

## FOREIGN DIRECT INVESTMENT IN THE OECD FISHERIES SECTOR<sup>a</sup>

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### ABSTRACT

Restrictions on flows of foreign direct investment (FDI) in most sectors of OECD countries have been significantly reduced in recent years. In contrast, FDI in the fish harvesting sectors of OECD countries is still heavily restricted through a range of measures including outright bans on FDI, maximum allowable levels of FDI, restrictions on the nationality of captain and crew, location of head offices, and so on. The data on FDI flows to the sector is very limited due to aggregation problems, although anecdotal evidence indicates that FDI flows within OECD countries in the harvesting sector are relatively minor compared with flows from OECD to non-OECD countries. At the same time, FDI in the processing and aquaculture sectors is quite open, with minimal restrictions in place. This paper examines the policy issues underlying the restrictions on FDI to the sector. As with other trade liberalisation issues in the fish harvesting sector, such as tariff and subsidy reform, the effects of investment liberalisation will depend crucially on the effectiveness of the management regime in place in the countries to which the FDI is directed. An index of FDI restrictiveness is developed to enable cross-country comparisons to be undertaken. Several key reasons for maintaining FDI restrictions are examined in the paper including concerns over sovereignty, distributional issues, domestic industry protection, and enforcement of regulations.

**Keywords:** foreign direct investment, trade liberalisation, industry protection.

### INTRODUCTION

Foreign direct investment (FDI) is defined as an activity in which an investor resident in one country obtains a lasting interest in, and an influence on the management of, an entity in another country [1]. FDI is generally considered to be an important driver of economic growth both in OECD and non-OECD countries as the internationalisation of production helps to better exploit the advantages of enterprises and countries, increase competitive pressures in domestic markets, and stimulate technology transfer and innovative activity [1]. As a result, there has been a tendency towards reducing or eliminating hindrances to FDI, as long as this does not conflict with other legitimate policy objectives and barriers to FDI have fallen significantly in virtually all OECD countries over the past few decades. For example, there are now almost no restrictions on FDI inflows into manufacturing, aside from economy-wide restrictions such as notification or screening requirements, and the bulk of the remaining restrictions are concentrated in the service sector, with electricity, transport and telecommunications being the most constrained, followed by the finance industry. The decline in FDI barriers has been coupled with a significant increase in the flows of FDI within the OECD area in the last half of the 1990s, with most of the activity consisting of mergers and acquisitions (including privatisation deals) of existing businesses.

To a large extent, however, the fisheries sector has not been part of this trend. There remain significant restrictions on FDI in the fisheries harvesting sector in many OECD countries. In contrast, there are fewer restrictions on inward FDI in the processing sector. This paper examines the restrictions on FDI in OECD countries and explores the potential benefits of liberalising FDI restrictions in the OECD fisheries sector, the obstacles to such liberalisation, and potential measures for addressing the obstacles.

### FDI IN THE OECD FISHERIES SECTOR

Foreign direct investment in the harvesting sector primarily takes two forms: investment in vessels or the purchase of quota (the leasing of quota is considered a service). These two forms of investment are often interlinked as, in some countries, quota is attached to a vessel and is transferred with the vessel (for example, in some fisheries in Norway and Denmark). The main motive for undertaking FDI is to gain access to fisheries resources in the host country. This is fairly obvious in the case of investment in quota and in vessels that have quota attached. Such access will often help in obtaining raw material for processing plants owned by the investing company, or assist in utilising idle vessel capacity. The purchase of vessels without quota is primarily a means of expanding or diversifying the operations of a fishing company. Intangible assets specific to the company (such as technologies, managerial skills, etc.) help to explain such investments, in addition to the company's expectation of obtaining a higher rate of return on the investment than in available alternatives.

The processing sector is closer in nature to other manufacturing industries. Multinational companies undertake such investments in order to ensure their investment portfolio maximises the net wealth of the company. The decision to undertake FDI in a particular country's processing sector revolves around a multinational company's desire to locate production closer to raw material inputs, reduce transport costs to final markets, or exploit cost advantages. They may also be seeking to internalise the benefits from technology that may have been developed by the company, and from vertical integration [2, 3].

