GOVERNMENT INTERVENTION IN THE BRITISH COLUMBIA SALMON AND HERRING INDUSTRIES (1969-1982)

by

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Government Intervention in the British Columbia Salmon and Herring

Industries (1969-1982)

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ABSTRACT

In 1969, Environment Canada acknowledged that the British Columbia salmon and herring industries were overcapitalized and initiated a rationalization scheme. However, between 1969 and 1982 the capitalization of the industry actually increased with the help of government. Starting in 1980, the B.C. salmon and herring industries experienced a reduction in economic efficiency due, in part, to government mismanagement. To explain why this might have happened, the thesis puts forward a theory of government intervention drawn from sociological analysis of government and fiscal policy that articulates the relationship between private and state sectors and private and state spending. The thesis also plans to show that government administration of the fishery resource favoured the institution of private enterprise to the detriment of common property resource exploitation, thereby leading to misallocation of resources. Government spending programs support the basic economic practice of "capital accumulation" but in order to maintain credibility the government must also offer programs that help unemployed segments of the working class and aid chronically poor and disabled groups -- the government's "legitimation function". This dual purpose of government often creates administrative conflicts and leads to inefficiency. In the period from 1969 to 1982, a boom period in fishing, the Canadian government authorized many spending programs in the B.C. salmon and herring industries to fulfill its dual practice

of "accumulation and legitimation". These programs were offered by several different departments and agencies and took the form of cash subsidies and loans to fishermen and processing companies. The government also offered above normal capital cost allowances to fishermen during this time which encouraged capital expansion. The result was more overcapitalization of the sector and resulting inefficiency that led to bankruptcies and foreclosures, as well as the devastation of certain northern communities. The thesis plans to show, in light of the found data on the British Columbia salmon and herring industries between the years 1969 and 1982, that the practice of "accumulation and legitimation" provides a contributory explanation of the problem of economic inefficiency.

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A. Introduction

Between the years 1969 and 1982 many changes came about in the organization of the Fritish Columbia salmon and herring industries that precipitated the economic squeeze the industry experienced in the early 1980s. Certain federal government policies such as the Davis Plan of 1968-69, and government financial assistance programs and tax incentives failed to remedy many of the industry's problems. These factors coupled with an influx and then withdrawal of foreign investment have influenced the structure of the British Columbia salmon and herring industries and jeopardized the livelihoods of many northern communities such as Bella Bella and Alert Bay. The above factors also helped to change the debt relationship of both processing companies and fishermen, forcing many of these groups into bankruptcy.

Government sources claim that the major problem in the fishery has been one of evercapacity or overcapitalization of the fishery in general. Although this has been the case in the British Columbia fishery to a degree it has been especially noticeable in the harvesting sector where there are allegedly "too many boats chasing too few fish". After the Davis Plan of 1969 it was believed that the fishing capacity on the west coast would be reduced quickly; however, the exact opposite has proven to be the case. Between 1969 and 1980 the industry was

characterized by a steady increase of capacity in both the processing and harvesting sectors (new processing companies and expanded fishing capacity in existing individual vessels) that was accelerated by government incentives such as accelerated depreciation on capital goods, and government subsidies, as well as a substantial degree of foreign financing. All these incentives contributed to a dramatic addition of surplus capacity to the fishing industry that contributed in large part to the crisis. The study hopes to discover the problems behind inefficient operations in the B.C. salmon and herring industries in order to grasp why various government programs had little success in maximizing economic rent in the fishery.

The approach taken in the thesis centers on a theory of government intervention as drawn from sociological analyses of government and fiscal policy and intends to elucidate the relationship between private and state sectors and private and state spending. In the early stages of research, Staples Theory and Dependency Theory were also considered for their possible value in explaining crisis and uneven development in this case. The presence of a foreign metropole in the thesis discussion added interest in these questions. Staples theory, useful in explaining uneven economic development in natural resource rich economies, is of little use in explaining crisis in this case. The theory explains crisis through a descriptive analysis of the effects of sole reliance on primary resource extraction by a domestic economy. The economic crisis investigated, stems

largely from a problematic relationship between industry and government and therefore, cannot be grasped in a descriptive analysis of staples extraction. The Dependency Theory of Baron and Sweezy, Jallee, and Watkins argues that economic crisis in a primary resource intensive economy develops as a result of staples extraction by a foreign metropole. In this theory, crisis occurs because foreign capital tends to develop the domestic economy in accordance with its own interests which are generally opposed to the long term interests of the domestic sector. Although a foreign metropole was present in this case, the duration of foreign intervention was very brief and did not involve direct ownership of industry. Crisis conditions stem largely from a causal link between the resource industry and government instead of between the resource industry and foreign capital. For this reason 'state theory' provides a better alternative for explaining the problem at hand.

We have drawn on the premise of the social theorists O'Connor, Jessup, and Holloway and Picciotto that over the past century the private and state sectors of the economy have become more and more interdependent and that it is increasingly necessary for the state to intervene at various levels of the economy in order to promote economic growth and stability. Under modern capitalism, the growing social character of production draws an increasing percentage of the population into the working class, thus non-capitalist forms such as family centred crafts, cottage industries, petty commodity production and

traditional native forms decline. At the same time, the growth of capitalism brings with it problems such as periodic unemployment and economic stagnation. This problematic tendency creates a huge aggregate of social needs that were met formerly in traditional ways through traditional modes of production. The resultant surplus population must now look to the state to supply its needs. Crises associated with economic stagnation, overproduction, and inflation make accumulation by the private sector increasingly difficult so the private sector also must look to the state for support. The hypothesis chosen for this thesis is that state intervention can be explained by the concepts of "accumulation and legitimation", two necessary functions of government tied to the presence of intrinsic and quintessential social conflicts.

Historically, incomes have been supplemented in this sector by subsistence production, extended family systems and community help programs...However, in modern capitalism the increasing "proletarianization" of the entire population, the decline in subsistence and artisan production, and the weakening and destruction of traditional community bonds increasingly compel workers to look to the state for means for subsistence. Thus they are condemned to be full or partial dependents on the state, the recipients of income supplements in the form of public hospital services and health care, subsidized housing, welfare, and relief, old age assistance, food stamps, transportation subsidies and the like (O'Connor, 1973:15).

What has in fact happened over the past century or so? Capitalist production has become more interdependent—more dependent on science, technology, labour functions more specialized and the division of labour more extensive. Consequently, the monopoly sector (and to a much lesser degree the competitive sector) requires increasing amounts of infrastructure (physical overhead capital) — transportation, communication, R&D, education, and other facilities. In short, the monopoly

sector requires more and more social investment in relation to private capital... The costs of social investment... are not borne by monopoly capital but rather are socialized and fall on the state (O'Connor, 1973:24).

The focus of the problem is that although the government must maintain and create conditions which make accumulation possible it has also to maintain and quarantee the conditions of social harmony. A government that fails to assist in the accumulation process risks the drying up of its own source of revenue, but on the other hand, if the government concerns itself only with the tusiness of helping one social class to accumulate it undermines the basis of its own "legitimacy". Accumulation policies are those policies designed to benefit capital accumulation while "legitimation" policies are those policies designed to extend aid to the working class in the form of welfare aid, unemployment insurance, medical subsidies, etc. In short, "legitimation policies" are all policies designed to benefit the labour. Due to the dual and conflictual nature of government all agencies are involved in either "accumulation" or "legitimation" functions (Holloway and Picciotto, 1979-1980, O'Connor, 1973).

Our first premise is that the capitalist state must try to fulfill two basic and often mutually contradictory functions -- accumulation and legitimation. This means that the state must try to maintain and create the conditions for social harmony. A capitalist state that openly uses its coercive forces to help one class accumulate at the expense of other classes loses its legitimacy and hence undermines the basis of its loyalty and support. But a state that ignores the necessity of assisting the process of capital accumulation risks drying up the source of its own power, the economy's surplus production capacity and the taxes drawn from this surplus (O'Conner, 1973:6).

In O'Connor's book the <u>fiscal Crisis and the</u> State he argues that government spending falls into two main categories that correspond to the government's dual process of "accumulation and legitimation". These categories are referred to as "social capital" and "social expenses". The first category represents government spending necessary for successful capital accumulation, and the second represents non-productive capital required for services and projects needed to quarantee social harmony. "Social capital" programs usually take the form of tax incentives to capital and subsidies to industries and commerce. "Social expense" policies represent non-productive capital spent for a political or social purpose rather than an economic purpose, as exemplified by welfare oriented projects and "make work projects. Due to the complex nature of "social expenses" and "social capital" nearly all state expenditures serve both legitimation and accumulation purposes simultaneously -few state expenditures can be identified unambiguously (O'Connor, 1973:7).

Due to this complex, two-edged managerial task of government that serves the various particularistic ends of vying classes and interest groups, a centralized organ finds it impossible to exercise consistent and meaningful planning and control for all areas of government activity. The task of government administration is therefore carried out by a plethora of departments and agencies that manage the many different aspects of "accumulation and legitimation". These departments are often semi-autonomous entities that conduct decision making

with only a small degree of interdepartmental collaboration and planning. Moreover, few covernment expenditures are dictated by the market, they are usually made on the basis of political pressure. Due to the political framework in which "social capital" and "social expense" programs are administered, and the diverse aims of governmental departments, "there is a great deal of waste, duplication, and overlapping of state projects and services. Some claims conflict and cancel one another out. Others are mutually contradictory in a variety of ways (O'Connor, 1973:9,10)."

The case of fisheries management poses an extremely difficult task for government in light of its primary functions of "accumulation and legitimation". Due to the presence of administrative overlap, more generalized policies, and contradictory programs, government departments find it impossible to provide administration for various regions and sectors of the economy. Lepartments and agencies issue "social capital" and "social expense" programs for "accumulation and legitimation" purposes to alleviate problems in the economy as a whole. However, this process is often destructive to the requirements of a sector such as fisheries with its own unique set of problems. As will be shown, the "legitimation and accumulation" process is especially harmful to the common property fishery resource.

