a framework for adequate governance. *Economics of the Oceans* examines this issue and provides a comprehensive study of ocean uses from the perspectives of law and economics.

Themes covered in the book include ocean governance, the economics of oceanic resource exploitation, offshore oil, coral reefs, shipwrecks and maritime piracy. Analytical techniques such as basic game theory, environmental economics of the commons, and cost-benefit analysis are employed to illuminate the topics.

This book will also be of interest to students of environmental economics and natural resource management.

Paul Hallwood is Professor of Economics at the University of Connecticut, USA.

This book is dedicated to my wife Barbara and my three children, Sarah, Alexander and Philip.

On the surface of the blue-green planet people have fought over the green bits for ages. However, because they didn't seem worth fighting over, they hardly bothered with the blue bits. Strange as it might seem, the green bits are mainly well tended, while the blue bits are in awful disrepair. Why is this? Let's see if we can find out.

—Lyme, Connecticut, June 30th, 2013

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PREFACE

Economics of the Oceans uses the discipline of economics to examine various issues relating to the use of ocean resources. I examine whether “Law of the Sea” treaty obligations, ratified by many countries and coming into force in 1994, are proving effective in improving the use of ocean resources. Sadly, there is not much evidence so far that enlightened cooperative interest is carrying the day. Over-fishing and severely depleted fish stocks are a worldwide phenomenon. International relations specialists describe an anarchic world where countries agree only to those international laws they want to acknowledge. Over-exploitation of many ocean resources is a good illustration of this anarchy. Even in the exclusive economic zones, where national writ could be made to be effective, so often it is not.

As there is more to the oceans than fish, a little more than one-half of this book is about non-fishery issues such as the economics of maritime piracy, the law and economics of historic shipwrecks, the setting of maritime boundaries, marine pollution, whaling, the nature of international public law as it relates to the oceans, and the recovery of offshore oil from the continental shelf and metals from the deep ocean.

I examine, specifically, what the objectives are of the nation-states both internally and between themselves. What constraints do they face? How can either the objectives or the constraints be modified to create a superior legal and economic environment governing use of ocean resources?

The “rents” of the subtitle (“*Rights, rents and resources*”) are the economic rents – akin to “profits” – that could be garnered from well-managed ocean living and non-living resources.

One of the paradoxes I find is that the large energy corporations in the business of offshore oil, with plenty of money to spend on lobbyists, are well regulated and share significant amounts of the economic rents they make with their respective governments. The much smaller fishing concerns and individuals are the ones who

often run amok with resulting over-fishing and low or non-existent economic rents.

The “rights” addressed in the subtitle are the rights to access ocean resources. At one extreme is the right of open-access to common pool ocean resources, especially fisheries. At the other is the existence of property rights, as with individual fishing quotas, licensed offshore oil lease blocks, and deep sea tenured mining leases. The issue of “rights” also addresses the question of who can share in the bounty of the ocean and what economic rent it can provide with careful exploitation.

In the early days, when the *Law of the Sea* was being negotiated, developing countries pressed the concept of the “common heritage of mankind”, under which all countries would share in the oceans’ bounty. As it turned out, ocean boundaries, the exclusive economic zones, were agreed and coastal states get to keep the economic rents, assuming that there are any of course. The *common heritage* doctrine does though apply in one area – an area that perhaps one day could become extremely profitable – and that is deep sea mining beyond any exclusive economic zone. One of the responsibilities of the International Seabed Authority is to design a fiscal system for the sharing of economic rents with commercial ventures and to pass them on to UN members. So far progress is slow and is bound to be controversial.

If I was to pick just one of the many issues that excite me I would have to choose the question broached in Chapter 13: “Why do countries sign treaties even though they know the agreements will be ineffective in practice?” Many of the chapters contribute to answering this puzzle, and I do come up with suggestions.

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PART I

Introduction

1

OCEAN RESOURCES, OCEAN GOVERNANCE

- 1 Resources
- 2 Regulating use of the oceans
- 3 Ocean governance
- 4 What is “international public law”?
- 5 The chapters

Economics of the Oceans: Rights, rents and resources studies the economic uses of ocean resources, rights to exploit them, and the division of surpluses (or economic rents) between the users and the “owners” of ocean space. But who owns the oceans? The answer is that within agreed exclusive economic zones coastal states have sovereign rights where national laws apply; beyond, lies the two-thirds of the oceans called the “high seas”, where loose and often ineffective international public law applies.

Until the end of the Second World War the oceans were *tabula rasa*. What international law did exist – for example, over the width of the territorial sea, freedom to fish, and freedom of navigation – was customary international law, itself a voluntary regime that independent countries could choose to obey or not. Much of this book is about the need for and progress of attempts to bring ocean resources under effective international law that promotes the rational economic use of ocean resources. As we will see, this progress is limited.

Economic theory is used to assess existing regimes governing the use of these resources. Two broad questions are investigated: are existing governance regimes economically rational in making best use of ocean resources? And, how are economic rents – approximately the profits – distributed between producers such as the fishing industry or offshore oil companies on the one side, and the sovereign owners of the submerged lands on the other?