Data on FDI flows in the fisheries sector are difficult to obtain. Such data are masked in official collections of statistics as FDI flows in the fisheries sector are aggregated with FDI flows in the agricultural sector. There are ad hoc estimates of FDI flows in particular countries, but these are rare and not useful for comparative purposes. For example, it is estimated that the cumulative value of Japanese FDI outflows for the fishery sector between 1950 and 2001 was JPY 257 billion [4].

## **TYPES OF FDI BARRIERS**

A range of barriers to inward FDI in the fisheries sector are in place in OECD countries. A recent survey of these restrictions is provided in a recent OECD study on the effects of liberalising fisheries trade [5]. The types of restrictions that are applied to the fisheries sector can be broadly grouped into foreign equity restrictions, screening and approval procedures, and constraints on genuine link, principal office and crew.

### **Foreign equity restrictions**

Restrictions on foreign ownership are the most obvious barrier to inward FDI. They typically take the form of limiting the share of companies' equity capital that non-residents are allowed to hold in a vessel or company in the fish harvesting sector or a company in the processing sector. In those countries where individual transferable quota (ITQ) systems are in place, there may be restrictions on the foreign ownership of quota and the amount of quota that can be held by a given foreign investor. A number of countries allow foreign investment up to a legislated maximum share in the equity of a given company. This limit varies significantly between countries:

- Australia, Canada, Greece and Mexico (<50% foreign equity is allowed, for non-EU nationals in the case of Greece);
- Norway (<40%);
- Denmark (<33% for non-EU nationals); and
- New Zealand and the United States (<25%).

Korea, Japan and Turkey have no equity restrictions on inward FDI to the sector. However, as will be discussed below, other restrictions on ownership of vessels in these countries have the effect of presenting significant barriers to FDI inflows. Iceland allows no inward FDI in its harvesting sector.

The situation with respect to the European Union (EU) is more complex. Within the EU, there is an internal market characterized by the abolition between Member States of obstacles to the free movement of goods, persons, services and capital. There are also no restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State (although some Member States have put restrictions on the movement and establishment of nationals from countries that recently acceded to the EU). The decision as to whether EU countries allow inward FDI from non-EU countries is left to individual countries and this varies significantly between EU countries. A group of EU countries – Belgium, France, Ireland, Italy, Portugal and Sweden– do not allow inward FDI from non-EU countries. Four other EU countries, Spain, Germany, United Kingdom and Poland, allow FDI from non-EU countries. A common restriction on inward FDI in EU countries (even from other EU countries) is that a genuine economic link with the host country can be demonstrated. This is discussed further below.

Data are not widely available on ownership patterns of OECD countries' fleets. An exception is the UK where there are a number of Dutch and Spanish-owned vessels in the fleet. There has also been a recent buyout of some very large distant water vessels, with associated quota, by an Icelandic company.

Restrictions on the ownership of quota by foreign interests are also widespread in OECD countries. These restrictions can either be implicit or explicit. Few OECD countries with tradable quota systems allow quota to be bought by foreigners, and even then, there are tight restrictions on the conditions under which the investment is allowed. In Australia, foreigners are allowed to buy quota, but fishing is only allowed to be undertaken with an Australian registered vessel, or a vessel deemed to be an "Australian boat" which is owned by an Australian company. In New Zealand, foreign ownership of quota is permitted subject to certain national interest criteria being met, such as creation of jobs, development of new export markets, increased market competition, etc. In addition, no overseas person is allowed to have the right to exercise or to control the exercise of more than 40% of voting power. In some other countries, such as Denmark and Norway, the quota is often tied to a vessel and so the same restrictions that are in place for FDI in vessel ownership implicitly apply to quota ownership.

In contrast to the harvesting sector, there are no restrictions on investment in the processing sector in the OECD area in terms of the amount of foreign equity allowed. In countries where forward integration between harvesting and processing occur, there are usually limits on foreign holdings of fishing quota. In Canada, for example, fish processing companies which have more than 49% foreign ownership are not permitted to hold Canadian commercial fishing licences.