The most distinctive feature of fisheries compared to other natural resources is its characteristic problem of common

property exploitation. This holds true for most of the fisheries throughout Canada and in the rest of the world. Fisheries. unlike other common property resources such as crown land. mineral deposits, and forest stands, has long had a history of open access. "It has long been considered a natural right that any man who wished to could become a fisherman without let or hindrance -- or at worst against payment of a nominal licence fee (Copes, 1972:6). In contrast, other common property resources are limited to only a few operators through the presence of royalties. The historical problem of fisheries management stems largely from its common property nature. The individual fisherman enters the fishery if he believes there are potential rents to be taken. However, new fishermen, to a mature fishery which is already being fished to the maximum, extract rents only at the expense of existing fishermen. For this reason potential rent in the fishery dissipates with each additional entrant.

This simplified analysis suggests that if entry to the fishery is not limited, the level of effort will inevitably be driven to a point (F) where the potential for rent that the fishery could yield has been entirely dissipated (Copes, 1972:7).

The essence of the common property problem is that the fishery lacks the discipline of sole ownership in maintaining resource productivity. In spite of fishermen's awareness of the escalating effort problem in fisheries, they are individually powerless because when one fisherman cuts back effort he only allows the other to take a larger amount of fish. Economists

have argued that the efficient exploitation of the fishery could only come about under the jurisdiction of a single authority with the power to enforce limited access to the fishery.

Where the fishery comes under the jurisdiction of a single government, that government could limit effort by licencing only the optimal number of men to participate in the fishery. The result would be a greater catch and a higher financial return per man for those remaining in the fishery (Copes, 1972:7).

One answer to the problem of too much competition for supply in the fishery is government limitation on the number of vessels permitted to fish. Under this policy the fishery becomes potentially more profitable with a limited number of fishermen, or petty commodity producers, competing for a limited supply of fish. Economists have pointed out, however, that whenever the number of fishing units is regulated individual fishermen are inclined to put more capacity into existing vessels. This development is the product of the same economic law (competition) that attracts too many participants under open entry. The resultant increase in capacity can take the form of speed, size of vessels, fishing gear, cooling systems, or manpower. If this trend is allowed to continue nearly all potential rents may be dissipated (Copes, 1981(b):123,124). Each time favourable economic conditions arise in a mature fishery the potential rents are forfeited due to another cycle of overcapiitalization brought about by fishermen's competition.

Regulations to restrict entry have now been imposed in respect of some fisheries in a number of countries. In several instances the generation of resource rents is observable. In these fisheries a common experience is emerging. Wherever the number of fishing units is

limited, their operations have attempted to build additional capacity into their individual fishing units. This has taken the fcrm, among others, of increasing the size and speed of the vessels, of adding more fishing gear or manpower, and of installing more sophisticated fish finding or navigational equipment.

Essentially, this is a manifestation of the same economic logic that attracts excessive numbers of vessels to an open-access fishery where rents are available. In both cases it signifies a competitive scramble for shares of the rent (Copes, 1981(b):123).

In British Columbia the problem of overcapitalization present in the fishery in 1982, resulted from a long history of open entry but also was due to a number of government subsidies and assistance programs effered to the fishing industry for both "legitimation and accumulation" reasons. These programs were offered to the British Cclumbia salmon and herring industries for both vessel and plant construction. Given the characteristic problem of overcapitalization of fisheries, due to the common property problem described above, these programs were particularly disruptive. According to Environment Canada, the fishing industry's overcapacity is the result of competition for raw material among fleet owners and fish buyers as well as "competition conducted in a setting of generous public assistance (loans and sutsidies) for vessel and plant construction, ... Although little is known to the public these conflicts probably cause more stress than other problems of fishery administration (Environment Canada, 1976:40,41)." This stress occurs in a mature fishery because, due to the historic problems of common property, 'individuals' expand their capacity at the expense of the efficiency of the 'whole'.

Throughout the 1969-1982 period many government programs were offered to the salmon and herring fishery in British Columbia both for 'capital expansion' and 'labour stability'. These government expenditures generally fall under the rubrics of 'social capital' and 'social expense'. The various government programs were offered by both federal and provincial governments, and generally helped to finance overcapitalization throughout the processing and harvesting sectors of the British Columbia salmon and herring industries. Because the government is the custodian and manager of the natural resource, it has a commitment to conservation, the distribution of the resource among competing interest groups and the maximization of resource rents. In the absence of sole ownership urgent remedial action may be confused with comprehensive long-term fishery development -- the consequences of short-term solutions may conflict with long-term objectives. For these reasons efficient allocation of the resource is made difficult by the process of accumulation and legitimation and the problems created by open entry are made harder to solve.

All levels of government are committed to developing the fishing industry and trade, along with other sectors of the economy, and to ensuring the prosperity and security of the people who find their livelihood in the fisheries (Environment Canada, 1976:20).

The thesis plans to test the concept of "legitimation and accumulation" through a case study of government financial programs in the British Columbia salmon and herring industries between the years 1969 and 1982. During that time frame the

British Columbia salmon and herring industries exhibited a high degree of economic waste and administrative inefficiency. Since 1969 the industry has also been characterized by a number of conflicting government management techniques and overall administrative confusion. The data on the B.C. salmon and herring industries between 1969 and 1982 will be weighed in light of government policy to establish whether or not the concepts of "accumulation and legitimation" provide a likely explanation to the management problem and the tendency toward industrial inefficiency and economic waste.

The research strategy conducted mainly involved use of government documents, newspaper articles, government reports, academic articles, interviews with government officials, union representatives and members of the British Columbia fishing industry. Insights were also gained through the Institute of Fisheries Analysis at Simon Fraser University and the Learned Societies Conference at the University of British Columbia.

Newspaper articles were drawn from The Pishermen, the Canadian Pishing Report, the Yançouver Sun, the Financial Post, and other small local newspapers. Newspapers and articles were collected starting May 1980. Some government literature was made available through both the Simon Fraser University and University of British Columbia libraries, while other publications were supplied by the Department of Pisheries and Oceans and the Department of Indian Affairs and Northern

personnel and fishermen provided a more comprehensive picture of the industry.

Chapter I provides an historical profile of the relationship between government policy and the development of the British Columbia salmon industry from 1887 onward. The chapter describes the effects of policy on the structure of the industry and on the relationship between fishermen and processing companies. It does not attempt to prove the central hypothesis of "accumulation and legitimation" but rather strives to provide the reader with historical background on the British Columbia Pishing industry.

Chapter II describes the effects of government intervention on the British Columbia salmon and herring industries between the years 1969 and 1982. It is divided into three sections as follows: 1. The Davis Flan of 1969, 2. Government Financial Assistance programs, and 3. The Boom Period and The Consequences of Government Policy. All the sections serve to build the argument that government management of the B.C. salmon and herring industries was irregular, conflictual and counterproductive to an efficiently organized fishery. The chapter attempts to explain how boom conditions in the 1970s encouraged the government to implement contradictory policy measures in order to fulfill the demands of labour stability and harmony in the Province of B.C. and also to encourage capital expansion. The data in the chapter was compiled with the

intention of testing the central hypothesis that government financial programs aim to further the contradictory processes of "legitimation and accumulation".

Chapter III demonstrates the results of such inefficiency and outlines the resulting financial difficulties of processors and fishermen, the decline of northern communities and the accumulation of the debt. The chapter gives a profile of crisis in the fishery starting in 1980 and shows how inefficient management and overcapitalization led to economic waste in 1980, 1981 and 1982.

The thesis attempts to demonstrate how a number of government financial programs, together with boom conditions in the 1970s, aided in increasing overcapitalization in spite of the 1969 Davis Plan's intention to remove excess capacity. During the 1970s boom in the salmon and herring industries, the promise of labour stability and economic expansion took precedence over the premise of efficient long-term economic planning. The thesis also hopes to show how short-term ad hoc management schemes led to irrational policy administration. and therefore, contributed to crisis conditions in the sector.

I. An Historical Perspective of the British Columbia Salmon Industry

Since 1877 when the Fisheries Act of Canada was extended to include the Province of Fritish Columbia, Federal Government policy affected the development of the B.C. fishing industry. Starting in the mid 1880s the fishing industry experienced a series of amalgamations that resulted in the oligopolistic control of the harvesting sectors by the fish companies. On two occasions, government licence limitation programs on the fishing of salmon stimulated mergers and encouraged the arrival of a new class of "independent fishermen". The changed relationship between fishermen and processing companies proved beneficial for the fish companies who did not wish to bear the rising costs of fishing. The advent of the "free-fishermen", as an independent commodity producer instead of a wage labourer was advantageous to fish companies who could extend credit to a large number of fishermen thus insuring strong vertical ties with a captive fleet at low cost, through relationships based on debt. Adverse conditions in the fishing industry brought on by rising fishing costs for fishermen and a diminishing supply of fish per unit of output brought about a long history of labour agitation in the B.C. fishing industry. Competition for raw material, unstable markets for finished product and a succession of work stoppages caused a series of mergers and the control of the industry by

one or two large firms.

Federal Policy

Since the extension of the B.N.A. Act to include British Columbia, the Federal Government of Canada regulated the fisheries with respect to conservation, and the Provincial Government of British Columbia exercised jurisdiction over processing plants. The devices commonly used by the Federal Government were the protection of spawning runs, the restriction of gear types such as traps, weirs and drag seines, restrictions on nets, and the regulation of fishing time. Licence limitation programs were also attempted, on two occasions, to aid conservation: in the Fraser River district from 1889 to 1892. and in the north from 1910 to 1920. These programs, although short lived, had a large impact on the development of the industry and the relationship between the fish companies and the fishermen. There was little recognition given over the years, however, to the economic problems of a common property resource before the 1950s. Even when the problem was recognized it was not genuinely integrated into government policy until the Davis Plan of 1968-69 (Carrothers, 1941:136, Stacey, 1982:13, Copes, 1979:136) .

