

Fishing under Flags of Convenience: Using Market Power to Increase Participation in International Regulation

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Ocean regulation is difficult because of the vastness of the ocean area and the number of ships whose behavior impacts the success of international regulatory efforts. In the past half-century the issue of regulating the behavior of ships on the oceans has been made even more challenging because of the growth in Flags of Convenience (FOCs), also called open registration. Under this system, some states have opened up their ship registration process—historically only nationals of a given state were eligible to register their vessels—to ships belonging to people who are not citizens or residents of the state. Ship registration confers a form of nationality: a ship must follow only the domestic and international obligations taken on by the state in which it is registered. States offer ship registration to raise income, from registration fees and taxes. To increase ship registrations, and thereby the revenue gained from them, these states often avoid taking on costly international regulations (and refrain from domestic regulations on shipping issues) so that they can present themselves as a low-cost regulatory option. Ship owners who want to avoid being bound by international regulation can choose to register their ships in these open registries.

The practice of ship owners choosing a flag in order to avoid conservation-related regulations has had a significant impact on the protection of fisheries or other ocean resources from overharvesting. When faced with either domestic or international fishery regulations, some fishing vessels choose to flag in states that do not belong to the relevant international agreements or are unlikely to uphold them. They can thereby legally harvest as much of the resource in question as they are able. In doing so, they make conservation more difficult, and perhaps even impossible, for other states and undermine the conservation gains of those who have agreed to limit resource extraction. Unregulated fishing also drives down the price for legally caught fish, thus restricting the earnings of le-

gitimate fishers and even decreasing their ability to invest in costly monitoring activities.¹

In 2002 just under 10 percent of the world's fishing vessels were registered in open registries.² But the number is increasing: Of new fishing vessels built in the period 2000 to 2003, 14 percent were registered in open registries at the end of 2003.³ The real numbers are almost certainly higher than that. Some have estimated the percentage of open-registry fishing vessels at 21.5 percent,⁴ and studies have found that most fishing vessels the registry of which is listed as "unknown" by the major record-keeping organizations are actually registered in open registries. FOC-registered fishing vessels also tend to be larger than nationally registered ones;⁵ a higher proportion of those fishing on the high seas in lucrative fisheries are thus flying flags of convenience.

Recently, the four leading open-registry fishing states have been Belize, Panama, Honduras, and St. Vincent and the Grenadines. Others identified in documents of the Organization for Economic Co-operation and Development as up-and-coming FOC fisheries registries include Georgia, Cambodia, Vanuatu, and landlocked Bolivia.⁶

To those who operate them, fishing vessels flagged in open registries can be particularly lucrative, especially if the owner intends to flout international standards. Crew costs, which account for up to 30 percent of total catch value in most major high-seas fisheries for nationally registered vessels,⁷ are considerably lower on ships in open registries.⁸ Taxes are also lower, and many states that offer flags of convenience operate as tax havens as well, decreasing even further any tax burden. Most important, however, is the opportunity to fish without having to abide by national or international limits.

Those vessels that truly want to operate outside the international regulatory system can change flag repeatedly, without even having to enter port to do so. Reflagging fishing vessels has been estimated to cost as little as \$1000.⁹ Modern factory fishing vessels can stay away from ports almost indefinitely; not only do they have all they need to process and freeze catches at sea, but those that prefer to remain away from rules and inspections can resupply and offload their catches at sea to other vessels.¹⁰

The decision by some owners of fishing vessels to manipulate ship registration as a way to evade fishery conservation measures is not new. One of the

1. Fallon and Kriwoken 2004.
2. Swan 2002.
3. Gianni and Simpson 2004.
4. ICTFU et al. 2002.
5. Gianni and Simpson 2004.
6. Gianni and Simpson 2004; and ISL 2003.
7. OECD 2004b.
8. Agnew and Barnes 2004.
9. Agnew and Barnes 2004.
10. Gianni and Simpson 2004.

earliest examples came more than a century ago when the owners of British fishing trawlers re-registered their vessels in Norway (employing a Norwegian crew member to circumvent Norwegian prohibitions on foreign registration) in order to avoid being bound by British law restricting fishing in the Moray Firth.¹¹

More recently, when the United States passed regulations in the 1970s under the Marine Mammal Protection Act requiring that US tuna fishers refrain from killing dolphins in the process of tuna fishing, a number of ship owners reflagged their vessels in states that did not regulate dolphin mortality, where they would not be bound by the costly US restrictions. (Between 1981 and 1985 thirty-four US tuna boats transferred to other flags to continue to fish for tuna.)¹² Currently there are related concerns about European ships—especially Spanish-owned—“flag-hopping” to get access, under European fishing regulations, to quotas from other member states. In an effort to prevent this type of activity, the United Kingdom passed regulations in 1988 requiring that vessels not only be British registered but that the owner also be a UK resident in order to participate in the British quota. The European Court of Justice overturned this measure in 1991, however, ruling that it contravened Article 52 of the EEC treaty.¹³