### **Screening and approval procedures**

All OECD countries require some form of notification and approval procedures for FDI in both the harvesting and processing sectors. Depending on their implementation, obligatory screening and approval procedures can limit FDI. Prior approval of FDI, such as mandated for several OECD countries, could limit foreign capital if it is taken as a sign of an ambivalent attitude towards FDI, even though it may not be vigorously enforced. Simple pre- or post-notification is unlikely to have much impact on capital flows. In the fisheries sector, approval procedures range from simple notification of the investment, either pre or post the investment taking place, to the requirement that the investor be able to demonstrate that the investment will result in economic benefits to the host country (for example, in Mexico and many EU countries). A number of countries require a middle course of action where approval is granted unless the investment is contrary to the national interest. In Australia, notification only is required for investments up to AUD 10 million, approval (normally without examination) for investments up to AUD 50 million,

and for investments above AUD 50 million approval is granted unless judged by the government to be contrary to the national interest. As noted in the previous section, New Zealand allows foreign ownership of quota provided it is in the national interest.

### **Constraints on genuine link, principal office and crew**

Barriers to FDI also arise through national regulations that impose further restrictions and requirements beyond limits on foreign equity holdings. These can have particularly restrictive effects on investment flows and can significantly increase the transactions costs of FDI. They may limit the freedom with which FDI can be undertaken in a country even if the “headline” restrictions in terms of foreign equity allowed are not, in themselves, very restrictive. Indeed, in some cases, such additional restrictions can be so tight and difficult for foreigners to meet, that FDI cannot be effectively undertaken. This represents a “Catch-22” situation where, for example, foreign investment is technically open, but there are nationality restrictions on who can own a license or quota in order to invest, without which it is not possible to be the foreign owner of a fishing vessel.

Such constraints are evident in a number of countries. In Japan, for example, while there are no restrictions on the amount of equity that a foreign holding may invest in the fishing sector, ownership of vessels is restricted to Japanese individuals, companies where the representatives and two-thirds of the directors are Japanese, and companies with head offices in Japan and where all the representatives have Japanese nationality. Such requirements can create barriers and increase costs just as effectively as explicitly limiting the amount of foreign equity.

As discussed above, a number of countries require potential investors to demonstrate a genuine economic link with the host country before inward FDI proposals can be approved. This reflects a concern that the exploitation of a country’s fish resources by foreign companies provide some economic return to the host country, and is achieved through the need of investors to develop some links with the host country economy. This is particularly the case in the EU where many countries require such a link to be demonstrated, even by other EU countries. The economic link requirement in many EU countries arose as a result of the long-running argument within the EU about whether one member state had the right to restrict access to their fisheries from other member states and concerns over “quota-hopping” [5, 6]. It marked a compromise between the need to allow for the free internal movement of capital and the right for each Member state to benefit from the fisheries resources within their exclusive economic zones (EEZs). Rights to fish in EU waters, to gain access to quota, and to hold a fishing licence are regulated by each member state individually. Such regulations must be consistent with overall EU regulations regarding freedom of movement of capital as well as maintain the “relative stability” of the distribution of fishing rights within the community. The economic link concession was brought in as a compromise between the Community’s policy on the free movement of goods and services and the need to provide some protection for the livelihoods of coastal communities [7]. A number of EU countries have taken up the economic link requirement as a means of regulating inward FDI in their fisheries sectors.

What constitutes a genuine economic link is not generally defined in the legislation of countries, but is often elaborated through the court system [8]. For example, under legislation in the United Kingdom, fishing vessels are required to demonstrate a real economic link with the UK through one of the following four options:

- landing at least 50% by weight of the vessel’s catch of quota stocks into the UK, or
- employing a crew of whom at least 50% are normally resident in a UK coastal area, or
- incurring a given level of operating expenditure in the UK for goods and services provided in UK coastal areas, or

- demonstrating an economic link by other means (including combinations of the above) providing sufficient benefit to populations dependent on fisheries and related industries.

Other formal restrictions that can discourage FDI inflows include constraints on the ability of foreign nationals to manage or to work in affiliates of foreign companies and other operational controls on the business. Stipulations that nationals or residents must form a majority of the board of directors or vessel ownership, as is the case in Japan, New Zealand, Norway and Sweden, may undermine foreign owner's control over their holdings and, hence, may make them more hesitant to invest under such circumstances. The requirement that the principal office of the host company be located in the host country is also a common restriction and serves to raise the raising transaction costs of FDI. Crew restrictions can also be significant. For example, France requires that the captain and first officer must be French nationals, and that the other crewmembers be nationals of an EU country. Some countries also require that crew obtain certificates of competency from their national authorities which can restrict hiring practices. For example, Poland requires members of crew to hold a certificate of competency issued and endorsed by the Polish Maritime Administration.