Overfishing was usually controlled by restricting the intensity of aggregate fishing effort rather than by limiting the number of entrants to the fishing grounds. The fishing

capacity of each fisherman therefore was increasingly restricted through conservation methods, as entrants to the fishing grounds increased. Conservation policies in the short-run decreased the numbers of fish available, therefore stimulating competition between fishermen and generating a demand for more efficient high cost methods of harvesting. This trend had a snowball effect that in turn brought about stricter conservation laws. Thus, competition between fishermen for thinning supplies, in the face of technological advancement, had the undesirable effect of increasing fishing costs per vessel (Carrothers, 1941:40, Stacey, 1982:13).

Traditional fishery policy in Canada, as in many other countries, has tended to be simplistic in the approach to resource management and relatively non-interventionist and uncoordinated in regard to industrial and trade development (Environment Canada, 1976:50).

The Industry

The British Columbia fishing companies were always plaqued by excessive competition for raw material. The problem of short supplies was exacerbated by the American interception of Canadian salmon stocks, and the devastation of Fraser River salmon runs in 1913 when C.N.R. track construction caused a landslide which impeded the passage of salmon going upstream to spawn. Intensified conservation practices in the late nineteenth and early twentieth century encouraged northern development of the fishing industry and added mementum to a wave of merger

activity that started in the late 1880s.

The British Columbia salmon canning industry was established in the early 1870s with the presence of a few family firms at the mouth of the Fraser River. Due to the guickly growing network of trade relations with Europe and the United States, it is not surprising that the industry grew rapidly in the early years with three canneries in operation by 1874, thirteen by 1882, and twenty-one by 1891 (Ralston, 1965:2). The rapidly growing industry required a steady supply of raw salmon and by the mid 1880s the Fraser River fishing industry experienced the problem of overcrowding.

The climate of the 1880s was one of instability brought about by overcrowding, diminished markets for finished product, and general recession. By the mid 1880s Federal conservation policies regarding fish nets reduced the size of the B.C. salmon catch. In addition, the policy of open entry had increased the number of boats on the Fraser to over four hundred by the year 1884. By 1888 there was serious cvercrowding on the Fraser (Stacey, 1982:12,13). Out of these circumstances the Victoria Canning Company was formed through the consolidation of a number of smaller companies and gained control of some thirty-eight percent of the Fraser River salmon pack (Hayward, 1981:36).

The Federal Government responded to the overcrowded conditions on the Fraser River and the Gulf of Georgia by implementing the 1889 licence limitation program for fishing vessel licences. The program limited the aggregate number of

licences to five hundred with a gucta of twenty licences per cannery. This limitation program on the number of fishing vessels was soon opposed by the procesors who could not maintain production levels in the face of diminishing supplies due to a decrease in the number of fishing licences allocated per cannery. The problem arose because vessel licences were limited but cannery licences were not; therefore, new entrants to the processing sector caused a reduced allocation of vessel licences per cannery. This legislation in some cases provoked the take-over of canneries if only to acquire more vessel licences. The legislation was lifted in 1892 (Hayward, 1981:38).

Between 1886 and 1891 the number of processing companies almost doubled. The investment came from both established processors and new entrants (Hayward, 1981:38, Reid, 1975:291, Doyle, 1957:191, Ralston, 1965:23-25). Labour shortages, depressed prices in Britain for canned salmon, and thinning supplies during the late 1880s and 1890s introduced a need for rationalized operations, and so by the turn of the century the fishing industry was dominated by large established firms instead of the small-scale family firms of the previous era.

By 1891 the Anglo British Columbia Packing Company, Ewen and Company and Victoria Canning Company controlled more than 70 percent of the Praser River salmon pack, and Anglo British Columbia Packing Company became the largest salmon producer in the world. According to Reid, the motivations for mergers by the larger corporations was the desire for oligopsony in the

acquisition of raw material. An oligopsony is a situation where there exists a small number of buyers in relation to sellers in a market (Hayward, 1981:39, Ralston, 1965:25, Reid, 1975:282). From 1892 onward, increasing competition, a decline in fish catches per unit of effort, and the introduction of the purse seine and automated cannery equipment, such as the can washing machine increased the demand for raw material and the drive for oligopsony (Hayward, 1981:62, Stacey, 1982:12). In response to these factors the British Columbia Packers Association of New Jersey, an ancestor of B.C. Packers Corporation, was formed in 1902; it purchased twenty-nine out of forty-eight plants on the Praser as well as an additional twelve plants in northern British Columbia (Innis, Carrothers, 1941:viii, Hayward, 1981:42).

In 1905, B.C. Packers, then known as the B.C. Fishing and Packing Company, reduced Fraser River operations to fifteen plants. By 1910, gasoline powered gillnet vessels comprised 50 percent of the fishing fleet on the Fraser River and the Gulf of Georgia, and by 1918 this figure had increased to 80 percent. Throughout this period the number of purse seines in the Fraser River region also continued to increase from twenty to one hundred (Stacey, 1982:27).

program was attempted this time in the North. Like in the

1 In 1911 the Federal Government issued a moratorium on gasoline
engines north of Cape Caution, perhaps to protect Northern
processors who progressed slower than the Fraser River companies
(Stacey, 1982:27).

Between 1910 and 1920 a second vessel licence limitation

earlier licence limitation program in the Fraser River district, canneries were given a guota of vessel licences depending on their size of operations. The Federal Government hoped to provide stability in the industry, which was experiencing runaway competition among processors for raw material. The Federal Government claimed, however, that the main purpose of the program was to fight overfishing through regulations restricting the maximum number of boats in given areas (Hayward, 1981:59, Ralston, 1965). Like the Fraser River program, this limitation stimulated takeovers in order to get more licences. In 1920 the moratorium was abrogated and the Northern fishery again was opened to all British subjects (Carrothers, 1941:40).

In 1918, during the period of licence limitation, another highly capitalized fish company was conceived -- the Canadian Pishing Company, a subsidiary of New England Fishing Company. This corporation gained influence very quickly and by 1926 it owned seventeen canneries, three salteries, four mild cure stations, six cold storage plants and three reduction plants (Innis, Carrothers, 1941:ix). In addition to this amalgamation the British Columbia Fishing and Packing Company absorbed British Columbia Canning Company in 1923, and Wallace Fisheries in 1926, and Gosse Millerd Packing Company in 1928, and in that year formed B.C. Packers under a Dominion charter (Innis, Carrothers, 1941:ix).

By 1930 the industry was dominated by a small number of large firms, in particular B.C. Packers Ltd. and Canadian

Fishing Company. These two corporations, to a large degree, controlled the raw fish prices and dominated the domestic canned salmon market. Both these companies commanded large fleets and had strong established ties with fishermen on the basis of financing, services, and incentives.

During the war years the B.C. Packers expanded facilities at the abandoned Alert Bay cannery and purchased Deep Bay Plant, constructed a large new cold storage plant at Namu to handle 1,000,000 pounds of frozen fish, and in 1942 made an 'off the record, purchase of Nelscn Bros. Fisheries Ltd. with canneries at St. Mungo, Port Edward, and the West Coast of Vancouver Island. B.C. Packers' frozen fish operation was further expanded in 1940 through the purchase of B. Gregory and Co. Ltd. in Port Alberni and by the purchase of Victoria Cold Storage in Victoria, B.C. The Canadian Fishing Company Ltd. also made additions and improved facilities at Butedale, and Nelson Bros. Fisheries Ltd., a subsidiary of B.C. Packers, opened a modern cannery in Prince Rupert. In 1944 the Canadian Fishing Company Ltd. opened its Wales Island Flant in the Nass district. In 1946, B.C. Packers purchased the entire assets of B.W. Brown and Sons of Victoria and two New Westminster firms -- Fraser River Fish Co. Ltd. and Monk and Company (Lyons, 1969:472-4730. By the year 1946 the British Columbia fish processing sector comprised fourteen salmon canning companies, but the B.C. Packers Corporation produced approximately 30 percent of the entire B.C. salmon pack, and together the B.C. Packers and the Canadian

Fishing Company produced well over 50 percent of the pack (Interview, Sales Manager, B.C. Packers, 1984, Lyons, 1969:438). The urgent demand for products during the war increased production incentives in the British Columbia fishing industry and the two large companies expanded operations. The Federal Government encouraged this trend by offering financing to fish packing companies beginning in 1941, in return for a "controlled price system". Between 1942 and 1946 the disposal of the entire British Columbia salmon pack was undertaken by the Federal Government (Lyons, 1969:446).

The post war years of the 1950s faced rising costs, the loss of the British canned salmon market between 1950 and 1954, and five strikes between 1950 and 1959. The rising cost of product on B.C.'s West Coast in the 1950s brought about continued rationalization of the industry.

The largest portion of the cost of a case of salmon is the cost of the raw fish, and until such times as the price of raw fish levels off, production costs will continue to rise, regardless of the concentration of operating canneries. (Provincial Department of Fisheries Report, 1950, Lyons, 1969:494).

Throughout the 1950s and 1960s the concentration of capital and the consolidation of operations in the B.C. processing sector continued apace. In 1950, both B.C. Packers and Canadian Fishing Company closed operations on the Skeena River -- the Canadian Fishing Company moved operations to Rupert. In 1953, B.C. Packers purchased Colonial Packers Ltd., and London Fishing Company Ltd. and in 1954 B.C. Packers and Canadian Fishing Company together purchased J.H. Todd and Sons -- a pioneer

fishing company. Between 1957 and 1960 both B.C. Packers and Canadian Fishing Company closed down operations at Rivers Inlet, and by 1964 all canneries operating in Rivers Inlet were shut down. In 1964 B.C. Packers also pulled out of the processing plant at Barkley Sound and concentrated its efforts in Steveston near Vancouver (Lyons, 1969:491-612).