Other states have made rules to try to prevent their citizens from participating in open-registry fishing as an effort to stem the phenomenon of “flagging out.” Citizens of New Zealand are prevented by national law from taking or transporting fish on foreign-flagged vessels unless such activity happens under the authority of a state that is party to international fisheries agreements. Japanese law requires Japanese nationals to obtain permission from the Japanese government before they can work on non-Japanese flagged vessels fishing for Atlantic and southern bluefin tuna. The law also is intended to prohibit Japanese nationals from fishing in any fishery on vessels flagged in states that are not party to the relevant regional fishery conservation organizations.¹⁴ Spain has declared that its national penalties for breaking fisheries laws can apply to its nationals fishing on foreign-flagged ships.¹⁵ Such regulations are intended to reduce the incentives for a nationally owned ship to re-flag. But ships continue to flag out, and open-registry vessels catch fish in all the major high-seas fishing areas where regional fisheries management organizations attempt to restrict the catches of member states.

The efforts of international organizations simply to cajole open-registry states to join the relevant fishery management agreements, so that ships they register will be legally bound by the agreements, have had little impact on their

11. Boczek 1962; Briggs 1952; and Fulton 1911.

12. Bonanno and Constance 1996.

13. Rachel Davies, “Fishing Boat Registration Rules Contravene EC Law,” *Financial Times*, 14 August 1991, 21.

14. Balton 2004.

15. OECD 2004c.

own. The most effective efforts to persuade these states to join agreements, or individual ship owners to uphold them regardless of their legal obligation to do so, have come through the use of trade restrictions. When states or international organizations limit access to markets to those who agree to uphold the relevant conservation agreements, the incentive for ships to operate outside the regulatory framework diminishes considerably. The experience with reducing the incentives for states to remain outside international fishery regulation in order to attract ship registrations illustrates ways to decrease the problems caused by open registries and perhaps to address problems of international environmental cooperation more generally.

International Agreements

Overfishing on the open ocean is generally addressed by international conservation agreements. These agreements are most frequently negotiated based on a species, a geographic region, or both. Fishing activity is regulated by imposing fishing seasons, catch limits, or equipment standards (often prohibiting certain types of equipment, such as driftnets). Every effort is made to ensure that all states whose vessels are likely to be fishing in the area participate in the negotiation of an agreement or are encouraged to join. But there are certainly some that prefer not to join.

The 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea (UNCLOS) Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks requires that a state that is not a party to fisheries management organizations not “authorize vessels flying its flag to engage in fishing operations for the straddling fish stocks or highly migratory fish stocks” that are the subject of those organizations.¹⁶ The converse is also elaborated: states (which under UNCLOS have a duty to cooperate in fisheries management) are instructed to become members of these organizations or at least to apply the conservation measures they create.¹⁷

A number of other international agreements also mandate flag-state control over fishing vessels to ensure that they do not fish in otherwise regulated areas. The Food and Agriculture Organization (FAO) Compliance Agreement (1993), which entered into force in 2003, requires that flag states license fishing vessels before they may fish, conditional on abiding by international conservation measures.¹⁸ Two non-binding agreements, the FAO Code of Conduct for Responsible Fisheries (1995) and the FAO International Plan of Action on IUU Fishing (2001), also ask flag states to make sure that their vessels only fish after receiving authorization to do so by the relevant conservation organizations or

16. Article 17(2).

17. Article 8.

18. Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993, Article III.

states. The plan of action, in particular, encourages flag states to prevent flag-hopping for the purpose of avoiding fisheries regulations. But the major open registries used by fishing vessels have not joined the binding agreements and do not participate in the non-binding ones. The same legal rules that allow for open-registry states to remain outside of fishing agreements allow them to avoid the cooperative agreements that seek to address their non-participation.

The most obvious way to deal with the threat of ships flagged in a state that is not a member of an international fisheries agreement or organization is to convince the state to join. Most fisheries commissions have a long history of efforts to gain membership of states whose vessels are fishing in a given regulatory area or for a protected fish stock. Between the mid-1980s and the mid-1990s, for example, the Northwest Atlantic Fisheries Organization (NAFO) faced an annual average of between thirty and forty vessels flagged in non-member states (most frequently Panama and Honduras) fishing in the NAFO regulatory area. Each year the commission would ask the states in question to join or prevent their ships from fishing in the area. They did not join the organization, and when diplomatic pressure increased a large number of the ships simply re-flagged in Belize.¹⁹

Fisheries commissions in general seem to have little success in persuading FOC states to join fishery conservation agreements. Moreover, if vessels have flagged in one state to avoid regulation, they are likely to re-flag elsewhere if their flag state takes on the regulations they are trying to avoid, as long as doing so does not prevent other advantages they seek. The large number of fishing vessels registered in newly opened registries supports this contention. Regional fisheries management organizations can only succeed in protecting the stocks they address if all those who fish in the area are bound by the relevant conservation regulations. Finding a way to persuade states in which fishing vessels register to belong to these agreements is thus essential if these agreements are to succeed at their conservation goals.