### AN INDEX OF FISHERIES FDI RESTRICTIVENESS

Using the results of the survey of FDI restrictions in the OECD member countries, an indicator of FDI restrictiveness can be developed in order to compare the degree of restrictiveness across countries and, potentially, over time. The concept is based on an aggregate indicator of FDI restrictiveness developed by the Productivity Commission in Australia [9] and further refined by the OECD [10]. The indicator aims to systematically capture the main statutory barriers to FDI by weighting the key barriers according to their relative importance and then summing them so that they fall between 0 and 1 (with 1 being the most restrictive and 0 the least restrictive). It provides a means of systematically pooling information on the various types of barriers in a sector to form an aggregate indicator for that sector. This can then be used to facilitate cross-sectoral and cross-country comparisons over time.

The scoring system is based on regulations in each country in three areas: the amount of foreign equity allowed; screening and approval processes; and other restrictions relating to economic link requirements, personnel restrictions and licensing. The scores are presented in Table 1. The highest weights are given to foreign equity limits as foreign ownership is a necessary and essential condition for FDI. A non-linearity

**Table I. Weighting coefficients on FDI restrictiveness in the fisheries sector**

<i>Foreign equity limits</i>	No foreign equity allowed	1
	1 - 19% allowed	0.6
	20-34% allowed	0.4
	35-49% allowed	0.3
	50-74% allowed	0.2
	75-99% allowed	0.1
	no restriction	0
	Restricted to EU nationals	0.3
<i>Screening and approval</i>	Must show economic benefits	0.2
	Approval unless contrary to national interest	0.1
	Notification (pre or post)	0.05
<i>Other restrictions</i>	Genuine or economic link	0.4
	Restrictions on licenses and quota	0.2
	Principal office in the host country	0.1
	Crew restrictions	0.1
<i>Processing restrictions</i>	Conditions on cross-ownership of licences	0.2

is built in to reflect the fact that a total ban on foreign ownership is significantly more restrictive than allowing a small foreign equity stake. Screening and limitations on management are generally less important, although this may mask the restrictiveness of “Catch-22” restrictions that may exist in some countries. The scores are added together to obtain an overall indicator of FDI restrictiveness.

There are a number of limitations of the measures that need to be borne in mind when interpreting the results [11]. The indicators cover statutory barriers and abstract from the more indirect obstacles affecting FDI, such as those related to corporate governance mechanisms or hidden institutional or behavioural obstacles that discriminate against foreign firms. Such non-statutory barriers, even if known, are very difficult to ascertain and quantify. It is also possible that some countries are more forthcoming than others in self-reporting their restrictions. This could result in more transparent countries receiving higher scores, not because they are more restrictive, but because they are more complete in their reporting.

The resulting indexes of FDI restrictiveness for the harvesting and processing sectors in OECD countries are depicted in Figure 1. The data are arranged in ascending order of restrictiveness in the harvesting sector. The indexes confirm that FDI in the harvesting sector is significantly more restricted than in the processing sector. Across the OECD, average score in the harvesting sector is around 0.6, while it is 0.1 in the processing sector. By way of comparison, the average score for the OECD as a total in 1998 was around 0.18, with the telecommunications sector around 0.34, banking 0.17, air transport 0.39 and manufacturing 0.09. Caution must be exercised in making such comparisons as the two indexes differ to some extent in their construction and weighting systems. Nevertheless, the comparison reveals the relatively high degree of FDI restrictions in the harvesting sector.

