SUBSIDIES TO FISHING

Ronald P. Steenblik
Organisation for Economic Co-operation and Development (OECD), Paris, France
(The views expressed in this contribution are those of the authors and do not necessarily reflect the views and policies of the institutions that employ them (OECD; Ministry of Fisheries, New Zealand), or of any governments they represent. The institutions do not guarantee the accuracy of the data included in this contribution and accept no responsibility for any consequences arising from their use.)

F.J. Paul Wallis
Ministry of Fisheries, Wellington, New Zealand

Keywords: aquatic living resources, employment, environment, fish, fisheries, fisheries management, fisheries policy, fishing, government financial transfers, marine fisheries, OECD, over-capacity, over-fishing, subsidies, subsidy.

Contents

1. Introduction
2. Why do Governments Subsidize Fisheries?
   2.1. National Defense
   2.2. Competition for Common-Pool Resources
   2.3. UNCLOS and New Sovereign Rights
   2.4. Perceived Market Failures and Structural Problems
3. Subsidies and their Classification
4. Effects of Subsidies
   4.1. Static Analysis
   4.1.1. Effect of Revenue-Enhancing Subsidies
   4.1.2. Effects of Cost-Reducing Subsidies
   4.1.3. Effects of Capacity-Reducing Subsidies
   4.2. Dynamic Effects and the Political Economy of Subsidies
5. Subsidy Reform
   5.1. Multilateral Frameworks: a Historical Background
   5.2. Current and Future Multilateral Frameworks
   5.3. A Case Study in Reform: Norway
Acknowledgements
Glossary
Bibliography
Biographical Sketches

Summary

Subsidies are a common form of government intervention to supplement management and encourage the development of fisheries. They take on a variety of forms and affect a range of participants in the fisheries sector. Along with fish stock productivity, management policy and market demand, subsidies are one of the key determinants of the nature and shape of the world’s fishing industry.
In theory, subsidies can be demonstrated to have harmful effects on fish stock health and on longer term economic performance of the fishery. Given the level of exploitation of fish stocks today, subsidies to develop fisheries are considered by many to be unnecessary and harmful. Some subsidies now appear to be directed at reducing fishing effort. Many developed countries have found subsidies essential for implementing new stricter management regimes and reducing the amount of labor dependant on fishing. However, these instruments need careful targeting so they don't inadvertently lead to the introduction of newer, and more-efficient, fishing capacity or create negative spillover effects in other fisheries.

Other support programs, like fisheries research, management and enforcement, are considered by many to be essential for ensuring the sustainable use of fish stocks and the aquatic ecosystem. Even so, some countries consider that benefits from these services are limited to commercial fishers. Most, however, take the view that these programs generate benefits for the wider community and thus should be funded by the general taxpayer.

Some countries have unilaterally reformed their subsidies. These efforts appear to have met with some degree of success, or at least have not created further problems. Multilateral reform efforts are continuing in a number of international forums, ensuring that subsidies to fishing will be a topical issue in the first decades of the twenty-first century.

1. Introduction

Fishing, like farming, has a long history of government intervention and support. Adam Smith, for example, mentioned per-tonne payments that were being made to the herring and whale fisheries in Scotland when he wrote his treatise on economics, *The Wealth of Nations*. Since that period, government programs to support marine capture fisheries have grown in scale and complexity. Recently, one researcher has estimated government expenditure on the sector to be of the order of US$14 to 20.5 billion a year worldwide, of which at least half, and probably much more, he estimated was spent by developed countries (Millazo, 1998). Put another way, for every tonne of marine fish harvested in the world, governments spend on average between US$ 150 and US$ 220 in support to the sector, with developed countries probably falling towards the higher end of this range. The OECD estimated that its Member countries spent US$ 6.3 billion on fisheries programs in 1997.

Subsidies to any primary industry—an industry that directly exploits natural resources—are problematic. Because primary products form the material basis of upstream manufactured goods, the economic distortions caused by subsidies appear, and can even be magnified, throughout the production chain. And because primary industries interact so closely with natural resources, subsidies that encourage higher rates of exploitation of those resources can frustrate conservation efforts.

Many observers feel that subsidies to fisheries production are especially perverse. A recent report prepared for the United Nations Environmental Programme (UNEP), for example, went as far as to describe them as perhaps "the most environmentally
destructive natural resource subsidies of all". Whether this assertion is absolutely true is beside the point: there is enough evidence, theoretical and empirical, to suggest that subsidies to fishing can at the very least make fisheries management more difficult, inserting another variable into an already uncertain policy-making environment. To the extent that subsidies to the sector fuel over-investment in fishing capacity, and lead to greater effort, they threaten not only the resource base for fishing, but also the industries that depend on the activity.