By 1966 B.C. Packers processed approximately 50 percent of the ntire B.C. salmon pack and together B.C. Packers and Canadian Fishing Company processed approximately 70 percent (Interview, B.C. Packers Production Manager, 1984).

Consolidation of the B.C. fish processing sector had largely taken place by the end of the 1960s. The well known fishing communities of Rivers Inlet, The Skeena, Port Edward, Klemtu, and many others were shut down, their operations shifted to either Prince Rupert or Vancouver.

The Fishermen

Until approximately the mid 1880s the fish companies had almost exclusive ownership of fishing vessels. The companies would supply small sailpowered gillnet vessels to the fishermen. The fishermen in turn would deliver their catch to the company at a set-rate of so much per fish. In most cases, fishermen's pay was established through the piece rate system rather than on the basis of an hourly wage. The company bore the cost of vessel

¹In the 1920s up to ten canneries operated in Rivers Inlet.

upkeep and maintenance and also provided the fishermen with services and credit for supplies, usually in the form of coupons to the company store (Rotins, 1983:Interview, Hayward, 1981:51). This system was abandoned by the Fraser River companies around the time of the first licence limitation program from 1889 to 1892 when a class of "independent fishermen" came into being. The Northern fishery, however, maintained the traditional method until approximately 1920-1926, after which time a large percentage of vessels were sold to fishermen (Robins, 1983:Interview, Carrothers, 1941:40). Under the old system of company ownership of vessels, the fishermen did not own his own means of production and was tied to the fishing company through wage relations.

By the mid 1880s this system was starting to change and a class of independent, "free-fishermen" was coming into existence (Hayward, 1981:52). The Federal licence limitation program of 1889-1892 accelerated the arrival of independent fishermen, or in other words fishermen as independent commodity producers. This licence limitation program restricted the number of vessels in the area to five hundred boats, three hundred fifty of which were allocated to "independent fishermen (Hayward, 1981:55)." Competition between canneries for the product of "independent fishermen" during licence limitation sent fish prices upward, and by the end of the program independent fishing was viewed as a desirable occupation. The year following licence limitation the quota of twenty boats per cannery was dropped down to ten,

therefore reinforcing the transition to independent commodity production in the harvesting sector and the changing company-fishermen relations. By 1894, the number of independent licences was twice as high as the 1890 level (Stacey, 1982:13). By the mid 1890s the dominant relationship between fishermen and companies was no longer a wage relationship but one based on a contractual agreement. "The dominant wage relationship in effect before the late 1880s rapidly gave way to contract relationships (Stacey, 1982:13)."

In the early 1900s the relationship between fishermen and processing companies became contractual relations based on a system of fishermen's dett -- fish companies would offer financing, services and incentives to a large group of fishermen, thereby maintaining vertical ties with their fleet at relatively low cost.

Increasing difficulties of fishermen under the 'contract-system' prepared the framework for labour agitation. These problems resulted mainly from increased competition arising from free-entry to the grounds after the lifting of licence limitations in 1882, and the rising costs of fishing due to modernization and changing government gear regulations. After 1892 there came a decline in the catch per unit of fishing effort, and therefore fishermen's catches declined. Three fishermen's strikes occurred, one in 1892 when contract relations became common, and others in 1900 and 1911. This early radicalism was to start a history of strike action that later

became the hallmark of the B.C. fishing industry (Hayward, 1981:62).

The growing number of contract-fishermen that characterized the Fraser River district and the Gulf of Georgia did not, however, spread to the Northern fishery until the 1920s. Progress in the North was years behind the Fraser River, and therefore the traditional wage system was continued for some time.

In 1910 the Federal Government implemented a vessel licence limitation program on the Northern districts similar to the early program on the Fraser. A limited number of vessel licences were distributed through the processing companies who were given charge over their distribution. In 1912 the government wished to encourage settlement of the north and they had a preference for white British subjects. For this reason a proportion of the total number of licences were allocated to independent white fishermen who were British subjects. The licencing program did two major things: it placed fishing companies in a powerful position in relation to the wage earning fishermen who could be discriminated against in the distribution of fishing licences. and it also created a privileged class of independent fishermen who were strongly sought after for the extra raw material they provided processors in the face of licence limitations. This limitation program persisted for some years longer than the earlier one in the South, remaining in effect until 1920, during which time it could be used to discipline fishermen and to

discriminate racially against fishermen. Company controls were even tighter on Japanese fishermen than on whites or Native Indians. Japanese fishermen without other skills and often without Canadian citizenship were not likely to argue with an employer (Carrothers, 1941:4, Hill, 1976:4).

In 1926, gasoline driven boats were permitted to fish the North and the traditional methods of fishing became outmoded. There was also a rising number of purse seines in the North after 1926 and companies were encouraging fishermen to own their own vessels in order to reduce costs. By the close of the 1920s the number of boats still owned by Northern fishing companies stood at less than 50 percent (Robins, Interview:1983). After 1930 vertical ties were mainly sustained through boat mortgages, and fishermen's loans, etc., offered to fishermen by the processing companies.

During the next two decades fishermen's costs continued to rise and due to the greatly increased efficiency of modern equipment, the Government felt the need to impose drastic area closures throughout the Province for conservation purposes. By the end of the 1950s the fishing fleet was equipped with such costly innovations as the power block for handling seines, hydraulically driven drum seines, synthetic fibres for fish nets, and by 1959-60 the fleet began to adopt refrigerated sea water cooling systems for the transportation of fish. The steady closure of outlying plants increased the need for the speedy transport of salmon to central plants and the efficient

multipurpose vessel was subsequently introduced (Lyons, 1969:517,540,541).

Due to rising fishing costs, increasing militancy among fishermen led to the formation of the United Fishermen and Allied Workers Union in 1945, and frequent fishing strikes have taken place since that year. Two strikes for higher prices occurred in 1945, two in 1952, and one strike in 1953, 1956, and 1959. The 1959 fishing season faced a costly strike that stopped fishing for two weeks and cost fishermen approximately \$7,000,000 in landed value of salmon (Lyons, 1969:538). Another costly strike occurred in the 1963 salmon fishing season, also costing fishermen in the neighbourhood of \$10,000,000 in the landed value of salmon (Lyons, 1969:554).

In addition to rising costs the salmon fishery also experienced falling outputs. The average salmon catch level for 1951-1955 was 172 million pounds and in 1966-1969 the average catch level was only 144 million pounds (Pearse, 1971:180). These figures show that the B.C. salmon catch declined slightly, while the demand for more expensive forms of gear increased.

^{&#}x27;The United Fishermen and Allied Workers Union (U.F.A.W.U.) bargains with the cannery companies for minimum prices at the start of each season.

According to Peter Pearse, the trends in the B.C. salmon fishery over the 1950s and 1960s show that, "technological change has altered the structure of the fleet and increased the capital intensity of fishing, but the rapid growth in value of the catch has not resulted in significant gains in fishermen's incomes (Pearse, 1971:179)."

II. Government Intervention in the British Columbia Salmon and Herring Industry

Fisheries policy between 1969 and 1982 embodied contradictory measures that led to administrative overlap, inefficiency, and waste. Although the 1969 Davis Plan intended to remove excess capacity from the salmon fishery by the year 1979, certain government financial aid programs available to fishermen for labour 'stability and fairness' encouraged the opposite trend -- capacity continued to increase after 1969. Although individual fishing vessels were removed from the fishing grounds under the Davis Plan it did not restrict the increase of capacity for the remaining vessels. Although government administration of fisheries was formally carried out by the federal department of fisheries, other departments such as the Department of Indian Affairs and Northern Development and the British Columbia Ministry of the Environment played secondary roles. Other Federal departments and agencies also participated in fisheries. Revenue Canada Taxation, the Federal Business Development Bank, the Department of Regional Economic Expansion, and others, all helped to contribute to confused and contradictory management of the sector. Many financial programs implemented in the British Columbia fishery during this time brought too much investment to the sector and therefore helped to dissipate resource rents.

Although all industries are affected by ineffective policy, the British Columbia fishery has been particularly unlucky due to the political significance of Canadian fisheries (Pearse, 1982:4). The common property status of the fishing resource places high expectations on the government in office. For this reason, "legitimation" questions such as economic 'fairness, the maximization of social benefits, the preservation of fishermen's lifestyles, and the fishing rights of native populations have figured significantly in the government's approach (Pearse, 1982:4-5). Government's habit of responding to interest group demands led to unclear management objectives and ineffective policy.

Federal government programs in the form of loans, tax incentives, and grants to west coast fishermen for political reasons served only to exacertate existing problems in the British Columbia fishery by adding even more capacity to the sector. Programs of this kind, offered by government, showed little understanding regarding the needs of common property ownership. In mature fisheries such as the west coast salmon and herring, the intense competition brought on by limited supply (characteristic of common property) leads fishermen to increase their fishing efforts in spite of declining profits. Government programs that contribute to capital expansion in the fishery contribute to this problem.

The key problem in the British Columbia salmon and herring industries noted by Sol Sinclair in his report to the D.F.O. in

1960 was the problem of 'chronic excess capacity'. In other words, Withere are too many boots chasing too few fish (Sinclair, 1978:7)." This problem stemmed from a history of open access in the B.C. fishing industry before 1969, throughout which time D.F.O. management practices engaged for the most part only the biological regulation of fishies through limiting the periods in which fishing was allowed. By 1969 the number of vessels had risen to 6,000 and allowable fishing time had fallen to two or three days per week (Reid, D.F.O., 1983:22; Copes, 1979-80:136; Sinclair, 1960). These figures may represent as much as four to five times the amount of fishing capacity needed to harvest the available catch (Copes, 1979-80:136). In spite of the qovernment's recognition of the problem with the Sinclair Report of 1960, government policy did not really reflect this awareness until the implementation of a controversial rationalization program in 1968-69 that proved to be unsuccessful in the first two years of its existence. The intention of the program, implemented by Jack Davis as minister of D.F.O., was to restore a reasonable income to fishermen by removing excess capacity from the fishing grounds within ten years (Sinclair, 1960; Copes, 1979-80:136). In spite of this intention a steady increase of capacity occurred in the salmon and herring fishery during this period.