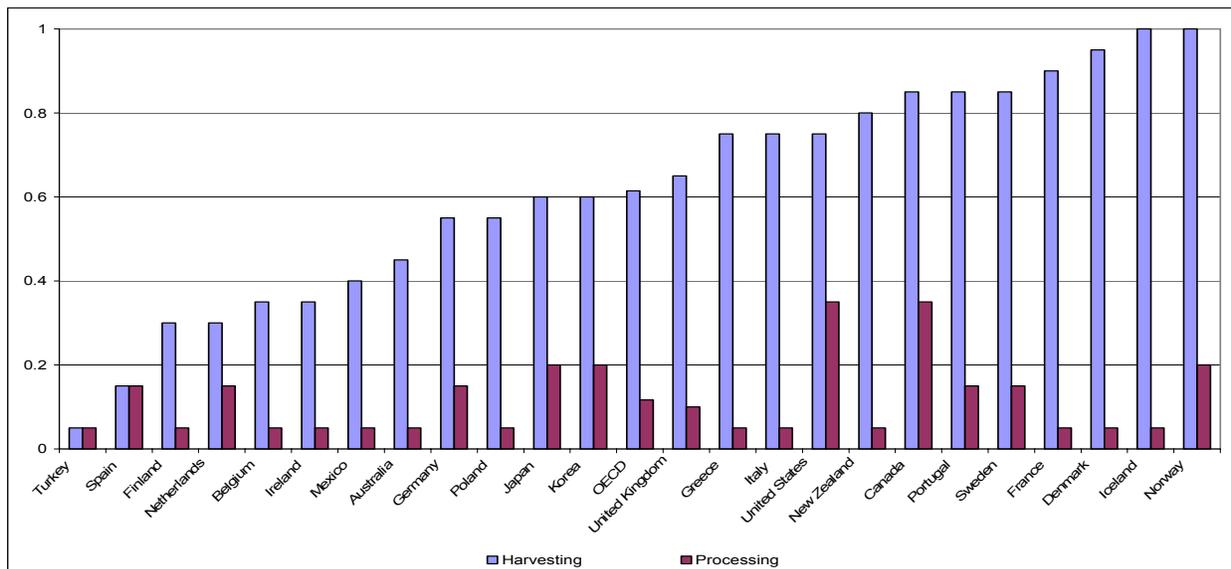


Figure 1. FDI restrictiveness index for harvesting and processing in OECD countries

### POTENTIAL BENEFITS FROM LIBERALISING FDI IN THE FISHERIES SECTOR

There is broad agreement in the general literature on liberalising FDI that open capital markets can promote more efficient and productive use of resources, realise economies of scale, and improve structural efficiencies [12, 13]. FDI contributes to both factor productivity and income growth in host countries, beyond what domestic investment normally would trigger. It is more difficult, however, to assess the magnitude of this “additional” growth impact. The main policy challenge in both OECD and non-OECD countries is to ensure that the host country has a transparent, broad and effective enabling policy and governance environment in which the benefits from FDI can be maximised while ensuring that

the potential costs are minimised. In addition to economic growth, it is recognised that inward FDI can facilitate technology transfer and diffusion in the host country. The spillover effects can reach into the local economy and FDI can provide countries with technology that may not be locally available. There is also evidence that increased competition associated with the entry of foreign firms can upgrade the efficiency and product quality in national firms. By giving firms access to foreign sources of savings, the internationalisation of capital markets can ease financial constraints that may prevent firms from investing in potentially more efficient (and perhaps environmentally preferable) technologies.

It is also recognised that, in the absence of proper governance, liberalising FDI rules may result in adverse impacts on the host country. Such concerns centre on the potential for FDI to crowd out domestic investment, increase environmental degradation, and exploit low-paid workers [14]. Some of these concerns have become crystallised in the vocal opposition by some groups to globalisation and the process of increasing international economic integration [15]. The remainder of this section discusses the potential benefits from the liberalisation of FDI in the fisheries sector, while the following section addresses the issues in removing obstacles to such liberalisation.

### **The harvesting sector**

In the case of the harvesting sector, the realisation of such potential gains from FDI depends critically on the effectiveness of the management regime in place in the host country [5]. The relaxation of FDI restrictions will bring out any distortions or weaknesses of the existing policy framework and can result in adverse impacts on the sustainability of the resource and on the domestic industry. It is useful to consider three situations: where management is effectively enforced in the host country (that is, the country receiving the FDI); where there is open access in the host country; and where there is regulated open access (between the two extremes).

Under effective management regimes, the relaxation of foreign investment rules will lead to economic efficiency improvements and income growth. If foreign investment in the host country is more profitable than investment alternatives in the home country (for example, through the more efficient use of capital stock or through access to resources), the foreign investor will buy their way into the domestic fishery through the purchase of access rights (catch quotas, effort quotas, vessel quotas, etc). This will occur if the foreign investor believes that they can operate more profitably and pay a higher price for quota than domestic operators. This may result in some of the owners of domestic quotas being replaced by foreigners. As a result, the inward FDI may crowd out some domestic investment, which would then be directed to the next most profitable investment opportunity. Hence, relaxation of FDI restrictions is likely to improve overall resource use efficiency, and income growth, in the host economy.

