Structure and Price Determination in Maritimes Port Markets: A Study of Fishermen/Buyer Relations

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STRUCTURE AND PRICE DETERMINATION IN MARITIMES PORT MARKETS: A STUDY OF FISHERMEN/BUYER RELATIONS

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FOREWORD

This study was commissioned in response to a need identified by the Task Force on the Atlantic Fisheries for further analysis on the subject of port markets. It represents an extension of work previously done for the Task Force by the author, Dr. Charles Steinberg. I would like to thank Dr. Steinberg for contributing further to our understanding of the port market and for stimulating discussion of this important issue.

The opinions and interpretations expressed in the report are those of the author, and do not necessarily reflect those of the Department of Fisheries and Oceans.

R.W. Crowley
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October, 1984

PREFACE

This study is an outgrowth of the author's discussion papers for the Task Force on Atlantic Fisheries (1982). It reflects a concern that fishermen/buyer relations in the port market -- and indeed, that the process of price formation itself -- be better understood. It is hoped that greater knowledge of the operation of the port market within the larger framework of the fisheries industry will facilitate the evolution of better working relationships there and lead ultimately to a more orderly marketing process.

The author hopes for a better, more viable inshore fishery, but his views on how the inshore fishery is structured and operates and, therefore, on the remedies for its present ills, are entirely his own. So, too, are any errors that practitioners and other students of the industry may discover.

The author wishes to acknowledge an enormous debt to government officials in the Maritimes and in Ottawa, to industry and union participants, and to the industry observers who have, over the years, shared their knowledge and made possible his work on the fisheries.

ABSTRACT

Steinberg, C. 1984. Structure and price determination in Maritimes port markets: a study of fishermen/buyer relations. Can. Ind. Rep. Fish. Aquat. Sci.149: 52 p.

This paper addresses the problem of poor fishermen/buyer relations in port markets in the Maritimes by studying the structure of price determination at the landings level.

The study finds that processor concentration is a response to secondary market conditions. The power of that concentration extends not only to the vertically integrated offshore sector, but to the inshore fisheries as well.

Contrary to the accepted view, this article holds that the Maritimes fishing industry is not separated into two branches -- a processor-controlled offshore and a competitive inshore fishery with many buyers and sellers. These fisheries are perceived instead as an integrated system. This system is characterized by a distinct horizontal structure linking the small and distant landing sites directly and indirectly to processors and secondary markets through a network of buyers. These buyers vary in size, in terms of their ties to major and minor processors, and in their degree of independence.

Immobility and economic ties create dependence of fishermen on buyers in a broadly-based pyramidal structure. This structure is loosely but effectively committed to a system of relatively stable seasonal prices, by region and species, through direct contract sales governed by strong price leadership from the major processors. This system has become even more formalized as a result of the recent restructuring of the industry. In a real sense, the entire inshore fishery constitutes the port market, because there is no meaningful price competition at the landing site.

The result is a price mechanism and market structure tilted in favour of the processors -- although for other reasons, they, too, face financial problems.

The paper reviews briefly co-operatives, auctions, market boards and commissions, mediation and the present arm's-length bargaining as alternatives for restoring a balance of market power in price-making at the landings level.

Collective bargaining, though not trouble-free, is advanced as the only alternative under present circumstances that might yield both the perception and the reality of equity. It is recommended that public policy include this option as one that fishermen would be free to choose.

It is further suggested that collective bargaining may be a better educational tool than any number of sermons about the need for fishermen and buyers to recognize their mutual dependence.

RÉSUMÉ

Steinberg, C. 1984. Structure and price determination in Maritimes port markets: a study of fishermen/buyer relations. Can. Ind. Rep. Fish. Aquat. Sci. 149:52p.

Le présent document, qui porte sur le problème des relations médiocres entre les pêcheurs et les acheteurs sur les marchés portuaires des Maritimes, examine la structure de fixation des prix au débarquement.

Selon l'étude, la concentration des transformateurs s'est produite en réaction aux conditions du marché secondaire. Les effets de cette concentration s'étendent non seulement au secteur hauturier intégré verticalement, mais aussi aux pêches côtières.

Contrairement à l'opinion générale, l'auteur considère que l'industrie halieutique des Maritimes n'est pas séparée en deux secteurs, soit, d'une part, la pêche hauturière, contrôlée par les producteurs, et, d'autre part, la pêche côtière compétitive autour de laquelle gravitent de nombreux acheteurs et vendeurs. Il perçoit ces deux secteurs comme un système intégré que caractérise une structure horizontale distincte liant directement et indirectement les petits points de débarquement éloignés aux producteurs et aux marchés secondaires par l'entremise d'un réseau d'acheteurs. L'importance de ces derniers varie selon leurs liens avec les gros et les petits transformateurs et leur degré d'indépendance.

L'immobilité et les liens économiques créent une dépendance des pêcheurs à l'égard des acheteurs dans le contexte d'une structure pyramidale à base étendue. Cette structure informelle est efficace et amène un système de prix relativement stable. Ces prix, établis pour des contrats directs de ventes, fluctuent selon la saison, la région et l'espèce et subissent la forte influence qu'exerce les grands producteurs. Par suite de la récente restructuration de l'industrie, ce système est devenu encore plus officiel. En réalité, toute la pêche côtière constitue le marché portuaire parce qu'il n'y a vraiment aucune compétition sur les prix au lieu de débarquement.

Le mécanisme de fixation des prix et la structure du marché sont ainsi biaisés en faveur des transformateurs, quoique, pour d'autres raisons, ces derniers font aussi face à des problèmes financiers.

L'auteur examine brièvement les coopératives, les ventes à l'encan, les offices et les commissions de commercialisation, la médiation et l'actuel régime de négociations sans lien de dépendance comme solutions de rechange pour le rétablissement de l'équilibre des forces du marché dans la détermination des prix au débarquement.

La négociation collective, quoique non sans problèmes, est proposée comme la seule solution qui pourrait à la fois, dans les circonstances actuelles, être perçue comme équitable et l'être effectivement. Il est recommandé que la politique officielle permette aux pêcheurs de choisir librement.

Selon l'auteur, l'expérience de la collective est peut-être meilleure que les beaux discours incitant les pêcheurs et les acheteurs à reconnaître leur interdépendance.

I. THE PROBLEM IN THE PORT MARKET

As The Task Force Saw It

The 1982 Task Force on Atlantic Fisheries carried out perhaps the most extensive investigation of those fisheries ever conducted.[1] One of its important findings was that a substantial source of conflict and misunderstanding lies in relations between fishermen and buyers at the port market level.[2] This relationship seems steeped traditionally in mutual antagonism and mistrust.

In one passage, significantly entitled "We versus They", the Task Force states that the "division of the income pie is another source of endless conflict, only part of which is justified by the need to maintain bargaining tension between buyer and seller" and later, noting that fishermen and buyers are in fact mutually dependent, the Task Force states that, "This problem [that is, of reciprocal suspicion] cannot be resolved by government policy. Its resolution will require a fundamental change in attitude on the part of fishermen and processors alike."[3]

As This Study Sees It

Clearly, such a state of affairs is neither wholesome at present nor promising for the future of the fishing industry. It is the continuing existence of conflict that prompted the present study, whose purpose is to explore the relations between fishermen and buyers in the port market more deeply. As a result, it should be possible to define the problems more sharply and bring a clearer understanding to this troubled and critical part of the fishing industry.

But the port market is only one of the crucial links in an industry that extends from the market to the supermarket.[4] Viewed from this broader perspective, the place of the port market in the larger system also needs study.

This paper considers the place of the port market within the Maritime provinces and the structure of the fishing industry, explores the mechanics of price determination at the landings level, examines the differing expectations and attitudes of fishermen and buyers, and reviews alternative systems for resolving differences between fishermen and buyers, with a view to suggesting realistic, and possibly permanent, solutions.[5]

In this task, the topics touched on in Chapter 15 of the Task Force report[6] were a point of departure, as was the author's discussion paper for the Task Force.[7] The Maritime provinces, namely Prince Edward Island, New Brunswick and Nova Scotia, are the base for the study.