Trade Restrictions

What has succeeded at convincing open registries to join fisheries agreements or persuading individual fishing vessels to uphold them is tying access to international markets for fish products to participation in the relevant conservation measures. The threat or imposition of trade restrictions has been used in efforts to convince states to join international agreements relating to ocean resources. In the cases where ships have reflagged in order to avoid these restrictions, they may find that their new state of registry decides to accept these international regulations, or that the ships may be prohibited from trading with their primary markets if they do not accept the regulations.

The United States has been the biggest practitioner of this method; it has

19. Agnew and Barnes 2004.

refused to import tuna from states that do not protect dolphins in the process of tuna fishing, or do not uphold the major tuna fishing conventions. The United States has also threatened not to accept fish exports from states that do not uphold international standards on driftnet fishing or do not participate in the regulation of whaling.²⁰ More recently a number of regional fishery management organizations are requiring that their members restrict trade in regulated species, only importing or transshipping fish caught by members of a given agreement or by those vessels that can otherwise demonstrate that they are operating within its restrictions.

The regional fisheries management organizations that have experienced significant levels of fishing by ships flagged (often intentionally) in non-member states have created an array of mechanisms that restrict the options of these ships. These programs aim to diminish the advantage to open-registry-flagged vessels that attempt to catch protected species. These mechanisms have generally been adopted at different points within a several-year period and often work in tandem. They have been used, with small variations, across a number of fisheries organizations attempting to address the same types of problems. Often this similarity is intentional, as fisheries organizations attempt to replicate successful efforts, or as they recognize the possibility that ships chased off from one fishing area may move to another.

The set of strategies used usually includes the creation of a “black list” of ships (or flag states) not authorized to fish in the regulatory area, often followed by the creation of a “white list” of ships that are specifically allowed to fish. Also commonly implemented is some kind of catch documentation that accompanies traded fish from the regulatory area (or landed in or transshipped through member states), which allows member states to distinguish between fish caught legally and within the regulatory framework and those caught by ships not bound by regulations. This type of measure also allows fishery organizations to gather statistical information that assists in scientific assessments of catches and stocks. Some organizations have augmented these measures with some sort of vessel monitoring system that allows flag states (at minimum) or fisheries commissions (more intrusively) to keep track of where ships are fishing. Finally, and most successfully, these measures in combination may lead to an actual requirement by the relevant commission that members refuse to accept imports of fish from ships or states that have remained outside of the regulatory framework.

The fisheries organizations that have faced the biggest threats from unregulated fishing by ships flagged in non-member states have primarily been those focused on high-value high-seas (and sometimes highly migratory) species such as tuna, swordfish, and toothfish. The fisheries commissions that have adopted these types of measures include the International Commission for the Conservation of Atlantic Tunas (ICCAT) followed by the other tuna agreements—the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) and the

20. DeSombre 2000.

Indian Ocean Tuna Commission (IOTC)—plus the commission in charge of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR). Other commissions, including the Northwest Atlantic Fisheries Organization (NAFO) and the Inter-American Tropical Tuna Commission (IATTC), have experienced the same problems and are beginning the process of implementing these types of measures.

International Convention for the Conservation of Atlantic Tunas

The conservation measures of the International Convention for the Conservation of Atlantic Tunas (ICCAT) have frequently been undermined by fishing undertaken by ships registered in non-member states. The organization estimates that about 10 percent of the total catch in the fisheries it oversees is taken by unregulated fishers,²¹ mostly those flagged in open-registry states. ICCAT followed the standard practice of asking non-member states whose vessels were seen fishing in the regulatory area to join the agreement, with little success. The organization decided that restricting access to markets so that only fish caught within the regulatory process could be traded would be the most effective way to curb the incentive to fish outside the regulatory structure.

In 1992 the organization created the Bluefin Tuna Statistical Document (BTSD) Program. Under this program, any bluefin tuna imported by ICCAT member states must be accompanied by a document explaining where, when, and how it was caught; this document must be validated by an official of the flag state whose vessel caught the tuna. (The organization allows for any equivalent documentation program to be followed, provided that states indicate in advance that they will be using an alternative.)²² All ICCAT members are now required to prohibit landings of tuna (or re-export of tuna) without a BTSD or the equivalent, or tuna otherwise caught outside the ICCAT regime. As of 2002 this process was extended to cover bigeye tuna and swordfish.²³ This information is used to ensure that member states can refuse entry to improperly caught (or undocumented) fish, and also that statistical information can be compiled on catches and trade.

ICCAT decided to go further than simply requiring documentation, to ensure that member states would penalize those states operating outside the regulatory framework. In 1996 the organization began passing recommendations (legally binding on its member states) calling for the restriction on imports of regulated species from non-member states whose vessels fished regularly for these species in the convention area.