Under open access regimes, relaxation of FDI restrictions will result in an increase in the capital flowing into the harvesting sector if, the foreign investors have a higher expected rate of return on their investment than the domestic investment. This will initially come as an addition to the domestic investment and may, over time, replace some or all of the domestic investment. As there are no effective controls on effort or catches, this will lead to a further depletion of fish stocks. Depending on whether the fishery is initially underfished or overfished, catches will increase (underfished) or decrease (overfished) in the short term, but will decline in the long run as the stock becomes overexploited. The profitability of the domestic industry will decline, but the host country will gain from moving capital out of fishing and into other uses. However, this efficiency gain needs to be balanced against the negative effects on the resource stock that will result from the combination of increasing capital entering the fishery and an open access management regime.

Under regulated open access regimes where catches are effectively controlled under a total allowable catch (TAC) but where there are few (if any) restrictions on the effort used to take the TAC, there will be

no effect on stocks. Some of the domestic fleet may be bought by foreign owners as foreign capital moves into the industry. As is the case under open access, this will reduce the profitability of the domestic fishing fleet but the country overall will gain from moving capital out of the fishing sector.

### **The processing sector**

The effects of liberalising restrictions on investment in the fish processing sector would not be much different from the effects of FDI liberalisation in other manufacturing industries. Unless the industry is vertically integrated, such investment would not have any direct effect on the catches of fish. There could, however, be indirect effects. Foreign investment either through ownership and control or through joint ventures, indicates that the investors expect to be able to increase the profitability of processing operations. This could occur through increased market access opportunities, better technology or better management and operating procedures. If the higher profitability of fish processing flows through to higher fish prices, then this could affect the total catches of fish, depending on what kind of management regime is in place. The extent of such price transmissions up and down the value chain depends on how the raw fish market operates. If there is a competitive market at the point of first sale (for example, through the use of auction houses), then the price transmission is likely to be quite low. On the other hand, if there is vertical integration between harvesting and processing, the extent of price transmission is much less transparent.

The issue of market structure will also influence the extent to which the host country will benefit from the positive externalities (spillovers) that are often associated with technological transfer and diffusion that may result from inward FDI. In general, the evidence of positive spillovers is strongest and most consistent in the case of vertical linkages with suppliers or purchasers in the host country. To some extent, fishing technologies can be bought off the shelf. But there is no doubt that experience in the development, use and diffusion of new technologies can be more easily facilitated within a vertically integrated company. Economies of scale and the internationalisation of research and development can also push the pace of technological change. In the fishing sector, this can also be observed in the increasing demand for quality and traceability right through to the consumer. There is sufficient anecdotal evidence to support the view that vertical linkages in the supply chain tend to push for technological improvements and innovations to meet these market challenges. For example, the increased activity of major processors in ensuring secure supplies of raw material and particular quality standards has helped to force the pace of change in the harvesting sector.

Similarly, this can lead to increased environmental standards and have a positive spillover to domestic industry. Such a “race to the top” has been observed in other resource sectors (such as the mining sector). There is little evidence in the fishing sector of the “regulatory chill” that is sometimes observed in other areas where countries do not seek to increase environmental standards for fear of deterring foreign investment. Indeed, the FDI restrictions in place for the OECD harvesting sector indicate that such policy-based competition for FDI is not an issue. It is an open question, however, if relaxing FDI restrictions throughout the OECD area would lead to such regulatory chill; unsurprisingly, in the harvesting sector, this will depend on the effectiveness of the management regime in place.

## **ADDRESSING OBSTACLES TO REDUCING BARRIERS TO FOREIGN INVESTMENT**

Given the potential benefits to reducing FDI restrictions in the fisheries sector, why have OECD countries maintained relatively high barriers, particularly in the harvesting sector? Obstacles to FDI liberalisation appear to centre on four interrelated issues: sovereignty; protection of domestic industry; concerns over monitoring, control and surveillance; and food security.

### **Sovereignty concerns**

Countries attach considerable importance to sovereignty over their ocean areas. This is due to a combination of factors including national pride, security and national economic wealth and is reflected in the legislation, policy objectives or political statements of many countries. For example, in a recent speech on his country's High North Policy, Norway's Foreign Minister emphasised the need "to safeguard Norway's interests and security ... to promote economic growth, employment, living standards and settlement" [16].