As The Participants See It

Processors seem to believe that the year-round offshore, large-vessel groundfishery, which feeds a handful of major processing plants that produce mainly for export, is the heart of the Maritime fishing industry.[9] There is a certain truth in this notion if capitalization is the main criterion, but if it were entirely true, solving the industry's problems would be relatively simple.

The fact is that, directly or indirectly, the few largest processors together still buy on average more than 45 per cent of their groundfish from the seasonal, small-boat, labour-intensive, inshore fishery.[10] These groundfish purchases are without reference to the processors' substantial interests in herring and mackerel, lobster and many other species.

If major processors' home ports -- the so-called 'trawler ports' -- are defined as year-round, offshore, distant-water-supplied landing sites, there are only six left in Nova Scotia, one (with some questions as to its viability) in Prince Edward Island, and none in New Brunswick -- that is, there are none having vessels over 126 feet or fishing distant waters year-round, though there are ports with major processor interests in New Brunswick.[11]

However, there are also literally hundreds of inshore landing sites where fish are bought. They are scattered along thousands of miles of rugged Maritime coastline and sheltered in hundreds of bays and coves that harbour the inshore fisheries. Some are clustered around the trawler ports, but most fishing settlements are isolated from the major centres. Yet the total catch of these little communities generates more than 60 per cent of the industry's landed value, thanks in good part to the high value of lobster.[12]

More important, the population of these communities is heavily dependent on fish for its livelihood.[13] Given that the prices received for inshore landings are critical variables in determining that livelihood, it is not surprising that price-setting in the port market is a central preoccupation of thousands of inshore fishermen and their crews and helpers.

Moreover, given that isolated communities may often have only one buyer or processor, it is not unnatural that small-boat fishermen would look upon buyers' pricing policies with mistrust. Similarly, in their concern for stable fish supplies in a difficult seasonal environment, the buyers might consider that fishermen lack commitment and a realistic perception of the industry's workings. The real issues, however, are far too complex to support either partner's one-sided explanation of the ills of the port market. The structure of the industry must be considered before the port market can be viewed in a realistic perspective.

II THE PORT MARKET IN THE INDUSTRY STRUCTURE

Selling Wholesale In The U.S.

Buying and pricing policies at the landings level in the port market are perhaps best observed from the top down, rather than from the bottom up. The demand for fish in the port market, like the demand for labour, is a derived demand in both the formal economic and the common sense meaning of that term. With the exception of relatively small quantities of fresh fish sold or used by fishermen locally, the demand for in-shore fish, like that for offshore trawler-caught fish, derives from the demand for processed fish and fish products in wholesale and, ultimately, retail markets.[14]

The largest of these markets for the troubled groundfish sector is in the United States, which took 59 per cent of Canada's 1980 exports, as compared with 22 per cent taken by the domestic market. Canadian groundfish made up 60 per cent of U.S. fillet imports and 34 per cent of its block imports in 1981.[15] Canada's place in this market is fairly well defined; but this portion of the market is highly segmented and contains areas of substantial buyer concentration.

In the 1960s and '70s, Canadian sellers were considered price-takers. In fact, in 1970 some six U.S. buyers accounted for 60 per cent of total Canadian groundfish sales. Only one Canadian firm had substantial forward integration into the U.S market, and the balance of the sales was to broker-wholesalers and buyers for large institutions.[16]

The Canadian foothold has increased somewhat, and U.S. buyer concentration has declined to 40 per cent over the last dozen years. But there is still high concentration in particular segments of the market, and there are strong tendencies toward renewed concentration as giant food conglomerates such as General Mills, Campbell Soups, Conagra and Nestlé acquire major food distributing and retail sales chains. Furthermore, as brokers and institutional buyers improve their computerized inventory control, it is expected that they will gain even greater direct market leverage.[17]

In short, though Canadian processor-sellers have increased their share of the market, there seems little reason to believe that they have achieved sufficient market influence to provide a counterbalance to the concentrated buying and pricing policies they encounter in their major export market. Canadian processors may not be the price-takers they were a decade ago, but neither do they have the wholesale outlets or the financial and inventory-holding resources to be price-leavers when the U.S. market is soft.

The implication is that the prices received by Canadian processors are probably still somewhat lower than they might be under free market conditions. This is clearly so in those U.S. market segments where buyer concentration is highest.

Canadian Processor Concentration

The response to a secondary market dominated by a handful of strong buyers was the growth of processing concentration in the Canadian primary markets, especially where heavy processing capitalization was required. This development is easy to see. To secure reliable, year-round (as opposed to seasonal) supplies of fish, vertical integration of processing with offshore fishing emerged as processors acquired fleets of large vessels.

The size of processing establishments increased to meet the potentially large-volume foreign market, but also to gain production economies. More complicated financial and marketing arrangements developed as companies grew to accommodate the larger volume needs of export markets.[18]

By the early 1970s, 14 firms among 218 processors exported almost all the Nova Scotia groundfish, including supplies to Canadian domestic markets out of the Maritimes, while Nova Scotia accounted for almost 50 per cent of Atlantic landings.[19] Yet by the end of the 1970s, less than a decade later, the Task Force noted that

> ...the concentration of production had increased, and more small firms were relying on the larger firms to market their products. The top four firms (National Sea Products, Fishery Products, H.B. Nickerson & Sons, and The Lake Group) marketed almost 70 per cent of all Atlantic Canadian groundfish and processed 63 per cent of the total. The top four also marketed about 90 per cent of all

> frozen fillets produced and 85 per cent of the frozen blocks. (For the top eight firms, the figures were 98 and 96 per cent respectively.)[20]

Ever greater processor concentration in the industry seems to have been a natural economic evolution in response to both the size and complexity of U.S. wholesale markets and the concentrated buying power in them.

The recent restructuring of the industry -- which combined the Nickerson group with National Sea Products in Nova Scotia, and The Lake Group with Fishery Products in Newfoundland, and allocated the Nickerson quota of Georges Bank scallops to Newfoundland -- appears only to have speeded and rationalized the east coast industry's normal path of economic evolution.

Buying Concentration in the Primary Market

The implications of this evolution are that Canadian processors, seeking to cushion themselves against the power of U.S. buyers, have created their own buying concentration, one that extends backward from wholesale export markets to the port markets. The process is one of natural growth stemming from specific economic circumstances more than it is a calculated effort to pass on the market pressure. Yet that growth, fuelled by the demand for larger volumes of throughput and sales, requires substantial capitalization. The resulting cost increases create an urgent need to secure stable, year-round raw material supplies, because cost-minimizing economies can result only from a constant flow of materials through an expanded plant system. Idle capacity becomes intolerable, given the cost of overhead.

One of the effects of this buying concentration at the landings level is to stabilize the primary market and its price system. The relative price stability is more marked if only a handful of major processors emerge -- and especially if one of them is large enough in relation to the others to become the price leader in buying raw material. With limited exceptions, the Maritime fisheries fit this description well.

A longer-term effect of primary market processor concentration is that it acts to regularize the industry, particularly if it has become overcrowded with inefficient, marginal firms. Smaller firms drop out, or become more efficient and find a place for themselves, or become dependent in one way or another on the major firms. The industry thus is rationalized over time.[21]

The practical effect of industry leadership and buying domination by a few firms has been, and now will be more than ever, to avoid destructive competition among the large firms. Under these circumstances, it makes no sense for processors to compete for raw material supplies by bidding up prices to the fishermen. Certainly, the small firms cannot defy the going prices. A price war against the major firms would quickly put small ones out of business. Moreover, the price set is already the best price that can reasonably be achieved from the point of view of the processor/buyer. Why compete in the area of price? There are other advantages. Costs and margins can be identified more easily with stabler prices, and better planning can be achieved.