In 1996, recommendations required the prohibition of bluefin tuna imports from Panama, Belize and Honduras. Panama became an ICCAT member

21. OECD 2004b.

22. ICCAT 1992.

23. ICCAT 2001c.

in 1998 and also took measures to reduce the activities of its fishing vessels, and the organization lifted restrictions on imports by a 1999 recommendation.²⁴ Honduras was also targeted by recommendations in 1999 prohibiting imports of Atlantic swordfish. Honduras joined ICCAT effective in 2001, and these measures were removed.²⁵ It was still targeted in 2002 with import prohibitions on Atlantic bigeye tuna because it had not sufficiently addressed the problems of Honduran-flagged ships fishing for bigeye tuna in the convention area. These trade restrictions were removed after the Honduran government communicated to the ICCAT secretariat the specific measures it had taken, including removing 228 of 269 registered fishing vessels from its registry, and suspending the remaining 41. Honduras claimed that it would close its registry to fishing vessels until it could be sure of ICCAT compliance.²⁶

Recommendations in 1999 and 2000 added prohibitions on the import of Atlantic swordfish and bigeye tuna to the existing prohibitions on bluefin tuna from Belize. Although Belize did not join the organization, the restrictions on imports were lifted in 2004 after Belize began attending ICCAT meetings and undertook "a broad program of reform to achieve full compliance with ICCAT measures," including deleting large number of fishing vessels from its registry.²⁷

St. Vincent and the Grenadines was identified in 1999 as a state that diminished the effectiveness of ICCAT measures by unregulated tuna fishing in the area. A recommendation in 2000 restricted imports of St. Vincent-caught Atlantic bigeye tuna. This prohibition was slated to be lifted as of 2003 by a recommendation passed in 2001, when St. Vincent indicated that it had undertaken efforts to reform its registry and to curtail efforts by fishing vessels in the area.²⁸ ICCAT member states, however, expressed concerns that the state had not fully outlined the oversight of fishing vessels under its flag, and postponed the removal of the sanctions until the beginning of 2004.²⁹

The most recent targets of these measures are Equatorial Guinea (targeted in 1999 and 2000),³⁰ Cambodia (targeted in 2000),³¹ Bolivia (2002), Sierra Leone (2002),³² and Georgia (2003).³³ Thus far, these flag states have not sufficiently changed their behavior to be allowed to export tuna and tuna-like products to ICCAT members.

In an effort to expand these measures, ICCAT in 2002 decided to create "white" and "black" lists. The organization had begun this process in 1994 with a resolution calling for the creation of a list of vessels authorized by member

24. ICCAT 1999a.

25. ICCAT 2001b.

26. Swan 2002.

27. ICCAT 2002a.

28. ICCAT 2001a.

29. ICCAT 2002e.

30. ICCAT 1999b; and ICCAT 2000b.

31. ICCAT 2000a.

32. ICCAT 2002b; and ICCAT 2002d.

33. ICCAT 2003.

Table 1
 ICCAT Trade Restrictions

<i>Resolution Number</i>	<i>In Force</i>	<i>Import Prohibition</i>	<i>Target State</i>	<i>Lifting Resolution Number</i>	<i>Date Lifted</i>	<i>Target Action Taken</i>
96-12	1/1/98	Bluefin Tuna	Panama	99-9	1999	Became ICCAT member, reduced fishing
96-11	8/4/97	Bluefin Tuna	Belize	02-16	1/1/04	Removed fishing vessels
96-11	8/4/97	Bluefin Tuna	Honduras	01-15	9/21/02	Joined ICCAT 1/30/00
99-8	6/15/00	Atlantic Swordfish	Belize	02-16	1/1/04	Removed fishing vessels
99-8	6/15/00	Atlantic Swordfish	Honduras	01-15	9/21/02	Joined ICCAT 1/30/00
99-10	6/15/00	Bluefin Tuna	Eq. Guinea			Re-emphasized in rec 03-08
99-10	6/15/00	Swordfish	Eq. Guinea			Re-emphasized in rec 03-08
00-15	10/15/01	Bigeye Tuna	Belize	02-16	1/1/04	Removed fishing vessels
00-15	10/15/01	Bigeye Tuna	Cambodia	02-18		Joined ICCAT; took action
00-15	10/15/01	Bigeye Tuna	Honduras			
00-15	10/15/01	Bigeye Tuna	St. Vincent	01-14; 02-20	1/1/04	Took measures to comply
00-16	6/26/01	Bigeye Tuna	Eq. Guinea			Re-emphasized in rec 03-08
02-17		Bigeye Tuna	Bolivia			
02-19		Bigeye Tuna	Sierra Leone			
03-18		Bigeye Tuna	Georgia			

states to fish in the regulatory area, followed in 1999 by publication of a list of longline tuna fishing vessels flagged in open registries that were conducting unauthorized fishing in the convention area.³⁴ These lists were formalized in 2002 (to take effect in mid-2003) with the requirement that member states prevent landings or transshipment of regulated species by ships not on the positive list, and in particular refuse to do anything that would help ships on the negative list to fish for regulated species.³⁵ The black list of vessels, however, has had mixed success. The Japanese representatives to the International Conference on Illegal, Unreported and Unregulated Fishing in 2002 indicated that forged documents have made enforcing these measures difficult.³⁶

In addition to these specific recommendations, individual ICCAT member states undertook related actions to support and expand the effect of ICCAT measures. Japan restricted the import of tuna from all fishing vessels that are not registered in ICCAT member states.³⁷ The United States, even before official ICCAT recommendations required it, refused to import tuna from states identified by the organization as diminishing the effectiveness of ICCAT.³⁸ South Africa also banned landings of fish by vessels listed by ICCAT as engaging in IUU fishing.