The sovereign right to exploit the fisheries resources that lie within the EEZs of OECD countries is fundamental to fisheries policies in OECD countries. Indeed, such sovereignty underpins many of the mechanisms in the United Nations Convention on the Law of the Sea in determining the rights and obligations of coastal states. This is reflected in the national laws of most OECD countries. In Japan, for example, the Law Concerning the Exercise of Sovereign Rights Concerning Fisheries in Exclusive Economic Zones outlines the limited conditions under which foreigners may engage in fishing activities in the Japanese waters. Canada has a long-standing policy, which dates from the 1970s, which is intended to prevent foreign companies from gaining access to Canada's fisheries resources through the acquisition of Canadian companies having substantial license holdings. The policy does permit minority ownership of Canadian fish harvesting companies by foreign investors.

The strongly held view that a country's fisheries resources are essentially to be reserved for the country's fishers represents a relatively major political obstacle to moves to further liberalise FDI movements in the sector. Reducing the obstacle involves a trade off between the potential for improvements in economic efficiency and potential effects on security and national pride. This calculus is complex and involves a high degree of political judgement as the two sides of the analysis are not necessarily denoted in the same metric.

It is interesting to contrast this emphasis on sovereignty in the fisheries sector with the experience in other resource sectors. In the mining and oil sectors, for example, both large and small multinational enterprises operate across international borders and there are significant capital flows in and out of countries as mineral and oil resources are developed. In general, the ownership of the resources rests with the State, but access for exploitation is provided to companies, often in exchange for royalty payments, or in the case of some energy developments, resource rent taxes. The well-developed property rights regimes set up for mineral and oil development enable the functional separation of ownership and exploitation and pave the way for FDI to help improve the efficiency of resource use and exploitation [17]. Of course, there are some fundamental differences in the capital requirements of the mining and fishing sectors. The mining sector is highly capital-intensive and very few countries have the financial or technical resources to undertake major mining projects without the use of foreign capital and expertise. The fishing industry, in contrast, tends not to involve such major investments and expertise in fishing is more widespread amongst fishing nations.

However, the more relevant parallel lies in the way in which access rights are specified in the different sectors and the potential scope for the increased use of stronger access rights regimes to address the separation of the ownership and exploitation functions in the fisheries sector. In OECD countries, the ownership of fisheries resources rests with the State and the rights of exploitation are provided for access to fish rather than over the resource itself. However, there are considerable differences between OECD countries as to how well those access rights are specified with only a portion of OECD fisheries having well-specified, enforceable rights-based regimes which facilitate the efficient use of fisheries resources [18]. In cases where there are strong access rights, relaxing the restrictions on inward FDI to the fisheries sector will improve the economic efficiency of resource use, without compromising the sovereignty of the state over the resources themselves.

### **Protection of domestic industry**

Closely related to concerns over sovereignty, is a desire by many countries to ensure that the domestic industry is able to exclusively exploit the countries' EEZs. Fears of foreign control of a nation's fisheries resources are generally closely allied to domestic industry protection, often reinforced by the strong political voice of the fishing industry and coastal communities in many countries. This is reflected in the FDI conditions in many countries, including the need for foreign investors to demonstrate a genuine economic link in the host country, requirements for FDI to be undertaken through subsidiaries operated and controlled by host country nationals, and nationality requirements for board members to be primarily of host country nationality.

In the past, the FDI restrictions has been at least partly the result of an infant industry argument mounted by the domestic industry and governments as countries sought to build up their domestic fishing fleets. This was particularly evident in the years following the extension of the EEZ to 200 nautical miles when coastal states suddenly had control over significantly larger resource stocks than prior to the extension. Significant support was provided to domestic fisheries to build up capacity and domestic production. However, it is unlikely that the infant industry argument can be invoked in many OECD countries today. Indeed, the majority of OECD countries have undergone significant fleet reduction and industry rationalisation programmes in the last decade, indicating the industry has proceeded well beyond the infant stage. Even in the case of newly discovered (and hence under-exploited) fish stocks, the infant industry argument is weak; potential market failure resulting from a lack of information on resource availability, or a lack of capital in the domestic industry, can be addressed through appropriate specification of management measures to strengthen access rights and address issues of risk [19, 20].