Fishermen-Seller Implications

Nevertheless, the flow of buying power from the processors to the price-setting mechanism in the port market is far from unimpeded. The best price has an economic floor. The price must in the long run cover the fisherman's "opportunity cost" -- the value of his next best alternative use of his money and time. In short, it is the price needed to keep the fisherman in the market. Competition for supply, then, can subtly take the form of competition (of sorts) for the loyalty of fishermen, but price competition in buying the fish is well dampened.

What emerges is a pricing system of direct contract sales, in an atmosphere of fairly stable seasonal prices, with explainable regional differences. This is the system that exists in the Maritime provinces and indeed, in the entire Atlantic fishing industry.[22] There is no doubt that the system will become even more clearly defined under the newly restructured industry framework.

However, whether there is in fact an element of buyer advantage built into the pricing system depends on whether the fishermen-sellers have mobility, alternatives and high or low opportunity costs; it also depends on overall supply in relation to demand in the secondary markets. For example, if firms are operating in the red because a supply glut has caused secondary market prices to collapse in the short run, there may be a potential buyer advantage at the landings level, but it cannot be realized because the fishermen's supply-side price "floor" exists and confronts the buyer regardless of secondary market conditions.

To secure future raw material supplies, the buyer may have to meet that floor without covering his own opportunity costs. That is, if he wants to stay in the game after export market prices normalize, he may have to continue buying for inventory.

The status of the true cost/price spread at any point in time is what must be determined. Doubts about its size are the source of much of the suspicion and resentment in the industry. Sharing the true spread, to the satisfaction of both buyer and seller, is both the problem and the goal.

The Independent Sellers: A Few Generalizations

Even this brief outline of the structure of the industry would be incomplete without noting that independence is possible under certain conditions. Some small and medium-sized firms, mainly in southwestern Nova Scotia, but perhaps elsewhere, have been able to take advantage of their proximity to U.S. auction markets for fresh whole fish. Low capital requirements to enter these markets, and Canadian cost advantages, have also aided in creating some successful independent brokerage and/or export arrangements relatively free of the influence of the major processors.[23]

The appearance of independent fish brokers or independent fishing firms that successfully circumvent the concentrated buying and marketing power of the major firms and their agents tends to be limited to a special set of conditions, all of which must be met simultaneously:

- The particular fish or fish product enjoys very strong, stable demand in the secondary markets; it is usually a luxury item.

- There are open, well-organized, competitive markets.

- These markets are relatively near and accessible.

- The would-be independent is located close to stocks of the luxury item.

- Capital requirements for catching and/or processing are low.

- There is freedom of entry to the processing sector.

- In the absence of large, open, competitive markets, there is a sufficient number of local independent, alternative buyers (bidders).[24]

The "blind hail" auction for halibut and swordfish that operated in Nova Scotia a decade or more ago is an example. The fresh fish industry described earlier is another. Lobster brokerages are a third, but more limited example.[25]

All require only modest vessels and gear. The products require almost no processing, so that onshore facility costs are low. As Maritimers describe these businesses, they can be operated with a "light bulb and a telephone" and from the tailgate of a truck, but they depend on the well-organized U.S. auctions or on the ability of entrepreneurs to create a market niche for their special products.

For a perspective on the question of independents, consider one fishery where independent firms could have but have not developed -- the deep-sea scallop fishery. Although most of the conditions are met (scallops are a luxury item, they are shucked on board and require little or no processing, and they are landed near the independent fresh fish exporters), the missing ingredient (aside from licensing) is ease of entry. It now costs over a million dollars to buy a 104-foot deep-sea scallop dragger ($3 million if it is made of steel), outfit it, and cover initial expenses.

Dependence and Independence: An Overview

In summary, the economic conditions for dependence in the port markets, and in the inshore fisheries generally, are at present the norm. The exceptional circumstances that produce independence are comparatively rare. Though the independents in southwest Nova Scotia have fared well, and may even have increased in number over the last decade, they have also tended to increase the size of their firms, and there has already been some consolidation among them.

More generally, buying concentration across the Maritimes has increased greatly. There has been no noticeable tendency for independent processors to emerge elsewhere. Even the government-fostered

Northumberland specialty exporting consortium in Prince Edward Island has been slow to take hold. In fact, notwithstanding the exceptions described, the dependence of fishermen on processors has increased significantly.[26]

The restructuring of the Atlantic groundfish industry may only have completed a process begun long ago by the underlying economic forces at work in the industry. Nevertheless, the new structure will be more powerful still in price determination.

III THE PORT MARKET STRUCTURE AND OPERATION

Its Character and Scope

The term 'port market' tends to call up images of a bustling wharf full of buyers trading bids on catches of fish. After a half-day's trading, the existing supply is cleared and prevailing prices are established in a process repeated daily in response to the flow of fish to the market.

Or we may imagine an auction, where catches supplied by many sellers are bid on by many buyers. Going prices are established by haggling in the market place, with no particular advantage to either buyers or sellers.

These market processes are common to the ports of Europe and the U.K.[27], and something akin to this description may be found in Boston, New York and New Westminster, British Columbia. The critical characteristic of these port markets is that the fish supplied are available to all buyers at the outset. Whether by auction or individual bargaining, the market is cleared at market-set prices that include individually negotiated quality differentials when fish are not formally graded prior to the auction.

The Maritime port market bears no resemblance to this picture. There the system of direct dockside contract sales at going seasonal/regional prices avoids the effects of competitive bidding in an open market for the reasons already described.

The Task Force defined the Atlantic port market as the place "where the fisherman, as a seller of landed fish, meets the processor, as a buyer of raw material."[28] But this definition implies that every buyer is a processor, or that only processors buy, or that every landing site where a processor buys is a port market.

However, we have already seen that landing sites in the Maritimes fisheries are located in hundreds of small hamlets and villages scattered along thousands of miles of Fundy, Atlantic, Northumberland, and Gulf of St. Lawrence coastline. We also noted that there are only a handful of trawler ports left, dominated mainly by the major processors. There is, in addition, a slightly larger number of port towns, which might be called 'port markets', each containing a number of processors. Some of the fishing hamlets are clustered around these port towns, but many more are scattered along the shore with no proximity or real connection to processing centres, large or small.[29] It is the fact that the many buyers and sellers are spread out in this fashion that gives the impression of independent marketing.

Is There a Horizontal Structure?

The extent of vertical integration in the groundfisheries is acknowledged by most observers. So, too, is their limited forward integration into secondary markets; only a very few of the largest Maritime processors provide most of the export channels for the industry. However, the fact that the inshore fisheries, which contribute heavily to both total landed value and the processor/exporter's groundfish supply, are scattered creates an outline which still seems to be unclear. It is as though the groundfisheries, and other fisheries as well, are divided in two -- a vertically integrated portion and a 'competitive' inshore sector.

This view is no doubt lent credence by the presence of many buyers and sellers in the inshore segment. As one observer said flatly, "Horizontal integration is conspicuous by its absence...".[30] Yet this does not explain how processors, dependent on inshore fish overall, safeguard their supply. Nor does it explain the relative seasonal price stability or, in general, the absence of price bargaining (where there is no union) in port markets with more than one buyer,[31] except for some arm's-length bargaining on the issue of quality. The Task Force was silent on these issues, but understanding the implications of these questions is crucial to understanding price determination in the inshore fisheries.

The Inshore Fishermen/Sellers

If we hold as constant the relatively small number of independents already described, the average fisherman and his crew and helpers run small vessels on trips of a day or a few days at most. Limited by vessel size, costs and fishkeeping facilities, they are tied to their own landing sites, which may be remote from fishing centres.

The communities are generally too small to have financial institutions, repair yards or independent freezing, ice-making, cooling and bait-holding facilities. Independent transport is usually not readily available. The only market outlet for the catch, then, is the fish buyer, who may or may not be a processor.

It is easy to see how mutual dependence develops. The buyer relies on the fisherman to go out fishing. The fisherman depends on the buyer for financing and all the necessary facilities not provided publicly, often including a wharf.

The buyer provides what is necessary, but it is in return for exclusive sales by the fisherman at established prices. If there are alternative buyers in the area, the fisherman may shift his allegiance, yet it will be under the same pricing policy.