There is some evidence that these measures are having an effect. ICCAT estimated that unregulated catch (primarily by vessels flying flags of convenience) declined by about two-thirds between 1998 and 2001. A study by Japan presented in 2002, however, indicated that unregulated tuna fishing accounts for 25,000 tons of tuna annually, a figure close to the 1998 ICCAT estimate.³⁹ In addition, some fishing vessels that left ICCAT-targeted flag states during the time when sanctions were imposed (because they would not be able to sell their tuna to their primary markets), returned once the restrictions were lifted and in some cases engaged in unregulated fishing.⁴⁰

There have clearly been some changes by targeted states: Panama and Honduras joined ICCAT, and Belize and St. Vincent and the Grenadines took measures to reduce their fishing fleets and to make sure their ships were not fishing against ICCAT regulations. Honduras also requires that, before they can be registered, fishing vessels sign an affidavit that they will not fish for tuna.⁴¹

The most recently targeted states, Cambodia, Bolivia, Sierra Leone, and Georgia, are among those open registries with the greatest increase in fishing vessels. It seems clear that ships that did not want to meet the standards adopted by their previous states of registry have instead moved registration else-

34. OECD 2004b.

35. ICCAT 2002f; and ICCAT 2002g.

36. OECD 2004a.

37. "Japan to Ban Tuna Imports from Panama, Honduras, Belize," *AP Worldstream*, 3 December 1996.

38. DeSombre 2000.

39. Agnew and Barnes 2002.

40. ICFTU et al. 2002.

41. Swan 2002.

where. ICCAT has limited their access to the most lucrative markets, however, and in doing so has removed at least some of their incentive to fish outside the regulatory scheme.

Commission for the Conservation of Southern Bluefin Tuna

The Commission for the Conservation of Southern Bluefin Tuna (CCSBT) also faced increased fishing by ships flagged in non-member open registries. The organization estimated that in 1999 15 percent of the catch was being taken by these vessels;⁴² later estimates put the catch at nearly one-third of the total.⁴³ In June 2000 the organization created a Trade Information Scheme (TIS) to combat this problem. Under this program, member-state imports of southern bluefin tuna require a CCSBT Statistical Document, providing details on where, when, and how the tuna was caught, attested to by a state authority. The program requires that member states refuse to import tuna caught outside the regulatory system or without proper documentation. The organization also created, effective July 2004, a list of vessels authorized to fish in the regulatory area, and member states (and cooperating non-member states) are not allowed to import tuna caught by vessels not on the list.⁴⁴

Since Japan, a member state, is by far the largest market for southern bluefin tuna, this mechanism has been reasonably successful. Trade with non-party states has decreased significantly since the program was introduced.⁴⁵

Indian Ocean Tuna Commission

The Indian Ocean Tuna Commission, established in 1996, has had to deal with the problem of fishing by open-registry vessels since almost the beginning of its existence. The organization has estimated that approximately 10 percent of the landings of tuna under its regulatory purview come from vessels registered in non-member states.⁴⁶ The commission adopted a resolution in 2001 requiring member (and cooperating) states to inspect the ships from any non-contracting party that enter their ports, and prevent these vessels from landing or transshipping fish until such an inspection has occurred. If the vessel has fish on board from species regulated by IOTC it is not allowed to land or transship any fish unless it can demonstrate that they were caught outside of the regulatory area.⁴⁷ A resolution adopted the following year mandates the creation of a list of ships flying the flags of non-cooperating states. Members (and cooperating non-

42. Swan 2002.

43. OECD 2004b.

44. CCSBT no date.

45. Swan 2002.

46. OECD 2004b.

47. IOTC 2001a.

members) are then required to take a variety of steps to ensure that no tuna be imported, landed, or transshipped from these vessels.⁴⁸ The IOTC also adopted, in 2002, a positive listing process, which created a list of large-scale fishing vessels authorized to fish for tuna in the IOTC regulatory area. Member and cooperating states must then take actions to prohibit the import of tuna from vessels not on the list.⁴⁹ This policy, mirroring that used in ICCAT, was adopted at least in part to prevent unregulated fishers from moving ships from the Atlantic to the Indian Ocean.

In 2001 the organization also created an IOTC Bigeye Tuna statistical document that members were asked to require from states from which they imported tuna. This document must be authorized by an official of the flag state of the vessel that caught the tuna, and must include information on the ship that caught or is transshipping the tuna, the area and method of catch, and a description of the fish product. Member states must refuse imports of tuna not accompanied by such a document. They must also refrain from importing tuna when the accompanying document shows that the catch was not acceptable under IOTC rules.⁵⁰ This process was expanded by a 2003 resolution that gives the commission the power to impose ICCAT-like trade sanctions against non-member flag states who consistently let their ships fish in the regulatory area.⁵¹ As of 2005, the commission has not yet taken such measures.