As with the sovereignty argument, concerns over domestic industry protection revolve around the distributional impacts of changing foreign investment policy for the sector. Allowing a less restrictive investment regime in the harvesting sector may result in some changes in income distribution, depending on the management regime in place. Under a system of transferable quotas (either output or effort based), an individual or company that voluntarily sells their quota or vessel is, after having done so, no worse off than before the transaction took place, so the policy concerns over the distributional impacts are significantly reduced. However, under regulated open access or open access management regimes, the resulting shifts in distribution may be a cause for concern, particularly if the affected region(s) or communities have a strong political voice. This, for example, may be significant in some coastal regions. So, in general, liberalising the investment regime may result in an overall improvement in the wealth of the economy, provided that there is appropriate and well-enforced management.

### **Monitoring, control and surveillance concerns**

A third interrelated point focuses on enforcement concerns. It may be harder to control foreign-owned vessels and to enforce sanctions if the owner is not in the country. Such challenges are most evident in the case of prosecutions for IUU fishing where the offending vessel may be captured, but there is little prospect of being able to prosecute the actual owner of the vessel as they are usually located overseas. Similar concerns may be a factor in the reluctance of OECD countries to relax restrictions on investment in the harvesting industry.

Improved domestic fisheries management, with stronger access rights regimes which can be used to both control catches and effort and enlarge financing possibilities, may help address such concerns. Both domestic and foreign fishers are likely to have a greater incentive to abide by the rules imposed by domestic regulators if they have well-defined and enforceable access rights to the fisheries. Both groups of fishers have an incentive to maximise profits, but both have a stake in the longer term health of the fishery.

It is difficult to argue that the actual monitoring of foreign-owned vessels within a country's EEZ is any more difficult than monitoring the compliance of domestic vessels. The surveillance that is undertaken by fisheries authorities both at sea and in ports is equally likely to detect violations in domestic and foreign-owned vessels. The main problem occurs in the enforcement of infringements. One possible solution to this is the use of performance bonds as a surety against non-compliance with management regulations. Such financial guarantees are widely used in other resource sectors, most notably the mining sector [21]. In the mining sector, performance bonds are used to provide a form of insurance for the government in case a mining company goes bankrupt before a mine site is properly rehabilitated [22] and provides the company with a strong incentive to ensure that it undertakes appropriate environmental management.

More attention could also be paid to requiring a higher level of authentication of the bona fides of the investing company prior to granting approval for investment to take place. Many companies now put significant effort into improving and demonstrating their environmental credentials. The use of environmental auditing processes for companies has become a regular feature of the corporate reporting architecture, along with due diligence and social responsibility requirements. The extension of such corporate oversight and reporting tools to the fisheries sector has not been widely adopted and there is scope for increasing their use to improve the effectiveness of fisheries enforcement.

### **Concluding remarks**

In a recent book on globalisation, the economist Jagdish Bhagwati concluded that foreign direct investment is as good or as bad as the domestic policies governing the sector to which the investments are directed [23]. This conclusion is even more acute in the case of the fisheries sector. As a common property resource, government policy plays a major role in determining the distribution of benefits from access to the resource. As a result, the impacts of FDI on the sustainability of fish stocks is nested within the effectiveness of the domestic management regime. The oft-quoted concerns about the general impacts of FDI on the environment will largely disappear if effective and enforced management regimes are in place in the host country. Other concerns over the ability to enforce regulations on foreign-owned companies will largely also apply to domestically controlled companies, and may be addressed through the innovative use of reporting and enforcement mechanisms.

Despite the potential benefits from increased efficiency and reduced transactions costs that are likely to flow from liberalising investment in the fishing sector, very few OECD countries have taken this path for their harvesting sectors. One of the major obstacles to liberalisation is a concern that such a policy shift will adversely affect the sovereignty of the host country over its marine areas. Domestic industry protection also appears to be a major obstacle, bolstered by domestic industry and coastal communities voicing concerns over the entry of foreign vessels and companies and the resulting the potential for changes in the pattern of income distribution. However, it is clear that effective domestic fisheries management will play a crucial role in determining impacts. Stronger access rights regimes and the use of innovative mechanisms (such as performance bonds), coupled with effective enforcement will increase the likelihood that investment liberalisation will result in an overall increase in the net economic wealth of the host country and in the country of origin of the investment.

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## ENDNOTES

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<sup>a</sup> The views expressed in this paper are those of the author and do not necessarily reflect the views of the OECD Committee for Fisheries or its Member countries.