A modest form of competition could creep in, perhaps in the form of more generous arrangements offered the fisherman by some buyers, but the leeway is very narrow. The largest port towns are still relatively small communities, and both fishermen and buyers are tied by the social structure, which does not bear disruption easily.

Generally, then, relationships are fairly stable, and except in unusual circumstances (for example, when outsiders forage for a slim supply) price competition does not surface, although prices may vary over time with overall regional supply in relation to secondary market conditions. Regional prices may differ, largely explained by cost differentials in marketing the supply and by remoteness, which imposes even greater fisherman immobility.

The stability of these relationships is underscored by traditional financing arrangements: buyers often finance vessel down-payments, provide the necessary equity in small fishing companies to aid fishermen in obtaining vessel loans, and cover the fishermen's overhead costs and the variable costs of operation, which the buyer may deduct from the value of the catch.[32] The business ties between inshore fishermen and buyers can therefore be very strong, and they should not be underestimated in assessing the port market structure. The stability of buyer/seller financial relations reinforces the stability of the price structure and rationalizes the market supply process.

The Horizontal Linkage: The Buying Network

The integration of inshore fishery with the vertical sector through the market structure just described is complex. Explaining the economic basis of fishermen/buyer relations, apart from the mutual need to sell and buy, does not show how prices are transmitted and how supply is secured between the processing/exporting sector and the outports. Though it is grossly over simplified, the following description of the buying side of the port market, which describes seven categories (and one sub-category) of buyer, may help clarify the system.[33]

Processor/Buyers of Large Multi-Plant Firms

This category includes the National/Nickerson complex and a few others. They buy direct from fishermen in most of the major port towns. They have substantial inshore vessel holdings in addition to their trawlers; they market well over half the lobster, all the deep-sea scallop (prior to the recent allocation to Newfoundland), and over 85 per cent of the groundfish.

Processor/Buyers of Small Multi-Plant Firms

Almost all have interests in inshore vessels, and some may run trawlers as well. Exports by these firms, combined with those of the large multi-plant firms, constitute over 96 per cent of Atlantic groundfish exports.

Processor/Buyers of Independent Single-Plant Firms

They usually have financial interests in inshore vessels. They may own a vessel outright, but the processing of raw material purchases for export may be through other agencies, using the label of a major firm.

Buyer/Processors

This term describes those who buy direct from the inshore fishermen. The term 'processor' distinguishes the operator who is fundamentally a fish or lobster buyer, but who may also produce salt fish, or perhaps some other specialty, on a modest scale.

The buyer-processor regularly lends inshore fishermen capital for trawl and other gear (as does the processor-buyer) and perhaps for boats as well. Often he also provides the services already described: bait, sometimes at cost, freezer and cooler facilities for holding bait, and baited trawl tubs.

The relationship between buyer-processors and processor buyers, to whom the fish are sold more often than not, is murky indeed. It is alleged that many of these buyers are acting as agents on commission for the large processors. In some instances, processors may advance funds to buy fish and "lending money" to these buyers. It is nevertheless clear that the buyer-processor does not make prices. He receives price information from the major centres and transmits it to inshore fishermen.

Independent Buyer-Processors

This is no more than a small sub-category but it is identified separately because independent buyer-processors may act as brokers, selling direct to agents in the export market as well as to the processors, for whom they may also work as commissioned agents.

The Company Buyer

The company buyer is exclusively a buyer for a processor. He does no processing, but performs all the other functions of the buyer-processor in relations with inshore fishermen. He buys daily in the outports when the fish are running. The large processors send trucks to his facility, and he crates and acts as an assembler. Processors extend credit to him for the purchase of fish and so that he can extend credit to inshore fishermen. He normally works on a percentage commission, but he might also own a truck and use it to transport fish, especially if he deals with one of the smaller processors. In a very few instances, he is a salaried employee of a small processor. He is obviously a critical link between processing centres and the many landing sites.

The preceding description simply highlights the primary buying network; it ignores many additional marginal functions performed by buyers.

Independent Buyer/Co-ordinators

There is a substantial number of operators in this category, though they handle only a small volume of fish and their functions are not entirely clear. It is believed that they are mainly lobster buyers who are independent of domestic processors. Instead, they act for brokers in the U.S. export market. They may buy, gather and hold lobsters for transport by vessel, but more often by trucks sent from New York, Boston or one of the Maine ports. Here, too, buying relations with fishermen usually include lending expense money, a typical arrangement in the lobster fishery. It is more likely that they are speculators on lobster prices rather than commissioned buyers, though it is clear that they co-ordinate and assemble for brokers who provide the transport. There is therefore stability in their relationships with both U.S. brokers and Canadian inshore fishermen.[34]

Buyer/Processor/Retailer/Brokers

The seventh category is very small. These entrepreneurs buy fish mainly, though not exclusively, from inshore fishermen and do some processing -- ranging from smoking and salting to filleting and packaging. They sell whenever they can to wholesalers and brokers in the secondary markets, to institutions, and to cargo and passenger vessels in major ports. When they survive it is because of their flexibility and their energetic search for outlets. Their number has declined drastically.

While the foregoing description is over-simplified, it reflects buying practices in the markets for groundfish, scallops, lobsters and other shellfish, as well as herring.

Price-Setting At The Port Market

The network of processor/buyer linkages just described ties the hundreds of landing sites in the outports to the processing centres, imposing a structure on what seemed an irrational division between processing and exporting on the one hand and the buying of raw material from the inshore fisheries on the other.

The economic ties between fishermen and buyers, based on mutual need, completes the explanation of how the direct sales system is reinforced and price stability is maintained within the port market framework.

Unfortunately, it has not been clear that the processing sector and the inshore fisheries are part of the same system, largely because buying in the latter appeared decentralized. It was assumed that the pricing mechanism reflected local forces of supply and demand more sensitively than it actually does.

In discussing the quality aspect of price structure, the Task Force was confounded by this price insensitivity and complained,

> One of the most perplexing phenomena in the fishery is that the apparent market [that is, the secondary market] preference for high-quality fish fails to be transmitted effectively to the fishermen in the form of appropriate price incentives.[35]

They blamed the processor's need for fish (presumably of any quality) on the one hand, and overstated the extent of competition among small-station buyers for fishermen on the other, implying that buyers would pay going rates for poor-quality fish to ensure fishermen loyalty.

There is no mechanism at present for transmitting secondary market signals to the inshore fisheries (apart from the single major processor that is integrated forward). Those signals take the form of effective price leadership.

The buyer categories just described constitute a loosely organized but efficient overall system for transmitting leader-determined prices. The system guarantees a continuing flow of raw material in return, despite leakages through the independents' end-runs around the processors to the U.S. markets.

The relationship between total demand and total supply undoubtedly determines how prices filter through the market system in the long run, but a much more effective clue, in the seasonal time horizon in which fishermen and buyers actually work, is given by the Maritimes watchword, "We're waiting to see what National will do".

A far simpler answer to why port market prices are not sensitive to differences in quality lies in the major exporters' traditional U.S. market niche for mediocre blocks and slabs. Until quite recently, the exporter could make a comfortable living peddling a modest-quality line without having to incur the expense of fostering quality improvements throughout the system -- in the inshore fishery as well as on its own trawlers.

One fisherman demonstrated this point in his submission to the Weeks Commission on the Prince Edward Island fishery. He showed how a fisherman could lose money under present circumstances trying to obtain the higher secondary market prices prevailing for quality Norwegian groundfish.[36] However, newly emerging shifts in the quality orientation of secondary markets are being compounded by overseas competition that is serious enough to cut into Canadian leadership-generated cost advantages.

Part of the fisheries' hope for the future therefore lies in quality improvements. But these cannot readily be achieved by exhorting either fishermen or processors to do better. Both are exceptionally competent at calculating marginal costs and revenues.