Although the number of vessels was reduced by 1,500 through the Davis buy back program, the capital value of the fleet in real terms more than doubled. In 1969 the capital value of vessels in constant (1982) dollars was \$267 million, and by 1982 this figure increased to a total value of \$580 million (Reid. A Status Report, 1983:22). During the 1969-1982 period, average landed values of salmon and herring increased sharply, but the average quantity of salmon landed remained about the same, while the average landed quantity of herring dropped off drastically. From 1955 to 1969 the average yearly dollar value, in constant (1982) dollars, for the E.C. salmon catch totalled \$96 million. After 1969 this average yearly total increased sharply to \$163 million in the years between 1969 and 1982. A similar, but more dramatic increase can be shown for herring with the average yearly catch value to 1969 standing at \$16 million and a sharp increase to \$145 million in 1977, and \$168 million in 1979. The fishing industry expanded under the incentive of these price increases, but after 1979 prices for herring dropped off drastically to a total of \$32 million in 1982. Prices for salmon remained more or less the same. High prices in herring were temporary and were accompanied by an actual decline in the amount of fish caught (see table and figure 1 and 2).

The ten year period following 1969 was also marked by a general increase of government intervention in the British Columbia salmon and herring industries. In addition to the Davis Plan, government intervention took the form of financial incentives to fishermen and processors. Many of these programs were initiated in response to the upswing in prices of the 1970s, when it was felt that the industry was entering into a

Table 1

Herring Catch - Quantity and Value

Quantity to nearest thousand

Nominal Values and Constant (1982) Dollar Values

<u>Year</u>	<u>Cuantit</u> y	Nominal Yalue	<u>Constant Dollar</u> <u>Value</u>
	(*000 tonnes)	(\$ *000)	(\$ '000)
		•	,
	4.4.		47 000
1955	139	4,000	17,000
1956	223	7,000	28,000
1957	1 34	5,000	14,000
1958	184	7,000	27,000
1959	201	7,000	27,000
1960	85	2,000	8,000
1961	203	4,000	15,000
1962	202	5,000	19,000
1963	260	6,000	22,000
1964	229	6,000	21,000
1965	201	6,000	21,000
1966	140	5,000	17,000
1967	53	2,000	6,000
1968	3	231	700
1969	2	221	650
1970	4	290	900
1971	10	556	2,000
1972	39	3,000	8,000
1973	55	11,000	26,000
1974	45	12,000	25,000
1975	60	13,000	24,000
1976	81	23,000	39,000
1977	97	91,000	145,000
1978	21	57,000	85,000
1979	44	124,000	168,000
1980	25	27,000	33,000
1981	34	35,000	39,000
1982	29	32,000	32,000
, , , ,	~ ~	,	

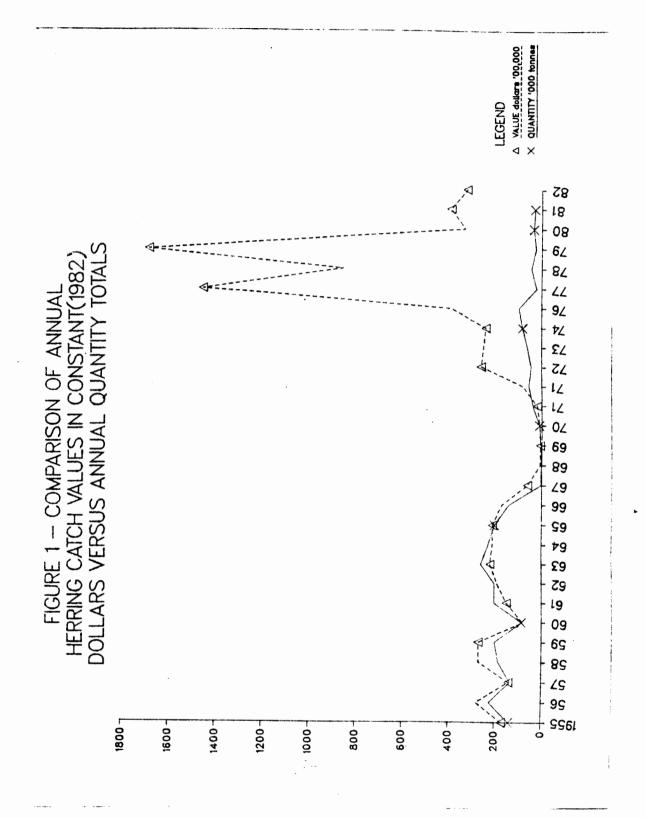
Table 2

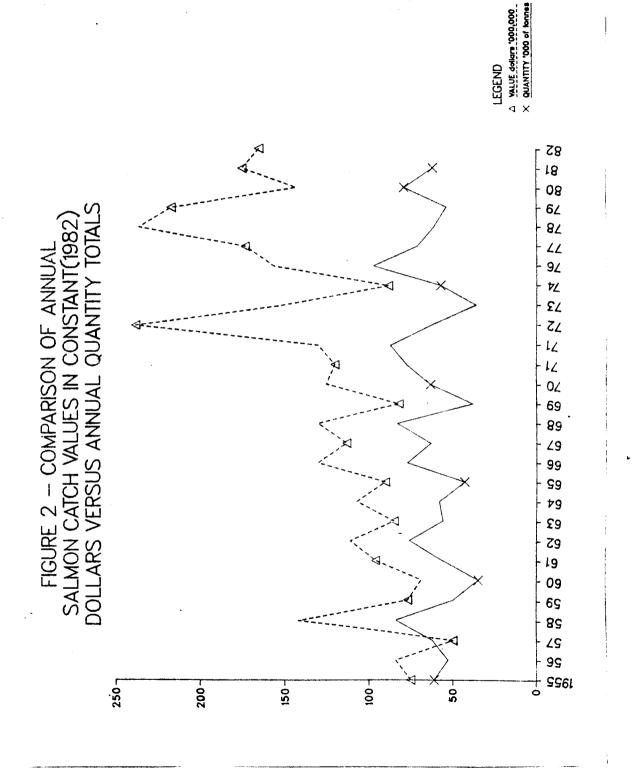
Salmon Catch - Quantity and Value

Quantity to nearest thousand

Nominal Values and Constant (1982) Dollar Values

<u>Year</u>	Quantity	Nominal Value	Constant Dollar Value
	(*000 tcnnes)	(\$ *000)	(\$ ' 000)
	•	•	•
1055	<i>(</i>)	10.000	35 000
1955	61	18,000	75,000
1956	53	21,000	84,000
1957	62	18,000	50,000
1958	84	37,000	142,000
1959	5 C	20,000	77,000
1960	35	18,000	69,000
1961	57	26,000	96,000
1962	76	30,000	111,000
1963	56	23,000	85,0 00
1964	5 &	30,000	107,000
1965	43	26,000	90,000
1966	77	39,000	130,000
1967	63	36,000	113,000
1968	83	45,000	130,000
1969	3 &	28,000	82,000
1970	72	45,000	125,000
1971	63	44,000	120,000
1972	77	50,000	130,000
1973	8 7	100,000	238,000
1974	63	74,000	153,000
1975	36	47,000	88,000
1976	57	92,000	156,000
1977	97	109,000	173,000
1978	71	158,000	236,000
1979	61	160,000	217,000
1980	54	117,000	143,000
1981	79	158,000	175,000
1982	62	165,000	165,000
1 702	0 2	103,000	103,000





period of long-term economic improvement. During the 1970s, the government extended benefits to fishermen and processors who wanted to expand their operations and benefit as much as possible from the favourable climate. The boom period of the mid to late 1970s was short lived and in 1980 the industry was overcapitalized again.

Davis Plan

The Davis Plan of 1968-69 was implemented to raise fishermen's incomes, to promote stability and to further resource conservation. It was felt, true to the conclusions of fisheries economics, that the removal of excess vessels from the fishing grounds would increase the level of rent captured by individual fishermen. In the words of Sol. Sinclair, who conducted a study of the B.C. fishery, under contract by the D.F.O.,

The introduction and enactment of the Salmon Vessel Licence Control System in 1968 was directed at conservation and protection of the salmon fishery and the establishment of an economic management system for it. In practical terms it was directed towards adjusting the catching capacity of the salmon fishing fleet to the available supply of harvesting salmon, thereby providing fishermen with the opportunity to earn a reasonable income from fishing. Its purpose was to deal with the persistent problem of too many fishermen chasing too few fish (Sinclair, 1978:7).

In September 1968 Jack Davis announced his plans for a four-stage fisheries rationalization program. The first stage was directed toward checking west coast salmon fleet expansion.

No additional vessels were permitted to enter the salmon fishery and boats with a negligitle catch record were removed. Salmon vessels were categorized into two licence categories according to their catch records over the two preceding seasons. Very low production vessels were awarded class "B" licences, and allowed to stay in for a limited period, but the bulk of the fleet was given class "A" licences which could be maintained permanently for an annual fee. Fishing vessels that caught 10,000 pounds or more of salmon were eligible for an "A" licence and those that caught less were eligible for a "B" licence, provided they had fished during the preceding two year period. At the time of the program's inception, these licences were sold only to salmon fishermen, but under pressure from halibut fishermen the regime was changed to allow vessels from other fisheries to fish for salmon with "A" licences.

