

NEW ZEALAND CASE STUDY

TRADE EFFECTS OF ECONOMIC ASSISTANCE TO FISHING

Introduction

The Committee for Fisheries is in the process of conducting a study on economic assistance in the fishery industries. At the 66th Session of the OECD Committee for Fisheries it was decided to proceed with a country case study of New Zealand. This report is a progress report on that part of the case study which deals specifically with the trade effects of economic assistance.

This report outlines a framework for the evaluation of the effects of economic assistance to fishing industries in the OECD and how the New Zealand case study might contribute to this overall study. Accordingly, this progress report is largely conceptual or methodological and any data presented is intended to be illustrative only.

Objective of OECD fishing study

OECD governments intervene in their respective fishing industries in three broad areas. They provide varying degrees of support in the form of subsidies to fishing vessels and national fleet income support. Coastal governments also have different regulations controlling access to their resources and facilities. The third generic form of intervention is fish import regulations to national markets. Previous studies indicate that all these interventions have the potential to discriminate in favour of some countries at the expense of others. The broad objective of the Committee's work on economic assistance focuses on this issue.

This broad objective, however, needs to be refined to serve as a basis for a quantitative study on economic assistance. The various forms of intervention can affect the relative profitability of fishing by national fleets, the relative size of those fleets, fish consumption in markets and international trade in fish. The methodology suggested below incorporates these effects in a particular fashion. This paper then shows how the New Zealand case study might contribute to an eventual multi-country study on economic assistance.

Conceptual issues

Total production

The sea fishery is of the nature of a common property resource which can be expected to be depleted unless national programmes are in place to limit catches to long-run sustainable catches. Countries have varying quality systems in place to achieve sustainability. Accordingly there is an

important issue of resource management involved for each national fisheries policy, as outlined by Professor Hannesson . Where countries have appropriate Total Allowable Catches (TACs), economic assistance measures are not expected to affect the supply of fish from the Exclusive Economic Zone (EEZ).

This condition provides a way of partitioning this study. A programme of work can be initiated to address the resource management issues associated with the fishery. That is, the extent to which current OECD policies involve unsustainable TACs. It is then suggested that the other sections of the economic assistance study focus on policy intervention effects based on the assumption that sustainable TACs are (or will be put) in place for all national EEZs.

Patterns of production

When TACs set the level of output from national EEZs, economic assistance measures will not influence the total catch. (To draw an analogy from the OECD Agriculture studies, there will be no supply response). Economic assistance can be expected to affect who catches the available supply. The shares of the catch made by the local fleet and the various distance fleets (e.g. Republic of Korea, Japan, Norway or the USSR) from a particular EEZ (e.g. New Zealand) may have been influenced by the relative economic assistance to national fishing fleets. The national shares of fish processing may also be affected by relative economic assistance levels.

Changes in national shares, vis-a-vis the unassisted (counterfactual) case, can be estimated from a measure of the extent to which the incomes or value added of each national fishing fleet is affected by economic assistance. In general, there will be two opposing types of economic assistance. The home country government may be supporting its distance fleet through subsidies while that fleet may receive disincentives to fish (provide fishing services) in a country's EEZ as a result of local taxes and penalties. One flexible measure of these net subsidy effects is the Producer Subsidy Equivalent (PSE). The measure could be estimated for each national fishing fleet given all the major economic assistance measures (positive and negative) that apply to it, in each of the OECD EEZs in which it fishes. These estimates will be most extensive for OECD countries with distant water fleets.

These relative PSEs in combination with estimates of the responsiveness of fishing effort of national fleets (analogous to supply elasticities in the OECD Agriculture studies) can then be used to estimate the effects of economic assistance on the catch, processing and trade shares in fish, in each EEZ.

Patterns of consumption

Economic assistance measures will also change fish consumption patterns throughout OECD markets. These effects can be measured using the related Consumer Subsidy Equivalent (CSE) measure also popularised in the OECD Agriculture studies.

Resource management

This framework separates the question of the absolute amount of fish harvested as primarily a resource management question. The pattern of harvesting, processing and the consumption of fish products then form the focus of the economic assistance study. In a separate New Zealand case study, we

examine a possible methodology to analyse resource management questions separately from the economic assistance questions.

Types of economic assistance

As discussed in Section II, economic assistance policies affecting fisheries in the OECD may be classified into three areas.

Market access barriers to product

Market barriers to fish products include tariffs, quotas and other non-tariff barriers. These barriers can affect the relative profitability of different fishing fleets and processing services, and hence indirectly affect each fleet's share of total catch.

Market access barriers to fishing services

There are also market barriers which directly impact on international trade in fishing services and hence on shares of the catch. These would include restrictions on access to an EEZ, which are a form of quota access, and discriminatory EEZ access charges.

Direct support of production

Finally, there are measures which directly impact on the profitability of fishing capacity. These would include all special subsidies that apply to a nation's harvesting and processing capacity, and which affect its competitiveness relative to other nations.

In order to assess the full impact of economic assistance on the pattern of production, all three categories of assistance need to be considered.