Nevertheless, the conclusion of this paper is that in evaluating the structure of the inshore fishery, the Task Force may first have misread the grumbling of both fishermen and local buyers, and then seriously undervalued the general stability of fisherman/buyer relationships, a stability that supports regional price determination. They may also have underestimated the capacity of the major processors, and their agents and surrogates, to establish going prices regionally by species, often even seasonally or semi-seasonally.

The Maritimes port market -- in the sense of the place where buyers and sellers of fish meet, bargain and, in so doing, determine price -- cannot be found at a single landing site, or in a port town or even in a major processing centre. The entire inshore fishery constitutes the port market, segmented by region, but not necessarily by species, because, more often than not, buying cuts across fishery lines, as fishermen themselves shift from one species to another to earn a living.

It is a primary market that reflects the forces in the secondary market, but it is well insulated from their immediate effects by the dominance and resulting price-leadership of the major processors. However, it should be understood in terms of and as part of the evolutionary economic process described earlier. There is nothing collusive or illegal about the firms' operations. Competition among the few largest companies has been keen -- and often destructive.

The processing firms are as much a part of the history, life and culture of Atlantic Canada as the fishermen and the agent buyers. It is in the light of this historical mutual dependence that we should examine fishermen/buyer relations and their points of view.

IV FISHERMEN AND BUYERS: A LOOK AT BOTH SIDES OF THE COIN

The Inherent Conflict

Reviewing the operation of the port market makes one thing clear. Neither fishermen nor buyers can exist without the other under the present structure. It would be difficult to imagine a workable alternative in the Maritimes. But keeping that mutual dependence in sight is not easy for either fishermen or buyers.

Fishermen want to maximize their incomes. So do buyers and processors. Fishermen therefore need to reduce their costs, increase efficiency and maximize the available catch. But one of the most important variables in their earnings equation is the price received for their catch. For any given level of fishing technology, skills and effort, the fisherman can increase his income only by obtaining higher prices for his catch.

To maximize their incomes, processors and buyers have to minimize their costs, consistent with stable supply at appropriate levels. For any given level of processing technology, overhead, capital, volume and raw material quality, and processor working and managerial skills -- marketing as given -- the processor can increase his income only by minimizing the price of his raw material -- the fisherman's catch.[37]

Thus, the difference in attitudes toward prices emerges and conflict seeps into the market relationship, despite the fact that mutual advantage is clear, economic ties are close, and price-making is usually understood to be remote from the landing site or port market. Sometimes the conflict is overt, sometimes it is more subtle. While many relationships between fishermen and buyers are old, strong and mutually satisfactory, it is nevertheless useful to consider how each considers the issues.

The Inshore Fisherman's Outlook

Since maximizing net earnings means maximizing landings and prices and minimizing costs, the fisherman's concerns cover a wide field:

° Volume is in good part dependent upon the availability of the fish, governed by such factors as the health and density of local stocks.

Fishermen have long worried that lobster are getting scarcer. They note that the amount of worthwhile fishing time during the season is getting smaller, so that volume and earnings will decline if price rises do not compensate. 'Worthwhile" means taking a sufficient number of fish of decent size, per unit of effort, to cover opportunity costs. This is always a difficult but necessary calculation. Those who urge the fishermen to increase earnings simply by putting in more fishing time are not familiar with the marginal cost calculations of the fishing enterprise.

Similarly, it has long been argued that the availability of stocks of inshore groundfish is related to offshore stocks through seasonal migration patterns.

Heavier offshore allocations and catches are therefore thought to mean smaller inshore catches in the short inshore season. Not only are protection and husbandry of fish stocks a concern of the fisherman, but their allocation by sector is also a source of conflict.

- Costs begin with the vessel and interest rates: the amount of the loan required to finance the purchase of a vessel and the size of interest payments on those funds.

The sharp increase in the demand for vessels following the adoption of the 200-mile limit, general increases in the cost of building vessels, and other factors have driven both new and second-hand vessel prices upward. The high interest rates of the last half-dozen years added to the pressure on the fisherman and caused the collapse of many fishing enterprises, which had to seek either greater processor assistance or take-overs. The rise in fuel costs since 1973 has affected fishermen as it has other sectors of the economy. Bait prices, too, have become a problem with the increasing scarcity of herring and mackerel.

- Fishermen often express dissatisfaction with the availability of storage and water facilities. And while ice is not used frequently onboard, it is not easy to obtain it inexpensively.

- Inadequate wharfage is seen to be a problem in many areas, and bait and gear repair, traditionally done by the fishermen, now requires more sophisticated facilities, which are not always available and can be expensive when electronic gear is involved.

- In addition, fishermen have sometimes felt that they are in competition for limited stocks with part-time fishermen whose livelihood is not as dependent on fishing and whose additional supply, they fear, may ultimately put downward pressure on fish prices.

- Finally, fishermen are concerned perennially about price itself.

The Buyer's Interests

Concerns on this side of the market equation depend on whether the buyer is a processor or a broker.

- All buyers worry about their responsibilities as bankers to the fishermen. Whether they own inshore vessels outright, extend down-payment money, or are silent partners in fishing enterprises, these are longterm commitments that form part of their overhead costs. Interest rates, then, are also of critical importance for buyers who borrow to cover the overhead costs of their buying enterprises. The buyer who says, "I've just added another boat to my fleet" may actually have extended a down-payment to another fisherman.

- Moreover, buyers face continuing responsibilities for providing money for gear and outfitting and/or for the running costs of the fishing vessel. If the buyer is a chandler or has the facilities, he may simply extend credit and write the debts off against the value of the catch. Whatever the arrangements, the buyer makes a financial commitment to provide the working capital in what he trusts will be a long-term arrangement.

- If buyers give bait or sell it at cost, its price must be covered. Diesel and gas pumps, ice-making equipment, coolers and fridge facilities, and a water source may also be part of the services offered by the buying enterprise.

- In the absence of a government dock, the buyer's stage and store, station or dock may be the only real wharfage in the area, and fishermen will land there to unload their catch. Clearly, the overhead on the entire buying enterprise is not insubstantial.

- The cost of trucking, assembling, crating and loading, including the cost of the materials involved, may be covered by the buyer or by the processor.

- Buyers and processors often voice concerns about quality. Obviously, small soft fish are more difficult and expensive to fillet, as are catches where there are wide variations in size, particularly in machine filleting operations.[38]

- Processors share the fisherman's worries about stocks and the allocation of the resource, though they may disagree on the appropriate inshore-offshore allocation if they run trawlers for a portion of their supply. In that case, they may see the stock allocation problem in the broader context of NAFO areas and international competition for the resource, and this is another source of conflict.

Some Specific Complaints

When differences surface between fishermen and buyers or processors, they often can be narrowed down to the following kinds ofcomplaints.[39]

Fishermen Say

- The prices offered are below their true market level and are not fair.
- Where there are quality differentials they are not fair.
- Buyers take advantage of remoteness to depress prices.
- We need over-the-side sales to foreign vessels to help break the buyer's power and to avoid depression of the local market by part-timers.

Buyers Say

- The market dictates prices, and forward markets are unstable.
- Quality is poor, yet we're forced to obtain supply, which is inadequate.
- Costs are what determine differentials by region.
- Competition from other processors to wean fishermen away breaks any advantages we might have.

- Fishermen, processors and buyers agree that cost increases have threatened their financial viability.

In short, fishermen believe that processors and buyers are often "holdingback", while processors and buyers feel they are making the best possible offers, given market conditions and the services they provide. In general, no one is satisfied. Despite the existence of some satisfactory arrangements, mistrust seems a chronic part of the relationship.

V THE PRICE SYSTEM IN THE PORT MARKET AND ITS ALTERNATIVES

The Economist's View

Efforts by fishermen in the Maritimes to organize for their economic protection have followed a difficult and tangled course since at least 1905.[40] Offshore fishermen did not sign their first voluntary collective agreement until 1969.[41] Throughout this period industry, governments, and students of the fishery alike claimed that collective bargaining, even by offshore fishermen, made no sense because the prices on which their shares rested were determined competitively in the marketplace.