Vessel "B" licences represented only a small gross annual income and represented approximately one percent of the aggregate catch. Tabs were given annually to these vessels under the condition that they could not be replaced, lengthened, or increased in capacity -- they were expected to drop out of the fishery as they became obsolete. Class "A" licences, on the other hand, were eligible for replacement by another vessel and were initially allowed to expand their capacity. A previously unlicenced vessel was allowed to fish if it replaced an existing "A" vessel. The "A" licence category comprised all but the most unproductive vessels in the fleet and therefore, made up the

foundation of the permanent fleet (Pearse, 1972:184).

In 1970, stage two cf the Davis Plan was implemented to hasten the egress of vessels from the fleet. With this in mind, a lifespan of ten years was placed on "B" vessels in order to hasten their withdrawal. In order to discourage the renewal of "A" licences the annual tab fee for "A" licences was also increased substantially and in 1971 this ruling was revised to accommodate vessel size and capacity, i.e., vessels less than thirty feet in length were charged one hundred dollars, vessels less than thirty feet long and less than fifteen net registered tons were charged two hundred dollars and vessels exceeding fifteen tons were charged four hundred dollars. A further clause was added allowing "A" licence holders to convert over to "B" licences in order to avoid the stiff licence fee; this conversion required compulsory retirement of the licence within ten years.

Stage two of the program also established a buy-back program for class "A" vessels through a government financed program. Under this program fishermen could sell "A" licenced vessels to the government at fair market value -- thus retiring the vessels from the fishery. These vessels were then in turn resold by the government to the public for other uses. Removal of licenced vessels through buy-back denies them further activity in the fishery. The fee system and sale of retired vessels by auction generated approximately \$1.9 million for the buy-back program.

In addition to stage one and two of the program, two more stages were implemented. Stage three made rulings that governed fish handling and fish storage on board vessels, and stage four was directed toward salmonid enhancement, gear regulations, and area controls. Because this thesis is concerned mainly with matters pertaining to fisheries rationalization, a discussion of stage three and four is outside its scope.

These, then, are the four stages of the Davis Plan. The B.C. salmon licence limitation and buy-back program was a new experiment in fisheries management, and the extent of the program's success is questionable. "In fact only 5 percent of the salmon industry's fishing capacity was removed by the buy-back program before it was suspended (Copes, 1979-80:137)." Although the plan intended to reduce fishing capacity, for the most part, it failed in doing sc due to the presence of several unforeseen problems and loopholes in the plan.

The presence of three loopholes in the Davis Plan contributed to the plan's inability to check capital build up in the fleet. The first of these loopholes was the "tonnage escalation loophole". When the plan was first implemented fishermen with "A" licences were allowed to replace their existing vessels with another vessel of any size. This resulted in a lot of small boats being replaced by very large boats, ie. small gillnet vessels were replaced by large seine vessels. The Department of Fisheries and Oceans Canada soom noticed this loophole, however, and it was quickly closed by introducing the

"ton for ton replacement rule" which stipulated that an existing vessel could only be replaced by one of the same size or smaller.1

The second loophole arose when halibut fishermen felt that they too had a right to fish for salmon and therefore, put pressure on the federal government to provide them with salmon fishing licences. In response to this pressure The Department of Fisheries and Oceans Canada granted salmon licences to fishermen from other fisheries; this greatly increased the number of entrants to the salmon fishery. Halibut fishermen in many cases sold their newly acquired salmon licences to new fishermen who commenced salmon fishing— the halibut fishermen returned to fishing halibut.

The third loophole in the Davis Plan emerged when the "pyramiding rule" was introduced. This allowed fishermen to purchase licences from several smaller vessels in order to pyramid the tonnage of these licences to licence a larger vessel. In other words many small gillnet boats were replaced by large seiners with the same total tonnage. The unfortunate result of this was, that overall fishing power on the grounds increased because big seine vessels are better suited to carrying large amounts of powerful gear. Therefore, the loophole helped to allow an expansion in fleet capacity.

^{&#}x27;In 1969 it was observed that the average tonnage of new "A" vessels was more than three times that of vessels being replaced; an observation that led to the Davis Plan's ton for ton replacement provision and the resultant pooling of "A" licences to licence a larger vessel (Pearse, 1972).

In addition to the loopholes described above, another set of problems developed due to the Davis Plan's decision to make salmon "A" licences transferable. The three resultant problems were: 1. the expectations trap, 2. the capital stuffing problem, 3. the transitional gains trap. The unfortunate feature of the transferable "A" licences is that it allows the establishment of a sales price for "A" licences demanded by the holder.

The "expectations trap" emerged because profits expected from the success of the Davis Plan were quickly capitalized into the value of the licence. The anticipation of higher returns led to the establishment of high licence values. This made the buy-back program inoperative because the speculative increase in the value of licences made it financially difficult if not impossible for the government to buy back a sufficient number of boats. This prevented fulfillment of the anticipated higher earnings. (Copes, 1979-80:137) If a non-transferable licence had not been used licences could have been withdrawn from the fishery with the retirement of the fishermen or through an easy vessel and licence buy out program.

The second problem, the "capital stuffing problem", was a problem that emerged in full force in the B.C. salmon industry after 1969. Capital stuffing is simply the option of stuffing more and better equipment into a vessel in order to increase its catching capacity and thus the share of the catch a vessel could capture. Some examples of this are: faster gear, space efficient architecturally designed storage compartments and elaborate

freezing apparatus. Capital stuffing was encouraged in the industry when the "ton for ton replacement regulation" allowed "licence pyramiding" in order to licence a large vessel. With the option of "licence pyramiding" the resultant "capital stuffing" continued apace, because the expanded platform of a large seine vessel can accommodate much more gear. A non transferable salmon licence instead of a transferable one could have offset the problem of capital stuffing because the government could have retired the appropriate number of salmon licences each time capital stuffing got out of hand. As explained above, the decision to make licences transferable precluded the possibility of buy back and attrition in the salmon fishery due to the speculative value of licences.

The third problem, the "transition gains trap", impeded the Davis Plan's objectives to improve fishermen's incomes. This problem also is related to the transferable status of "A" licences and their "free market value". If vessel owners are allowed to sell their licences at market value then each time incomes in the fishery start to rise above normal returns the projected earnings (rents) will be capitalized into the value of licences. This usually means that after limited entry only the first generation of fishermen will benefit because projected future gains will be calculated into the sales value of the licence. The following generation will in this case receive much lower net returns because they will have to pay for the value of the licences out of the gross returns from fishing.

Another incipient problem of fisheries rationalization that intruded was that of the "transitional gains trap" (Tullock, 1975). If licence limitaton succeeds in raising industry incomes above "normal returns" and boat owners are allowed to sell their licenses at free market prices, the antcipated stream of additional earnings (rents) attributable to licence limitation will become capitalized in the value of licences. Generally, only the first generation of limited licence holders may then expect to benefit. Nct only will they enjoy extra earnings during their term as licence holders, they will also capture the cresent value of future rent earnings when they sell their licence. The next generation of fishermen will pay for the rents they may expect to receive with the price of the licence, so that their net earnings will amount to normal opportunity costs returns only. (Copes, 1979-80:137-138)

As shown, the decision to attach "A" licences to the vessel soon proved problematic in the years following the Davis Plan. The United Fishermen and Allied Workers Union (U.F.A.W.U) argue that the decision to attach licences to the vessel rather than the man was a response to processing companies who wanted to own fishing vessels. The U.F.A.W.U. opposed the idea of transferable licences but favoured limited entry. They suggested a program in which licences were attached to the individual fishermen and would expire with his retirement. "This could have greatly simplified fleet reduction. Attrition through retirement could have replaced the complex buy-back program (Copes,

One factor leading to the nightmares becoming reality was the recommendation that licences be transferable. Dr. Sinclair was, no doubt, concerned about the problem of access to and egress from the industry and more specifically, about the need for the free flow of labour and capital into and out of the industry. Stevens on behalf of the U.F.A.W.U. on the other hand, argued that licences should not be for sale. (U.F.A.W.U. 1980:I-7)

The various problems and locpholes in the Davis Plan considerably weakened the plan and failed to reduce capacity in the harvesting sector, in fact it can be shown that fishing capacity actually increased.

In any event, the ton-for-ton replacement provision allows the number of vessels to decline without reduction in fleet capacity. Indeed, "A" vessel owners have an incentive to replace them with vessels of greater capacity. Thus, in 1969 it was observed that the average tonnage of new "A" vessels was more than three times that of the vessels being replaced; an observation which led to the ton-for-ton replacement provision in phase II of the program. Horeover, while the number of vessels declined between 1968 and 1970, 'owners' estimates of the value of their vessels suggests that the value of the fleet has increased by some \$11million. The accuracy of this statistic is questionable because it probably reflects, in part, capitalization of licences; but it does suggest the possibility that the reduction in numbers of vessels has been more than offset by an increase in catching power of the remaining vessels, so the total capacity of the fleet actually increased. (Pearse, 1972:190)

A program closely related to the Davis Plan rationalization program for the salmon fishery was the limited entry program for the roe herring fishery. The fee system that developed was a non-transferable fishing licence attached to the fishermen rather than the vessel. This difference in licencing technique was to prevent the same problems that occurred in the salmon fishery from occurring in the herring fishery as well (Schwindt, 1981: 99).

The problem that emerged with roe herring licences arose because licences were allotted initially to all fishermen who wished to fish for herring, not only to those who had fished in the past. A moratorium on roe herring licences took effect on

January 15, 1974 for non-native Indian fishermen and in 1977 for native Indian fishermen. Most fishermen applied for herring "H" licences because, "fishermen obviously anticipated that, as with salmon licences, the herring licences would also command some value (Schwindt, 1981:99)." This ultimately encouraged new entrants and more capacity to the sector. This trend is reflected in the fact that the number of seine vessels fishing for salmon and herring combined increased from eighty three in 1969 to two hundred and sixteen in 1980; more than double (Pearse, 1982:99-102).