There is thus a growing movement to scrutinize subsidies to fishing more closely, with a view to reducing those that are most distortive in terms of their effects on trade and, especially, the sustainability of fish stocks. Some nations have already sharply reduced their subsidies to the fisheries sector; others would like to but need more information on how to sort out the benign from the bad; still others are only interested in considering disciplines (i.e. rules and mechanisms) negotiated at the multilateral level. This article is intended to help readers better understand the dimensions of the issue. As a starting point, it asks why do governments subsidize fishing in the first place?

2. Why do Governments Subsidize Fisheries?

No single explanation can be provided for why governments subsidize fishing. Furthermore, reasons have changed over time, and often over-lapped. Three basic reasons seem to have dominated for most of the modern history of fishing: national defense; competition for common-pool resources; and concern about the intrinsic instability of fishing as an occupation. More recently, the extension of national jurisdiction over large areas that were formerly open to all fishing nations, and the problems of structural adjustment, have provided governments with new reasons to subsidize.

In the following sub-sections, it is important for readers to understand that subsidy practice varies widely among countries. The examples given are meant to give a feel for that diversity, not to suggest that all the types of subsidies mentioned are provided universally, which is not the case by any means.

2.1. National Defense

The eighteenth century economist, Adam Smith, normally critical of "bounties" (export subsidies) noted that in the case of fisheries they could be argued to contribute to the defense of a nation "by augmenting the number of sailors and shipping...at a much smaller expense than by keeping up a great standing navy". Such a consideration seems to have motivated the French Government in 1815 to start subsidizing that country's fishing fleet, particularly its distant-water fleet, which had been devastated by the French Revolution and the Napoleonic wars. This decision prompted Britain, wary of its recent enemy, eventually to follow suit. By the same logic, some countries may have supported the maintenance of fishing as an industry in remote coastal areas as a way of providing a first line of defense, or at least surveillance, against naval operations by an enemy. Nowadays, however, the national defense rationale probably plays a minor role in most governments’ policies.
2.5. Competition for Common-Pool Resources

A more general reason why governments have subsidized their fishing fleets, especially their distant water fleets, stems from the common pool nature of fishery resources in international waters. Until the 1970s, up to 90% of the world's fish swam in international waters. National jurisdictions extended for only a few nautical miles from the shore. Access to international resources was open to all. As stocks began to show signs of over-fishing, countries with a tradition of distant water fishing felt compelled to support their fleets through rough periods, or to help them seek out new stocks to exploit. Rapid changes in fishing technology—particularly in propulsion—as took place from the end of the nineteenth century, created further incentives for coastal states to give their fleets a competitive edge in the international race for fish.

Following World War II, another incentive to subsidize fishing emerged: food security. Nations were emerging from a time of food shortages and, for those that could afford it, developing and expanding fish catching capacity was seen as a way to increase their food supply. Large sources of protein were out there, just waiting to be scooped up from international waters: all a nation needed to do was to help build up its fleet and send it out to harvest the productive fishing grounds of the world. The problem was that too many nations had the same idea.

The problem can be illustrated by the growth in exploitation of the North Atlantic sea fisheries, once one of the most productive in the world. The catch from the fisheries grew from 2.3 million tonnes in 1960 to 4.6 million tonnes in 1968. The growth in capacity during this period was most marked for Canada, USA (the coastal nations), USSR and Poland. Canada's fleet increased from 272 vessels in 1962 to 534 in 1968; vessel capacity increased by 230% to reach 114 000 GRT (gross registered tonnes) over the same period. The major distant-water fishing nation, the USSR, had zero vessels operating in the area in 1953; by 1968 it had 553. After peaking in 1968, the catch from the fishery steadily declined, abetted by management and subsidy policies that for too long were set as if the over-high rates of fishing in the late 1960s could be sustained indefinitely.