The industry clung to this view, in theory at least, until 1975.[42] The first clear public pronouncement to the contrary may have been in the submission of one fishing company to the Task Force on Atlantic Fisheries in 1982. The company argued that such offshore prices quoted to its own vessels were only "accounting prices", or what economists might call "administered prices".[43]

The industry, modifying its position a bit, now holds that inshore fish prices bear no relation to offshore accounting prices, and that inshore prices are determined by competition among buyers and sellers in the market.[44] The industry also maintains that collective bargaining over prices by inshore fishermen would be detrimental to the industry and to fishermen themselves because of the tragedy of the commons -- the exhaustion of the accessible supply as a result of unrestricted entry to the fishery, which has eliminated any possibility of gain for the participants.[45] In short, the industry argues, there is nothing to bargain over.

Let us look at these arguments. In a competitive system with many buyers and sellers with simultaneous access to the goods, with freedom of entry and exit and with no organizations, collusion, or firms large enough to dominate a substantial portion of the market, price will settle at the opportunity costs of buyers and sellers -- that is, at the 'normal' or 'zero-profit' level, which is the price that will (just) make it worthwhile for them to stay in the market.

There are volumes of economics literature on the 'welfare economics' implications of this notion. This price, set under competitive conditions, is thought to be the lowest possible sustainable price for the greatest possible sustainable output -- in other words, it generally yields the greatest good for the greatest number.

The extent to which a higher or lower price could appear depends on the degree of imperfection in the market -- on the way relative market power is divided between buyers and sellers. Whether such a price differential can be maintained depends on the permanence of the market forces that created the imperfection. Whether the advantage arising from greater market power can be made good -- that is, whether it is reflected on the credit side of the ledger -- depends in turn on overall market structure and, in the fisheries, on secondary market demand conditions as well.

The Port Market Realities

A less tragic commons may in time be created through the present practice of limiting entry by licensing, coupled with sound quotas on total allowable catch per species, and perhaps with quotas further refined and extended into the new system of boat allocations by species.

While limitations on entry and catch quotas were imposed for the preservation of the fisheries, supply is now fixed by government fiat, and relations between seller and buyer have been altered permanently. Prices in the port market have become even more subject to demand conditions. The situation is analogous to that described by Professor Alfred Marshall: loads of fish are brought to market that must either be sold or rot.[46]

On the buying side of the market, the creation of the Nickerson/National super-firm has guaranteed price leadership in port markets of the type described earlier.[47] The result is that the preconditions for competition that were previously presumed to exist in the inshore fisheries now are not met on either side of the market -- if they ever were.

The following summary of buyer/seller relations in the port market makes the argument advanced by some - that inshore prices are determined competitively and, therefore, that the participants are deriving competitive market-share benefits -- seem even more remote from port market realities.

- Fishermen are for the most part relatively immobile, and alternative facilities are few.

- Fishermen's economic ties to buyers often are, of necessity, too close to allow much market bargaining or switching of allegiance. The extent of buyers' equity in boats -- or outright ownership -- makes the point.

- The size distribution of processing firms by volume of throughput is so top-heavy as to ensure domination by the major processors.[48]

- The buyer network regularly and effectively channels secondary market signals through the major processors to the landing sites under a system of strong price leadership in all but a limited set of circumstances.

- The horizontal port market structure is well established by custom and tradition, and while this picture is greatly oversimplified, it is realistic.

Moreover, given a fixed supply of raw material, it is difficult to conclude that the port market is other than tilted toward the major processors, among whom the largest have paradoxically and simultaneously been going broke for reasons that have little to do with prices at the landings level.

Levelling a Tilted Structure: The Options

When market power is lopsided, whether through concentration among buyers or sellers, there are two remedies: break up the concentration or introduce monopoly conditions on the weaker side, with the aim of creating a balance of market forces sufficient to ensure that the outcome of bargaining between the buying and selling monopolies will come close to what would have resulted under free competition.

Given that the recent restructuring of the industry favoured extending processing concentration, the answer seems clear. Equity dictates that additional market power should be allocated to the fishermen/ sellers so as to equalize the forces in price-setting -- in other words, to level the market tilt.

In the labour markets of the industrial world this has usually been accomplished through unionization. Yet its application to the inshore fisheries has been thought to be difficult, although its eventual extension in this direction has seemed almost inevitable.[49] To date on the East coast, only Newfoundland has had substantial experience with unionization as a means of readjusting market structure. The provincial Fisheries Collective Bargaining Act was passed in 1971.[50] New Brunswick tabled a long and complex bargaining bill for its fishermen in September 1982 -- too recently to judge experience with it.[51] Neither Nova Scotia nor Prince Edward Island has enacted enabling legislation; both are poised to do something, but the form that appropriate action should take is as yet undecided. What follows is a description of the most frequently considered alternatives and some thoughts about each.[53]

Co-operatives seem a natural solution. They were a part of fisheries in the Maritimes as early as the Antigonish Movement of the 1920s and '30s.[54] There are no legal obstacles to their extension; in some areas they are already solidly grounded, and the idea of co-operation gives a sense of fairness. They will, no doubt, continue in their present role.

Yet over the past half-century, they have not captured much more than 10 per cent of the overall market. They tend to be, but are not limited to, specialized operations, such as canned clams and lobster meat. They are often vertically integrated and therefore generate some internal friction between influential managers and leaders, members, and employees. Most of all, they do not provide a market counterbalance for the 90 per cent taken by fishermen who depend on and sell to the processors or their buyers.

Associations of fishermen, as in PEI at present and in Nova Scotia formerly, can be of some assistance to fishermen as channels of information and education and as a means of communicating with government. But membership and association policies are not compulsory, so they do not give fishermen the increased bargaining power they need to redress market imbalances. This judgement has been affirmed by their experience since 1947 in Nova Scotia and 1951 in Prince Edward Island when legislation encouraging the formation of associations was tabled.[55]

Marketing Boards and Commissions Whatever benefits are claimed for them -- and they are many and well known and include the fact that enabling legislation already exists in Prince Edward Island -- marketing boards have one fatal drawback. Fishermen see them as creatures of government at best and susceptible to processor influence at worst. Though a powerful, independent commission might readjust market power and shares in the short run, fishermen believe that they would have no control or input into decisions affecting their future and therefore have tacitly rejected the idea.

Mediation agencies can be helpful when seller and buyer are at loggerheads. However, they imply the prior existence of two-sided bargaining structures which now exist only in Newfoundland and, in fledgling form, in New Brunswick. As this paper has suggested, the arm's-length bargaining now taking place is inadequate to balance market forces.

Auctions would achieve competitive market results through the forces of supply and demand, and no new organization or enabling legislation would be required to introduce them. Fishermen would be free to use the auction system or not. However, establishing a system that would yield good market results would involve gaining wide acceptance by buyers and sellers, who would have to rearrange their activities to accommodate the new system. An auction system requires sufficient volume at one or more central ports to provide the basis for establishing an extensive price system. Demand in the long run must at least equal supply. For the short term, holding and cold storage facilities are needed. There must also be guarantees that processors will not dominate the proceedings; in Boston, for example, an alarm is rung if a processor tries to buy his own fish. Auctions are trickier to establish and more difficult to keep working properly than might appear at first glance. Even in southwestern Nova Scotia, the possibility is slim.

Collective Bargaining is the obvious, but is by no means a problem-free solution. Giving fishermen the legislative authority to organize into unions of their own choosing, governed by majority rule and having exclusive jurisdiction for a specified time, mandatory good-faith bargaining leading to legal agreements, and recourse against unfair practices -- all monitored, protected and nurtured by a knowledgeable board with representation from fishermen and seen by both sides to be impartial -- is really the recommended alternative.

Such a system would create the economic underpinnings for equalizing bargaining power in the port market by introducing monopoly conditions on the supply side to match the power of the major processors on the buying side. This would be done by making it legal for fishermen to withhold supply, if necessary, in the process of bargaining, just as buyers could refuse to buy.