Government Financial Programs

The political economy of government intervention in the British Columbia salmon and herring industries between 1969 and 1982 exhibited of contradictory, ad hoc policies that resulted in inefficient management of the fishery. Through a series of financial aid programs offered to the industry by a plethora of government departments and agencies such as: Revenue Canada Taxation, the Department of Regional Economic Expansion, the Department of Indian and Northern Affairs and the Federal Business Development Bank, government intervention in the fishing industry facilitated a program of capital expansion in the British Columbia fishing industry contrary to the aims of the Davis Plan. Many programs were aimed at financing the construction of facilities requested by fish companies in order

to generally maximize profits during a price increase in the salmon and herring industries—these expenditures were made by the government to bring about capital accumulation. Other expenditures were aimed at improving fishermen's incomes and at stabilizing incomes in the Native Indian sector of the fishery; such expenditures fall into the category of "legitimation" policies. "Legitimation" policies such as the Indian Assistance Program (I.F.A.P.) and the Indian Fishermen's Emergency Program (I.F.E.P.) were issued to the native sector of the fishery to insure Indian fishermen's survival in the industry, once the buy-back program and "capital stuffing" got underway. It was hoped that the I.F.A.F. program would, "maintain the Indian people's share of the British Columbia commercial fleet and catch (Foodwest Financial Consultants, 1979(B):68)."

In certain cases, the chartered banks and government financing either in the form of loans, grants, or tax incentives combined with Japanese financing to achieve capital expansion in the processing sector. These combination financing packages fulfilled the categories of both "accumulation and legitimation", and all programs served to channel excess capacity to the sector. Most of the programs researched were extended to aid both capital and labour in some fashion. None of the programs researched followed a coherently structured plan for the management of B.C. fisheries.

(i) Sources of Financing from D.F.O.

In spite of the intentions of the Federal Government to withdraw capital from the fishing grounds in 1969, with the Davis Plan, the D.F.O. maintained and even increased subsidy and loan programs after that date at a high level. For example, Fishermen's Improvement loans (F.I.L.) offered by D.F.O. for fishing equipment, measured in constant 1982 dollars, show yearly totals of:

1975-76	\$ 877	thousand
1976-77	\$ 600	thousand
1977-78	\$ 712	thousand
1978-79	\$ 1,404	thousand
1979-80	\$ 944	thousand
1980-81	\$ 826	thousand

F.I.L. loans for various improvement purposes and for building and construction of vessels also were maintained and in some cases even increased. For example, B.C. yearly totals, in constant 1982 dollars, for these purposes are as follows:

1975-76	\$ 17	million
1976-77	\$ 15	million
1977-78	\$ 25	million
1978-79	\$ 27	million
1979-80	\$ 26	million

^{*}Statistics Canada Publication 1301 - National Income and Expenditure Accounts, Table 21, Implicit Price Indexes (GNE) by Quarters. Using Seasonally adjusted data 1971 = 100, was used to remove inflationary content.

1980-81 \$ 16 million

The D.F.O. Fisheries Improvement Loan Act (P.I.L.A.) the most important D.F.O. aid program was initiated in December 1955, in order to make short-term credit available to fishermen for the improvement and development of the fisheries. This act authorizes the minister of finance to quarantee fishermen's loans for the following jurposes: 1. the purchase and construction of a fishing vessel. 2. the purchase and construction of fishing equipment, 3. major repair or overhaul of a fishing vessel, 4. the purchase and construction of shore installations, 5. the development and improvement of a primary fishing enterprise. The terms of the Act allowed borrowers up to \$75,000 at the bank prime rate plus one percent for a maximum of ten years. "According to the 1976 annual report of Fisheries Loans Act, in British Columbia 381 loans for a total amount of \$9,564,274 were quaranteed (Foodwest Pinancial Consultants, 1979 (B):23). In 1976-77 the maximum loan limit stood at \$50,000 but on March 1st, 1978 it was increased to \$75,000. This change came about during the borm period in frozen salmon and herring roe when many fishermen wanted to enlarge their vessels in order to become more efficient. Together with the Davis Plan, this D.F.O. loan quarantee program engendered a serious problem of "capital stuffing", and helped to increase fishermen's debts to a critical level. From April 1st, 1976 to March 31, 1977, the numbers, values of loans, and their average size increased considerably. In 1976-77, 854 loans were made with an average

amount, measured in current dollars, of \$14,461 per loan, for a total value of \$12,349,366. By 1978-79 the number of loans granted had increased to 1,490; the average loan was up to \$19,005 and the total amount of loans had more than doubled to \$28,317,786. Between 1974 and 1981 a total of \$133,780,146 was granted to fishermen. This figure represents two-thirds the dollar value of loans granted since the initiation of the program in 1955 (Foodwest Financial Consultants, 1979 (B):25-27).

"The outstanding balance of loans payable to lenders at the end of period 5, June 30, 1977 was \$7,780,207; by June 30th 1980 the amount had escalated to \$43,948,958 as of March 31, 1981, the debt load was \$68,212,404 of which \$54,569,920 was owed in the B.C. region. Approximately \$98 million of the \$123 million loaned by the Federal government under this program, that is 80 per cent of the total loans, went to British Columbia fishermen; chartered banks accounted for \$94 million and credit unions held the remaining \$4 million (McHullan, 1983:19).

Under the Fishing Vessel Construction Assistance Program, terminated in 1975 due to overcapacity on the grounds, the federal D.F.O. provided "35 per cent of the approved construction costs of eligible fishing vessels of the following lengths: seacoast fisheries 30 feet to 75 feet - inland fisheries 20 feet to 75 feet (Foodwest Pinancial Consultants, 1979 (B):24)."

Programs listed above added to the overcapitalization of the harvesting sector after 1969, and contributed to the

inefficiency and waste the industry experienced in 1980. The D.F.O. also got involved in cost-sharing arrangements with the Department of Indian and Northern Affairs (D.I.A.) (Evans, Interview, D.I.A., 1983). One noteable project of this kind was the formation of the Northern Native Fishing Corporation, a project in which D.F.O. and D.I.A. shared in the cost of an \$11.7 million fleet purchase. The details of this project are given under the next heading.

(ii) Sources of Financing from the Department of Indian and Northern Affairs

The Department of Indian and Northern Affairs, (D.I.A.) offered programs to help native Indian fishermen finance capital costs after 1969. These programs have been initiated in order to restore Indian participation in the British Columbia west coast fishery. Native Indian participation showed a decline from 26 per cent of the total fleet in 1930 to a low of 9 per cent in 1982 (Evans, Interview, D.I.A., 1983). It was in response to this displacement that D.I.A. offered various programs to stabilize the native Indian labour force in the harvesting sector after 1968.

D.I.A. and the Federal government regard fisheries in British Columbia as an "employer of last resort" for many northern Indian communities. In the words of Peter Pearse:

Second, as numerous studies and submissions to this

commission have confirmed, this displacement has generated serious economic and social distress in Indian communities many of which offer no alternative employment. The relative immobility of Indian people has left them heavily dependent on unemployment insurance and welfare payments. This is costly to the tax paying public and, at the same time, inflicts high costs on the Indians themselves in the form of idleness, dependency, demoralization and social and personal breakdowns.

...In short, the commercial fisheries afford a highly promising means of involving coastal Indians in constructive economic activity. Moreover, it is an activity in which many of them claim an historic right to participate. The fisheries, then, must be regarded as an obvious base for policies aimed at Indian social and economic development. (Pearse, 1982:156)

After the Davis Plan of 1969 the D.I.A. was concerned that displacement from the fisheries would increase. There was a strong likelihood of this happening for a number of reasons: first, because some Indian vessel owners failed to meet the landings qualifications required to obtain a salmon licence; second, Indian fishermen sold their licenced vessels through the buy-back program and third, certain Indian vessels did not pass the inspection for quality standards. After 1964 the Indian fishery had already shown a marked decline, "Between 1964 and 1971 the number of gillnetters declined by about 400, to 345. Indian owned trollers dropped from 388 to 197, and seiners, from 135 to 57 (Pearse, 1982:152)." In order to curb this decline the D.I.A. initiated two programs after 1969 to protect the native Indians position in the British Columbia fisheries.

The first of these programs the Indian Pishermen's
Assistance Program, (I.F.A.P.) was implemented in 1968 to
improve native participation in the B.C. fishery. After the
Davis Plan was implemented the I.F.A.P. established a licence

program for Indian fishermen who needed assistance. The I.F.A.P. bought up a certain amount of licenced tonnage through the purchase of "A" licences, and stored them in a tonnage bank. Vessel licences stored in the I.F.A.P. tonnage bank were then transferred to native fishermen who needed assistance. In 1972 the D.F.O. and the D.I.A. converted Indians' "B" licences into "A1" licences. Sixty three such licences were changed under this provision, most of which were for small vessels, only fifty two of which were renewed the following year. In spite of these special provisions for the Indian sector of the fishery, the number of native participants continued to decline after licence limitation. In the first two years gillnet participation dropped by 29 per cent (Pearse, 1982:153). To counter this problem I.F.A.P. issued some \$16.3 million to Indian fishermen by 1979, 50 per cent in the form cf grants, and 50 per cent in the form of loans, after which time the program ended. Up to 1978 the recovery on loans was excellent, standing at approximately 91 per cent. Following that year, however, repayment fell off drastically to a very lcw level (Pearse, 1982:154). This decline in repayment levels reflects the poor performance of the fishery after the slump of 1980. According to Pearse, the program was beneficial in its efforts to improve the performance of the native fishing sector as a whole, and saw a total tonnage increase of Indian vessels by 33 per cent, "more than double the rate for the fleet as a whole, and their average value increased from 67 to 87 per cent of the average for the whole fleet

(Pearse, 1982:154) ."