In addition, IOTC member states Seychelles, Vanuatu, and Japan adopted their own joint effort to eliminate tuna longline vessels operating outside of the IOTC regulatory process, by either registering or scrapping longline tuna vessels previously noted as engaging in unregulated fishing.⁵²

Convention for the Conservation of Antarctic Marine Living Resources

The Convention for the Conservation of Antarctic Marine Living Resources and its associated commission (CCAMLR) have also experienced the impacts of widespread fishing by ships flagged in non-member states. The organization estimates that between 1996 and 1999, illegal, unregulated, and unreported (IUU) fishing, done primarily by vessels flying flags of convenience, accounted for more than twice the amount of regulated fishing.⁵³ Estimates from other organizations put this number much higher; the international conservation NGO TRAFFIC suggests that IUU fishing may account for four times the amount of legal fishing. Panama and Belize have been singled out as the primary FOC registries for vessels wishing to avoid CCAMLR catch limits.⁵⁴

48. IOTC 2002a.

49. IOTC 2002b.

50. IOTC 2001b.

51. IOTC 2003.

52. Delegation of Japan 2003.

53. CCAMLR no date a.

54. Lack and Sants 2001.

After these states ignored requests to join the organization, CCAMLR created a “Catch Documentation Scheme” for toothfish, to dissuade unregulated fishing by blocking access to markets in CCAMLR member states for vessels whose ships continue to operate outside the regulatory framework. This scheme works to monitor and track catches of toothfish. Member states have an obligation to prohibit the import of fish caught in an inappropriate manner or not otherwise documented. Flag states that are not members of CCAMLR may participate in the program as long as they are able to document that their catches were caught within the conservation regulations.⁵⁵

Those who wish to land or transship toothfish must present this document to the officials in the port in which the fish are landed. States participating in the scheme may only allow the entry of toothfish with a complete and authorized document. CCAMLR also passed an associated measure enabling port states to inspect all vessels (whether they are from CCAMLR parties or not) that wish to land toothfish in their ports.⁵⁶

As per the usual process, the policy instructs the commission to contact non-member states whose vessels had fished in the convention area (particularly if “implicated in” illegal, unregulated, and unreported fishing) to ask them to attend commission meetings and consider joining the convention. These states are also to be informed of the Catch Documentation Scheme and “the consequences for them of not participating.”⁵⁷ The process requires some participation by the flag state—an official of the state in which the ship is registered must attest to the validity of the document filed when fish are traded—but can otherwise be undertaken by individual vessels that wish to participate, even if their flag state does not want to join CCAMLR. Those vessels registering in open registries specifically to avoid being bound by fishing restrictions are, however, unlikely to take advantage of this provision.

The CCAMLR catch documentation scheme faces some hurdles that those implemented by the various tuna commissions do not. Because CCAMLR focuses on a location, rather than on particular species, legal fishing for toothfish can take place outside the CCAMLR regulatory area. Distinguishing between legally caught and illegally caught toothfish can be difficult, and depends entirely on where it was caught.

For this reason, CCAMLR required that as of 2001 satellite tracking equipment be installed on ships fishing for toothfish to enable their flag states to track their location. Since this mechanism depends on flag state oversight, it has been subject to abuse. Those member states with little regulatory oversight capacity lack either the will or the ability to track their vessels. There is evidence that some vessels have falsified their location reports. Many CCAMLR member states hoped to augment this system with a centralized electronic tracking

55. CCAMLR no date b.

56. Green and Agnew 2002.

57. CCAMLR no date c.

mechanism that would allow the organization to track vessels, but such a measure was vetoed by Argentina at the 2003 CCAMLR meeting.⁵⁸ CCAMLR did authorize a seven-state test of such a system, however. The organization also created a blacklist of vessels known to be illegally fishing, so that they can be tracked. Member states agreed to refuse to accept any toothfish caught on black-listed ships.⁵⁹

There is evidence that the scheme is having an impact. Immediately after it began, the price paid for toothfish at the point of landing in the ports of contracting parties was double that of non-parties.⁶⁰ Since then, a more consistent price differential has been estimated, with shipments without documentation fetching a price 20 to 40 percent lower than documented catches,⁶¹ although some still estimate that the amount paid for documented fish is more than double that paid for undocumented catches.⁶² This differential suggests that well-documented catches fetch a premium in member states. Clearly, fish caught by non-member states (or those that did not follow the conservation regulations) can still find a market—as Stokke and Vidas put it, “there is always some other port”⁶³—but not one that is as lucrative. Also, it is generally agreed that the CDS has ended landings in member states of fish caught in an unregulated way.⁶⁴