Methodological approach

Although ultimately we wish to work towards analysing the impact on consumption and catches for each nation across all EEZs, there may be some advantages in focusing on one EEZ at a time. Under this approach, we would assess the effect of economic assistance measures on the use of fish from one EEZ only. This is the broad approach of the New Zealand case study. At a later stage it will be possible to integrate the analyses of individual EEZs to form a complete data base of economic assistance measures for each national fishing fleet and for each national market.

In a complete OECD study there may be a need to use approaches which span all EEZs. This is not being attempted in the New Zealand case study. Nevertheless, the case study will highlight all the issues involved and assist in designing a main study.

Certain limitations have been imposed on the New Zealand case study at this stage. We propose to exclude consideration of direct support measures to production. These are best examined on an EEZ-wide scale, and the Committee for Fisheries has already commissioned work in this area. Accordingly, we will deal only with the effects of market barriers to fish products and fish services.

Moreover, we will concentrate only on the production share effects of these barriers on the use of the EEZ, i.e. their effects on who catches and processes fish from the New Zealand EEZ.

Eventually, the study would attempt to compare production shares under present arrangements compared to the case of a "free-trade" EEZ, i.e. the case where fish from the EEZ faced no barriers with respect to either the trade of fishing services or to market entry.

Initially, the New Zealand study would attempt to explore a general methodology for an analysis of one EEZ. As such, the data need only be indicative, and can be extracted to some extent by New Zealand. However, eventually the study will need to be supplemented by data from other OECD Members. In particular, market access barriers for product may be most appropriately identified by the country concerned. For example, it is relatively easy to identify restrictions on access to the New Zealand EEZ and New Zealand fish processing and distribution facilities in New Zealand. On the other hand it is more efficient for the United States to identify United States import restrictions on New Zealand fish exports (to the United States).

The exploration of alternative methodologies to evaluate each type of economic assistance is an important part of the New Zealand case study. The quantification of non-tariff barriers will require particular care. These non-tariff barriers will apply not only to international trade and consumption of fish products but also to international trade fishing services. We will explore the extent that we can use alternatives to the reference price methodology (involving gross price margins). The Cod Study, undertaken by the Secretariat, will prove useful in examining the range of issues that arise with a reference price approach.

It is proposed that the issue of identifying and quantifying NTBs for fish comprise a significant part of the New Zealand case study.

New Zealand case study overview

Scope

This case study will focus on two fish species caught in the New Zealand EEZ, hoki and squid. The property right of these fish within the EEZ are held exclusively by the State. The State has granted individually transferable quotas (ITQs) for virtually all the TAC to private groups in New Zealand. These species are harvested within TACs by New Zealand fishing companies alone or by distant fleets of other nations (including the Soviet Union, the Republic of Korea, Japan and Norway). The fishing companies either use their own ITQs or lease quota from existing owners.

Hoki and squid products are processed at sea or in New Zealand for sale on the local market or for export. The main export markets are Japan, the United States, Australia and the EEC.

The case study will explore market access barriers into the New Zealand market for each species caught in the New Zealand EEZ. It will also examine barriers to market access in each of the main export markets. The study will also explore market access barriers to distant water fleets (fishing services) wishing to use the New Zealand EEZ for hoki and squid.

Initial work completed

The case study project commenced in July 1991. An initial literature review has been completed which includes a range of studies of the effect of industry assistance in fishing.

Barriers to foreign fishing services, New Zealand EEZ

An indicative list of the types of barriers to fishing services which may exist is outlined below, with special reference to the New Zealand case.

Type of Barrier

Charges	In general, charter vessels are liable for double the resource rentals of domestic vessels, though for squid they are a little over three times the domestic rate. For squid this amounts to an additional NZ\$ 87 per ton and for hoki an additional NZ\$ 11.
Areas allowed	None in general. Area closures based on vessel type not whether foreign charter. Exception is the skipjack tuna fishery.
Vessel type	None. Charter vessels must meet only same standards and conditions as a domestic vessel.
Crewing	None. However, foreign crew must contribute to domestic crewing union, and the Federation of Commercial Fishermen.
Land of product	None.
Restrictions on catch	None. Amount of catch determined by domestic charterer on a commercial basis. Potentially all fish could be taken by foreign charters.

Barriers to market access for product, New Zealand EEZ (squid, hoki)

Market	Squid	Hoki
Japan		
tariffs	%	%
quotas	yes	?
other NTBs	?	?
EC		
tariffs	%	%
quotas	?	?
other NTBs	?	?
United States		
tariffs	%	%
quotas	?	?
other NTBs	?	?

New Zealand		
tariffs	none	none
quotas	none	none
other NTBs	none	none

Next steps

We have identified a number of further steps in carrying out the New Zealand case study which might be considered by the ad hoc Expert Group:

- The Group may wish to select the most important group of fish species for the OECD study.
- The Group may wish to invite members to identify market access barriers, especially NTBs, which exist for squid and hoki in their markets. This might be widened for all species.
- The Group may wish to invite members to identify barriers to the trade in services which exist for their EEZs.
- Once market barriers are identified, the case study will need to find methodologies for quantifying the barriers.
- The case study will then find a method of combining the information to show the effects of a "free-trade" EEZ.