However, the circumstances do not necessarily favour the successful establishment of a collective bargaining system. The season is short, and strikes might be hard to sustain, and without the possibility of strikes, bargaining might not be as effective as it should be. The structure of bargaining in the provinces where inshore fishermen's unions exist only in formative stages (PEI and Nova Scotia) must be worked out. Most important, good information on markets and costs is essential to the success of a collective bargaining system. Potential cleavages between fishermen and their crews and helpers must also be considered.

Despite the potential pitfalls of introducing collective bargaining, we have found no better way to guarantee fishermen full participation in the process of price determination and to assure both sides a sense of fairness.[56]

VI TOWARD A FAIR SYSTEM IN THE PORT MARKET

This paper grew out of a concern about the levels of disharmony and mistrust among fishermen and buyers and processors at the landings level, and it sought to explore the underlying structural problems contributing to that mutual suspicion. The study identified and described an imbalance in market power, an imbalance that favours the processors and is probably contributing heavily to hostility in the buying/selling relationship. These conditions do not bode well for the industry.

Notwithstanding the conclusions of this paper, there is no comfort here for sellers. The processors themselves are caught in a system that is breaking the largest among them. Processors and buyers are no more the villains than are the fishermen.

The evolution of concentrated buying power was a natural economic development; it might even be described as one of self-defense against concentration in secondary markets. Moreover, processors and buyers are as much a part of the regional social fabric as the fishermen, and their behaviour has been as supportive of fishermen as it was exploitive of their supply schedules. People are playing out their economic roles on both sides of the market. Why should processors pay more for what they can decently get for less? Why should fishermen take less for what they can decently demand more? But how to determine what is 'decent' is the real issue.

Collective bargaining is a way to give each side the opportunity to be satisfied that they have got the best that could be obtained under the circumstances. Fishermen can opt for it or not as they wish, but it should be added to their options as a matter of public policy.

The Task Force on Atlantic Fisheries said,

> A recognition of [their] mutual interdependence and its practical translation into a more tolerant attitude in relations between fishermen and processors is one of the first requirements of a more successful industry.[57]

Sermonizing about the need for a "fundamental change in attitude on the part of fishermen and processors alike"[58] has produced no results to date.

The process of collective bargaining within an appropriate framework can be a powerful educational device, as well as a means of guaranteeing equity by levelling the market tilt.

NOTES

1. Canada, Task Force on Atlantic Fisheries, Navigating Troubled Waters: A New Policy for the Atlantic Fisheries (Ottawa: Minister of Supply and Services, 1983). See the review of past studies in Chapter 1.

2. Ibid. In Chapter 15, the port market as the locus of the fisherman/buyer conflict is an underlying theme, but see also "We and They", p. 33, and especially, "Making it Work", p. 194.

3. Ibid., p. 33.

4. The Task Force Report notes that the industry extends "...from sea to the dinner plate of a consumer." p. 9.

5. The genesis of these views may be found in the author's doctoral dissertation, "Collective Bargaining Rights in the Canadian Sea Fisheries: A Case Study of Nova Scotia", (Columbia University, 1973) and in "The Economics of Bargaining Rights in the Fisheries of Nova Scotia and Atlantic Canada", Relations Industrielles Vol. 30, Number 2; "The Legal Problems in Collective Bargaining by Canadian Sea Fishermen", Labor Law Journal October 1974, pp. 643-654; "Triple Jeopardy in Bargaining by Canadian Fishermen and American Implications", IRRA Papers and Proceedings 27th Vol., pp. 172-178.

6. Task Force on Atlantic Fisheries, op. cit., p. 267.

7. Charles Steinberg, "A Contribution to the Development of a Social Policy for Maritimes Fishermen" (Discussion paper prepared for the Task Force on Atlantic Fisheries, Ottawa, September 1982), p. 194.

8. This paper treats the Maritime provinces as its study area. Nova Scotia in particular provides a model and a strong basis. However, the Newfoundland fisheries, in both physical setting and economic relations, fit the model well prior to the early 1970s. It was the spread of collective bargaining following introduction of the provincial Fishing Industry (Collective Bargaining) Act of June 1971 (S.N. 1971, C. 35) that transformed economic relations between fishermen and buyers.

9. See the briefs by major processors and small-boat fishermen to the Task Force on Atlantic Fisheries, reflected in the Task Force report, p. 112. But see also the balanced discussion in "Inshore versus Offshore", p. 14.

10. From discussions with major processors, Department of Fisheries and Oceans, and provincial officials. Yet consider also the powerful indirect evidence in the Task Force report. Table 3.1 on p. 36 notes that 43% of all groundfish was caught by vessels over 100 feet in length in 1981.

11. Culled from New Brunswick, Department of Fisheries, Sector Profile: Review of the New Brunswick Fisheries Development Strategy (March 1982), Table 10; and Prince Edward Island, Department of Industry, Trade and Commerce, A Review of the Fish Processing Industry in Prince Edward Island (September 1980), p. 11. But see especially Task Force report, Table 4.22, p. 73.

12. Derived from Task Force report, Table 2.2, p.10; New Brunswick, op.cit.; and Nova Scotia, Department of Fisheries, 18th Annual Report (Halifax: March 1982). Even if we assume that all groundfish are caught offshore, Nova Scotia's inshore value is 59% of the total, Prince Edward Island's is 81% and, by definition, New Brunswick's is 100%.

13. The dependency of inshore fishermen is well demonstrated in Chapter 4 of the Task Force report.

14. Ibid. Chapter 6 is a thorough review of Canadian marketing patterns and structure and is the source of much of the detail in this passage, though the chapter contained some contradictory evidence. Table 6.4, p. 131, shows Canada's export mix of groundfish as 3% fresh whole fillets, 59% frozen fillets and blocks, and 37% saltfish. In short, almost 100% is processed or semi-processed.

15. Ibid., Table 6.1, p. 129 and Tables 6.2 and 6.3, p. 130.

16. Ibid., pp. 143-145, but see also W.C. MacKenzie, Problems of the Fisheries in the Atlantic Provinces, mimeographed (Economics and Research Branch, Department of Fisheries and Oceans, June 15, 1971). This perceptive paper notes that the Canadian fish export trade was dominated in the U.S. by powerful buyers, a conclusion reached by

the Joshua John study, Atlantic Coast Groundfish Marketing (Department of Regional Economic Expansion, June 1970), especially Chapter V, p. 51, on which MacKenzie was an adviser. And, although the doctoral dissertation of Keith Brewer, "The Canadian East Coast Groundfish Industry" (McGill University, 1972), reached a different conclusion in defining the basic problem in Canadian export marketing, it concurred in the level of concentration of U.S. buyers John found at that time.

17. Ibid.

18. A.G. De Wolf, "The Canadian Atlantic Fishing Industry in the Inter-War Period", mimeographed (Dalhousie University, May 1974). This passage does not intend to imply that the 'response' was premeditated. Size in the forward markets offers economic opportunity and tends to beget size in the primary markets. Yet primary market concentration does provide insulation that is obvious.

19. Steinberg, "Collective Bargaining Rights...", pp. 151-152.

20. Task Force, op.cit., p. 138.

21. The extension of pure monopsony theory to the solution for the oligopsony problem has not proceeded very far in the economics literature. The classic studies of oligopoly are William Fellner, Competition Among the Few and George Stigler, Industrial Organization; the classic effort to solve the bilateral monopoly problem is again William Fellner, "Wages and Prices Under Bilateral Monopoly", Quarterly Journal of Economics 61 (1947), pp. 503-532, though the effort goes back to Marshall and Edgeworth, whose indifference curve analysis has been applied to the bargaining problem in a variety of ways in readings beyond the scope of this article.

22. This price system has been described by every Royal Commission since that of 1928.

23. Ibid., p. 139. See also Price Systems at the Landing Stage in Fishing Industries of OECD Member Countries (Paris: Organisation for Economic Co-operation and Development, 1966).