More important is the impact of the measures on fishing behavior. There is evidence that it is having an effect, at least some of it positive. CCAMLR suggests that there has been a decrease in toothfish catch over the first four years of the program.⁶⁵ The largest decrease appears to have been in the 1999–2000 fishing season, when the program had been created but was not yet fully operational. TRAFFIC suggests that in that year IUU catches declined by 21 percent.⁶⁶ CCAMLR figures show a large drop in that year, followed by a gradual increase over the next two years and a slight decrease in the 2002–2003 fishing season.⁶⁷

Also relevant, however, are changes in the location of fishing. Since the beginning of the catch documentation scheme, more catches have been reported as coming from just outside the CCAMLR regulatory area. Stock estimates cast doubt as to whether toothfish could even be found in abundance in the areas from which these reports come. Some fishing has probably moved outside the CCAMLR regulatory area⁶⁸ (hardly a victory for stock preservation), but it seems likely that other fishing activity is simply being reported as having moved.

At minimum, it does seem that the catch documentation scheme has suc-

58. “Snag in Toothfish War,” *The Mercury* (Australia), 8 November 2003.

59. CCAMLR 2003a; 2003b; and Resolution 19/XXI, 2003. CCAMLR works by consensus, so Argentina’s opposition was sufficient to prevent passage of the tracking requirement.

60. Agnew 2000.

61. Stokke and Vidas 2004.

62. Miller, Sabourenkov, and Sicer 2004.

63. Stokke and Vidas 2004.

64. Lack and Sant 2001; and Sumaila 2004.

65. Miller 2004.

66. Lack and Sant 2001.

67. Miller 2004.

68. Stokke and Vidas 2004.

cessfully created a record of the legal trade,⁶⁹ and has allowed CCAMLR members to discriminate in favor of fish that have been caught within the regulatory framework. CCAMLR officials suggest that the CDS now covers more than 90 percent of the world market for toothfish.⁷⁰

The most promising indications of success are the behavior of flag states. Two states have joined the agreement since the Catch Documentation Scheme and its associated membership push began. Namibia, which is not an open registry but which has been a major landing and transshipment location for Patagonian toothfish, joined as a full-fledged member of the commission in June 2000. Vanuatu, which is an open registry, joined as a non-commission member in June 2001.⁷¹ In addition, Belize, an open registry that has until recently drawn large numbers of fishing vessels, has begun cooperating with the commission.⁷² It deregistered four vessels (and warned one other) specifically identified by CCAMLR as fishing in the regulatory area.⁷³ Panama has declined to join the agreement, but has said that it will provide the commission with a list of its vessels licensed to fish internationally. China, Mauritius, the Seychelles and Singapore are all officially cooperating with the catch documentation scheme, although they have not signed the convention.⁷⁴

The flagging of rogue ships in open registries that are members of CCAMLR is a trend that bears watching. Uruguay's registration, after declining noticeably between 1998 and 1999, has been increasing since then, from 61,800 GT registered in 1999 to 75,600 GT in 2003.⁷⁵ Those within the CCAMLR system, especially if willing to falsify satellite position data (as has been the case with a number of Uruguayan-flagged vessels), can participate in the catch documentation scheme while actually circumventing the rules.

Other Schemes

Several other fisheries organizations have developed some aspects of the schemes discussed above. The Northwest Atlantic Fisheries Organization (NAFO) created one of the earliest port-state control obligations, with a 1997 plan that presumes that non-party vessels fishing in the NAFO regulatory area are undermining NAFO efforts. NAFO members are required to inspect such vessels that enter their ports, and they may not allow landings or transshipments of fish on board unless the vessel can demonstrate that the fish were caught outside of the NAFO regulatory area. Member states report the results of such inspections to the NAFO secretariat, member states, and the flag state of in-

69. *COLTO Brochure* 2003.

70. Miller 2004.

71. CCAMLR 2002.

72. Lack and Sant 2001.

73. Swan 2002.

74. CCAMLR 2004.

75. Lloyd's Register Fairplay 2004.

spected vessels.⁷⁶ The North East Atlantic Fisheries Commission (NEAFC) has a similar port-state inspection process.⁷⁷

Individual states have gone further than some of the fisheries commissions have required. For example, Norway has created a prohibition on landing of fish catches in contravention of fisheries agreements, even if the ship's flag state is not a member of these agreements.⁷⁸ New Zealand requires that any fish landed in New Zealand be approved in advance by the Ministry of Fisheries. Approval is contingent on evidence that no fish has been caught outside of international conservation processes; usually, the vessel is required as well to use a vessel-monitoring device during the time it is fishing.⁷⁹

Club Goods

The success of economic sanctions at gaining adherence to fishery agreements comes from the creation of a trading club. Those who want to sell fish to the large American or Japanese markets, for instance, must live up to certain fishery regulations in order to be able to do so. This requirement has caused some open-registry states to join fishery conservation agreements and other individual fishing vessels to lose their incentive to flag in states that do not uphold regulations. Since the trading club is created around fishing regulations, it is the state rather than the individual vessel that is held to the standard. It is thus even more difficult for an individual vessel to gain admission to the club if it is flagged in an open registry.