2.6. UNCLOS and New Sovereign Rights

Until the 1950s, the concept that the world's seas belonged to all was a widely held principle of international law. Over the following three decades, however, a series of unilateral declarations, led initially by Iceland and supported by Norway and by most Latin American, African and Asian nations, would eventually lead to recognition of 200-mile (370 kilometer) exclusive economic zones (EEZs) surrounding national shorelines. In 1950 Iceland unilaterally extended its territorial limit from three to four miles; in 1958 it extended it to 12 miles; and in 1971 it extended it yet again, to 50 miles. On 15 October 1975, citing declining cod stocks and the need for conservation measures, Iceland extended its limit one last time, to 200 miles. By the end of 1976, most of the world's other coastal nations had also declared their own 200-mile zones. Six years later, the right of coastal nations to declare EEZs was enshrined in the United Nations Convention on Law of the Sea of 10 December 1982 (UNCLOS).
While extended jurisdiction provided new opportunities for improved fisheries management, it also created new motives for subsidizing fishing fleets. Article 56 of UNCLOS gave coastal nations, in their exclusive economic zones (EEZs), "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to seabed..." UNCLOS also provided guidance on the utilization of living marine resources; Article 62(2) states:

"The coastal State shall determine its capacity to harvest the living resources of the exclusive economic zone. Where the coastal state does not have the capacity to harvest the entire allowable catch, it shall...give other States access to the surplus allowable catch..."

The equity intention of this article was clear: it meant to provide a framework for distant-water fishing nations to remain involved in the fisheries of coastal nations. But the international legal framework had swung firmly in favor of the coastal nations and with it a new set of incentives for subsidies was created.

The establishment of exclusive economic zones, even with the allowance for foreign vessels under Article 62(2), created opportunities for domestic fishers in coastal states to earn substantial economic rents. In order to ensure that any allocations to foreign vessels were kept to a minimum, coastal states subsidized the expansion of their own fishing fleets.

The problem was that it was difficult not to overshoot the mark. And once support programs were established, it was difficult to end them once the original goal had been achieved. Moreover, countries that were heavily dependent on distant-water fishing felt the need to help their now excessively large fleets adjust to the new international order—funding access to other, usually under-developed, EEZs, and into international high-seas waters.

The North Atlantic sea fisheries can be used as an illustration of the effect of the extended jurisdiction from the perspective of a coastal nation. Extended jurisdiction in 1977 was seen by many to be a panacea for the problems besetting the industry in the mid 1970s.

The fish stocks were under pressure and struggling to recover from the over-fishing of the previous decade. Extended jurisdiction was seen as an opportunity to give fish stocks a chance to recover and, in the medium term, lead to an improvement in the performance of the fishery.

Unfortunately the chance for recovery did not eventuate: capacity, which had been moving out of the fisheries sectors of the coastal nations, flooded back in. As Hinds (1995) notes: “the resulting scenario was a classic example of events in an open-access fishery as increased investment forced increased production, leading in turn to unsustainable plundering of resources”. The increased investment was due in no small way to the generous subsidies available from coastal nation governments.
Bibliography


OECD (1965, 1971 and 1980). *Financial Support to the Fishing Industry*. Paris: OECD Publications. [This series was associated with one of the first multilateral attempts to curb subsidies.]


**Biographical Sketches**

Ronald P. Steenblik is currently employed as a senior policy analyst by the Organisation for Economic Co-operation and Development (OECD) in its Directorate for Food, Agriculture and Fisheries. During 1997 and 1998 he worked for the Directorate's Fisheries Division, where he was responsible for elements of the work programme relating to the social impacts of policy reform and, for part of that time, subsidies to fisheries. Mr. Steenblik has been engaged in the analysis of subsidies to primary industries for more than 10 years. In 1988, for example, he produced the first systematic estimates of subsidies to coal production in the member countries of the International Energy Agency. Since 1991 he has monitored farming subsidies in a number of OECD member countries, and in 1994 produced the first full compilation of subsidies to Turkish agriculture. He has also contributed to the OECD's work on irrigation subsidies, structural adjustment policies, technology, and sustainable development. Mr. Steenblik, a citizen of the USA, obtained a Master of Science degree from the University of Pennsylvania in 1985, and a Bachelor of Science degree from Cornell University in 1974.

F.J. Paul Wallis currently works for the New Zealand Ministry of Fisheries, where he is involved in domestic and international policy matters. Previously he worked as an administrator in the Fisheries Division of the OECD's Directorate for Food, Agriculture and Fisheries, which he joined in 1997. Prior to that, he worked for the New Zealand Ministry of Fisheries. He has also worked in the agriculture policy environment, as an analyst in the then New Zealand Ministry of Agriculture and Fisheries, and as a portfolio private secretary for the Minister of Agriculture. Mr. Wallis, a New Zealand citizen, obtained a Bachelor of Management Studies degree from the University of Waikato in 1988.