24. Steinberg, "Collective Bargaining Rights...", pp. 149-150.

25. Some of the well known smoking operations in their initial stages are a specialty aspect of this concept.

26. Discussions with National Sea Products indicate that, as suspected, the increase in interest rates in particular and costs in general have caused an understandable discouragement, and have forced many fishermen to give up their holdings in vessels and others to seek greater processor equity. Two examples may suffice: National increased its small vessel holdings in the Digby area by over 20%. Private ownership in the entire deep-sea scallop fleet has collapsed completely; all are now processor-owned. Until recently, eighteen vessels had at least some fisherman equity. The major processors claim that they normally do not seek small-vessel equity by reason of unnecessary responsibility, time and cost. Nevertheless, the pattern of small vessel acquisition and equity holdings by processors large and small is very widespread; indeed, it is institutionalized, as is noted in the next section.

27. OECD, op. cit.

28. Task Force, op. cit., p. 267. This definition is intended to focus on the inshore fishermen since it includes "...only the direct sales of fish by independent fishermen to processors", thus excluding the great volume landed by the processors' own vessels and, to a lesser extent, those of the co-operatives, and over-the-side sales to foreign vessels.

29. A 1971 Fisheries Sector Profile by the Nova Scotia Voluntary Economic Planning Board, a study intended to 'rationalize' fisheries structure, showed over 700 landing sites and 486 ports, defined as having wharfage or landing at least $5,000 worth of fish.

    The 'scatter' differs only in degree for New Brunswick and Prince Edward Island, where there are approximately 130 over 3 regions not including the inland fisheries, and 50 'processors' respectively, to Nova Scotia's present 180-odd. Cf. Annual Reports and Sector Profiles noted in footnotes 11 and 12.

30. MacKenzie, op. cit., p. 6.

31. The 'slightly larger handful' of ports noted above.

32. The independent New Brunswick fishermen say, "The first trip is for the processor."

33. The source of this analysis is Steinberg, "A Contribution to the Development of a Social Policy for the Maritimes Fishermen". This analysis defines processor/buyers as those whose main purpose is processing, for which fish are bought as raw material. They are categorized by regular employment using the following classes: large, over 30 persons employed; medium, between 10 and 30 employed regularly; and small, 10 or fewer employees. By mid-1970 in Nova Scotia alone, there were 51 small plants whose independence was doubtful; 21 medium-sized plants, and 25 large plants owned by the multi-plant firms.

34. There is one advantage to the lobster fisherman in dealing with this broker. If holding on to the lobsters for speculative purposes gains a better price for the broker, he may offer a rebate (perhaps 15%) to the fisherman after the close of the season. If not, the fisherman settles for the going rate he was already given.

35. Task Force, op. cit., p. 258.

36. R. Miller, Submission to the Commission of Enquiry Into the P.E.I. Fishery (26 November 1980). Mr. Miller concludes his argument with the following statement: "In simple language, why work harder to produce less volume to make less profit percentage, or is 21 fast nickles not better than a slow buck.", p. 2.

37. Obviously, buyers who do not process have a slightly different orientation. Brokers and other intermediaries who earn a living through the spread between market prices share the processor's need to minimize landings level prices at a given volume. Commissioned agents working on percentages may feel a conflict of interest with their employers, since their percentage would be greater at higher prices, but since they have little leverage in price-making, this ambivalent position is not an important contradiction.

38. There are, however, varying opinions about the relative quality of inshore and offshore-caught fish, but these are beyond the scope of this paper. Inshore fish vary in overall quality with the inshore season. The colder the water, the firmer the flesh, the fewer the skin parasites, the less the incidence of "sunburn".

The quality of inshore fish at any given time is generally well known and anticipated, and it is taken into consideration as part of the overall scheme of fish use for processing. The price offered for standard fish fits into the market structure as noted above, and perhaps may not contain sufficient leeway to make differentiation possible for landings of grossly lower quality. Given the supply orientation of the processor, those poor-quality fish will be used in some form other than as offal.

39. These complaints are a synthesis of submissions to the Task Force and to the Weeks Commission on the PEI fishery.

40. Steinberg, "Collective Bargaining Rights...", Chapter II.

41. C.B.R.T. & G.W. and National Sea Products, July 24, 1969.

42. Steinberg, "The Economics of Bargaining...".

43. Submission of National Sea Products to the Task Force.

44. The relationship between offshore and inshore prices can be demonstrated, but is beyond the scope of this paper. Nevertheless, strong hints about how to do so are scattered throughout this text.

45. The economic theory of a common property resource, referred to as the 'tragedy of the commons', can be categorized as the 'theory of exhausted rent'. An exceptionally good review of the economics of the fisheries is in Gordon R. Munro, The Promise of Abundance: Extended Fisheries Jurisdiction and the Newfoundland Economy, Appendix A, (Economic Council of Canada, 1980). The theory does, however, contain a stammer, a non-sequitur noted in, among other places, Crutchfield and Pontecorvo, Pacific Salmon Fisheries, Resources for the Future, (John Hopkins Press) and explored a bit in Steinberg, "Collective Bargaining Rights..." and "The Economics of Bargaining...", but this is also beyond the scope of this paper. The elasticity of derived demand is treated in John R. Hicks, Theory of Wages (London: MacMillan, Rev. Ed., 1964). The issue of shares and the elasticity of derived demand is also treated by Hicks in Value and Capital, (London: Oxford, 1939), especially

Chapters V, VIII and the Mathematical Appendix, pp. 323-25.

46. Alfred Marshall, Principles of Economics, 8th ed. (London: MacMillan, 1946). "There may be even more violent changes than this in the price of a thing which is not necessary, if it is perishable and the demand for it is inelastic: this fish may be very dear one day and sold for manure two or three days later.", p. 107. "But it may so happen that the stock to be sold is practically fixed. This, for instance, is the case with a fish-market, in which the value of the fish for the day is governed almost exclusively by the stock on the slabs in relation to the demand, and if a person chooses to take the stock for granted, and say that the price is governed by demand, his brevity may perhaps be excused so long as he does not claim strict accuracy.", pp. 348-49.

47. Discussion of the relative value of this move over its alternatives is beyond the scope of this paper. Here, the restructuring of the Maritimes, and indeed the Newfoundland, processing sectors is taken at face value, and only its port market implications are reviewed. Questions concerning the technical and economic viability of the super--firm are not considered.

48. This point was not specifically demonstrated but is clearly noted in the section entitled "Canadian Processor Concentration", concluding with footnote 20.

49. Steinberg, "The Economics of Collective Bargaining...".

50. Newfoundland Industry (Collective Bargaining) Act, R.S.N., No. 53, (June 2, 1971), to be read with Newfoundland Labour Act and Fishing Industry Advisory Board Act, No. 76, (June 25, 1975).

51. New Brunswick, Legislative Assembly, Fisheries Bargaining Act, Bill No. 25, 4th Session, 49th Legislature, 31 Elizabeth II, 1982.

52. Prince Edward Island, Department of Fisheries, A Brief to the Kirby Task Force on the Atlantic Fishing Industry presented by the Province of P.E.I. (March 23, 1982). See also, Nova Scotia, Department of Fisheries, Fishermen's Collective Bargaining Alternatives (1981).

53. Prince Edward Island, Commission of Enquiry into the P.E.I. Fishery, Report, Part I, "Primary Marketing" (January 16, 1981). In parts VI, VII and VIII, pp. 38-70, the Commission reviews many of the options, gives the arguments against each, and offers recommendations. The present brief summary is indebted to this thoughtful segment of the Commission's work, but takes the liberty of differing in some regards.

54. The guiding spirit in this effort to develop worker education and producer co-operatives was Father Moses Coady, whose base was the Extension Division of St. Francis Xavier University in Antigonish, N.S. See Steinberg, "Collective Bargaining Rights...", Chapter II.

55. The Fishermen's Federation Act, S.N.S. 1947, C.4 and The Fishermen's Union Act, R.S.P.E.I. 1951, C. 61, S.2.

56. Of course collective bargaining alone cannot increase total revenue but it may lead to creative efforts by fishermen, processors and buyers toward that end, once suspicion is eased.

57. Task Force, op. cit., p. 33.

58. Ibid.