Exclusion of fish from a market also requires a willingness to undertake fairly intrusive action, since it would not be apparent from the shipment of fish itself whether it had been caught in compliance with fishery regulations. It is precisely for this reason that these types of sanctions have frequently been found to be in violation of international trade law. The states that are willing to require documented adherence to fishery agreements from fish exporters do so frequently because their domestic fishers compete internationally with FOC fishers, and would gain directly from higher standards.⁸⁰

What about the WTO?

One concern about the mechanisms described here is their compatibility with international trade rules. At first glance, provisions requiring that states discriminate in trade based on conservation concerns seem likely to run afoul of the World Trade Organization (WTO) requirements that member states refrain from using non-tariff barriers to trade. Some suggest that decisions by the dis-

76. Lobach 2004.

77. NEAFC Secretariat 2004.

78. Lobach 2003.

79. OECD 2004c.

80. DeSombre 1995.

pute settlement mechanisms of the WTO (and its predecessor under the General Agreement on Tariffs and Trade) mean that the organization will disallow trade restrictions for environmental purposes. The most notorious of these are the findings against the United States in 1991 and 1994 for its unilateral restrictions of imports of tuna not caught in ways that protected dolphins,⁸¹ and in 1998 and 2001 for its restrictions of imports of shrimp caught in ways that harmed sea turtles.⁸² But within its findings against these particular trade measures, the dispute settlement process elaborated an increasing acceptance of environmental protection as a legitimate reason for restricting trade, as long as restrictions on trade are applied in a non-discriminatory way, are designed specifically for environmental protection, and are accompanied by multilateral attempts to address the environmental issue.⁸³

In part due to these rulings, the sanctions elaborated here against fish caught by vessels flagged in non-members of fisheries organizations have been more carefully targeted. They allow individual vessels that can prove they meet standards to export fish to the states that otherwise would exclude fishery imports from a given state. In this manner, the measures do not discriminate against individual vessels that meet standards, even when their flag states have not taken them on. The WTO Secretariat has indicated that the ICCAT and CCAMLR trade restrictions "provide examples of appropriate and WTO-consistent (i.e. non-discriminatory) use of trade measures in multilateral environmental agreements."⁸⁴

Conclusions

Several important observations should be made about the efforts to hold flag states to international fishing standards. The first is that the targeted states that improved their behavior and signed international fishery agreements are most frequently those that were working to improve their registries more generally. Belize and St. Vincent and the Grenadines worked to improve the records of their fishing vessels at the same time that they were attempting to avoid being singled out for scrutiny under the port-state control inspection regime addressing safety and environmental concerns. They also removed a large number of vessels from their registry during this time period. Panama and Honduras, while not aiming for the highest standards, are generally concerned with at least maintaining a reasonable reputation.

Second, a number of these states have managed to increase fishing standards by removing fishing vessels from their registries (Belize is the most extreme example, with Panama, Malta, Mauritius and Honduras also removing

81. General Agreement on Tariffs and Trade 1991; and General Agreement on Tariffs and Trade 1994.

82. WTO 1998a; WTO 1998b; WTO 2001a; and WTO 2001b.

83. DeSombre and Barkin 2001.

84. WTO 2000.

fishing vessels from their registry.)⁸⁵ Since it is highly unlikely that these vessels simply cease fishing, they almost certainly find somewhere else to re-register, and continue depleting world fisheries under a different flag. The list of states targeted under ICCAT provides an excellent example of this process. The most recently targeted flags are the low-standard newcomers to ship registration: Cambodia, Equatorial Guinea, Bolivia and Sierra Leone. There is even evidence that if these ships cannot find suitable flags they will avoid registration altogether. This is a strategy most likely followed by those operating the furthest outside the bounds of law; not only are ships required by international law to be registered, but “stateless vessels” have few rights. Fishing vessels flying an “unknown flag” increased from 14 in 1994 to 1602 in 2003.⁸⁶

Nevertheless, the innovation in these fishery conservation measures is that they involve the markets for fish. There is a limit to the number of vessels that could continue to fish profitably when the major markets for fish products are closed to them. So the number of fishing vessels that can fish outside these regimes is shrinking. The underlying strategy in these measures is the creation of a “club” (i.e. an incentive structure in which access is no longer open to all) out of what had been a common pool resource, by allowing trade only among those who uphold conservation measures. This strategy may be more broadly applicable as a way to address open-access depletable resources.

Finally, it is interesting to observe that these economic measures do not target open registries as open registries. All non-member states fishing outside the regulatory structure (and, to a lesser extent, member states that are not fully implementing the convention requirements) are impacted by the CCAMLR system and the related systems for tuna. At minimum this suggests that the open-registry system, while certainly problematic for fishery conservation, need not be ended for progress to be made on the issue—an optimistic conclusion given the pervasiveness of flags of convenience.

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85. International Transport Workers Federation 2003.

86. ICFTU et al. 2002; and Lloyd’s Registry Fairplay 2004.

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