In spite of the success shown under the I.F.A.P., and the special licencing provisions, the number of native owned vessels continued to decline after 1977. The native Indian fleet dropped by approximately 100 vessels between 1977 and 1980. This decline resulted from the sale of vessels by native Indian owners who wanted to reap the capital gains, and because native fishermen wished to leave the sector after prices dropped in 1980. As a result of this decline, the Indian Fishermen's Emergency Program, (I.F.E.P.) was conceived to protect the native fishery against losses. The purpose of this program was to assist in debt repayment, repairs, equipment and start-up costs for native fishermen close to bankruptcy. This program was administrated through D.I.A., the Native Indian Brotherhood of B.C., and through thirteen bands of the Nuu-Chah-Nulth Tribal Council. "It provided for \$2 million in grants, another \$2 million in loan quarantees, and \$200 thousand in direct loans. When the program ended in 1982, \$2 million in grants had been expended, plus \$200 thousand in direct loans; and \$700 thousand in loan quarantees had been extended" (Pearse, 1982:154-155).

In 1982, in response to the declining participation of native Indians in the British Columbia fishery, the D.I.A. conceived yet another scheme for Indian assistance. In cooperation with the D.F.C., the D.I.A. purchased 243 vessels, and 252 licences from the B.C. Packers Limited. This figure represents most of the gillnet boats the company owned in the

northern region. The program represented \$11.7 million dollars, \$3 million of which was provided for vessel improvements and operating costs. The remaining \$8.7 million was paid to B.C. Packers Corporation. D.I.A.'s objective in this moreover was to form a viable entity, "The Native Fishing Corporation", an organization formed of three tribal councils, in order to retain title to licences and to lease licences and sell boats to Indian fishermen, who previously rented vessels under private company agreements (Pearse, 1982:155; Evans, Interview, 1983).

The D.I.A. after 1969 also acted as a consultant for the Department of Regional Economic Expansion in the administration of its Special A.R.D.A. program, offered for northern development of northern Indian fisheries operations.

(iii) The Department of Regional Economic Expansion (D.R.E.E.)

The Department of Regional Economic Expansion's major objective is to promote opportunity initiatives through cost-shared federal/provincial agreements. D.R.E.E.'s general agreement with British Columbia was signed March 28, 1974, with the hope of developing employment opportunities on a federal/provincial cost shared basis, in rural areas of the province that require special measures to realize development potential. The department stresses balanced development throughout the province, as well as the aim to overcome interprovincial disparities and attempts to improve

opportunities through promotion of industrial and commercial development of processing and manufacturing in slow growth areas of the province (Development Agreements, D.R.E.E., 1980:149).

The most notable D.F.E.E. program offered to the B.C. fishing industry, was the Special A.R.D.A. program intended mainly to benefit native Indians in British Columbia's northern areas. The Special A.R.D.A., cr agricultural, regional development agreement, was established in 1974, and was intended to "provide specific incentives to Indian groups to develop industries that will create employment for their members (Foodwest Economic Consultants, 1979(B):64)." Under this program, capital costs and labour were funded for commercial projects situated on Indian reservations. In British Columbia almost all Special A.R.D.A. projects have been almost entirely funded by the federal government (Foodwest Financial Consultants, 1979(B):64).

In the period between April of 1974 and December of 1977, ten fish projects totalling a cost of \$653,000 were funded under Special A.R.D.A. Early in 1978 Central Native Fishermen's Co-op, (C.N.F.C.) was granted in the neighbourhood of \$1 million for expansion. After December 31, 1978 all funding for fish processing operations was terminated under the program (Foodwest Financial Consultants, 1979:64, Interview CO. director, C.N.F.C.).

Another D.R.E.E. incentive program offered to the fish processing sector in British Columbia, was the <u>Regional</u>

<u>Development Incentives Act</u>, (R.D.I.A.) introduced in 1969. Under this program fish processors were eligible to build new plants, modernize existing plants, and develop new projects. "If approved a plant could qualify for a grant of up to 20 per cent of approved capital costs up to a limit of \$6 million for modernization and expansion (Foodwest Financial Consultants, 1979 (B):32). The construction of a new plant or a new product expansion was eligible for a grant of up to 25 per cent of capital costs and 15 per cent of salaries, and jobs created up to a limit of \$5,000 for each direct job created. In the period July 1977 to December 1978, one grant for a total of \$106,187 was given to a British Cclumbia fish processor in the north for purposes of expansion. No other grants to fish processors were recorded under this program. "It was also pointed out that D.R.E.E. works closely with the D.F.O. when considering R.D.I.A. applications in fish processing" (Poodwest Financial Consultants, 1979(B):33).

During the 1970s bocm period two more D.R.E.E.

federal/provincial cost shared programs supplied funding to the British Columbia fish processing sector, in order to stimulate growth, and development. The programs, 1. A.R.D.S.A.

(Agricultural and Rural Development Subsidiary Agreement) parts I and II, and 2. A.S.E.P. (The Assistance to Small Enterprise Program) were conceived under the <u>Industrial Development</u>

Subsidiary Agreement (I.C.S.A.). Both A.R.D.S.A. and I.D.S.A.

were signed by the federal and provincial governments in 1977 in

aid of a development strategy for British Columbia. The programs were signed by the Federal Department of Regional Economic Expansion, and the Provincial Ministry of Economic Development, and were administrated provincially (Foodwest Economic Consultants, 1979(B):51).

A.S.E.P., started in 1977, and offered fish processing plants up to 50 per cent of approved capital costs, to a maximum of \$30,000 in forgiveable loans for modernization, expansion or establishment of facilities. The total funds available under this program is \$5 million to be given to applicants for manufacturing facilities in the province of British Columbia and located outside of the lower mainland region.

In December of 1978, three fish processing industry applications were approved under A.S.E.P. for a total of \$78,000. This money went to assist in custom canning, processing salmon, and salmon roe operations (Foodwest Financial Consultants, 1979(B):53). This program also involved consultations with the B.C. Ministry of Marine Resources regarding the approval of fish processors applications.

A.R.D.S.A. part IV aims to stimulate development of the agricultural and food processing industry in rural areas of British Columbia. This has been a high profile program among fish processors in British Columbia, outside of Vancouver, and Victoria. Eligible projects include any facility which enhances the value of food products. This program provides 25 per cent of capital costs plus \$5,000 towards each job created, up to limit

of 50 per cent of the total capital cost of the project.

A.R.D.S.A. has offered assistance to five fish processing projects for a total of \$1,054,000 in the years 1978 and 1979. These applications were recommended by the B.C. Ministry of the Environment, Marine Rescurces Branch, and by the Federal Department of Fisheries and Oceans.

(iv) The Department of Industry, Trade and Commerce

Starting in circa 1970 and carrying on up to 1982, the
Department of Industry, Trade and Commerce gave subsidies, under
the Shipbuilding Industries Assistance Program (I.S.A.P.), to
Canadian shippards in order to stimulate the boat building
industry by subsidizing 15 per cent of the approved cost of
building or converting vessels that were over 75 feet long
(Murray Fay, Industry, Trade and Commerce, 1984). This saving
was in turn passed on to any fishermen who contracted to build a
new vessel. This program stimulated the construction of 32
vessels, large super seine boats, for participation in the west
coast fishery. The program subsidized the construction of these
vessels for a sum of \$5.7 million (Pearse, 1982:160).

Although evidence shows that these subsidies were designed to sustain the shipbuilding industry, they added to excess capacity on the fishing grounds in the late 1970s and early 1980s and also stimulated the increased level of fishermen's loans. Through lowering the cost price of large vessels to

fishermen the subsidy helped to channel more fishing capacity to the sector, and encouraged fishermen to go into debt for a new seine boat.

An obvious reform needed to provide consistency between other government programs and fisheries policy is the removal of subsidies that encouraged the construction and rebuilding of fishing vessels. It is incongruous for the government to provide financial incentives to build new fishing vessels when the overriding problem is one of too much fishing power, particularly when almost the entire fishing industry disapproves of the subsidies, as is the case on the Pacific coast at least. In 1980, the government was advised (not for the first time) to eliminate "perverse subsidies" to those who construct new fishing vessels. (Pearse, 1982:160)

(v) Provincial Sources of Financing

The Provincial Government also had programs directed towards the stimulation of industrial development in British Columbia, to give companies incentive to expand their facilities. The three programs available were as follows: 1. The British Columbia Development Corporation-Low Interest Loan Assistance Program (L.I.L.A.); 2. The British Columbia Development Corporation-Eusiness Assistance Program; and 3. The Ministry of Economic Development Technical Assistance Program-T.A.P.

The first of the programs, I.I.L.A., was another program conceived under the <u>Industrial Development Subsidiary Agreement</u>, by the Ministry of Economic Development, and therefore was available only outside the lower Mainland of British Columbia.

The program offers low interest loans in order to stimulate processing and manufacturing. The program's loan funds must contribute to the purchase of fixed assets. L.I.L.A. offers loans at one-half of prime, up to a limit of \$250,000.

Three aplications for a total of \$225,000 were approved under L.I.L.A. between December 31, 1978, and December 31, 1979 for fish processing plants, and a buying station. Program authorities sought consultation with the B.C. Ministry of the Environment when considering fish processors applications (Foodwest Economic Consultants, 1979 (B):58).

Another Provincial program was the B.C.D.C., Business
Assistance Program, offering provisions for British Columbia
businesses in the form of loans and guarantees. This program
offers loans for land, buildings, equipment, or working capital.
"B.C.D.C. also assists businesses through loan guarantees,
equity participation, performance bonds and efficiency
guarantees (Foodwest Financial Consultants, 1979(B):59)."

From April 1, 1974 to December 31, 1978, B.C.D.C. approved six loans to fish processing companies equalling a total of \$1,238,000. All processors approved were involved in processing three or four species including herring roe (Foodwest Financial Consultants, 1979(B):59).

The T.A.P. program cffered by the B.C. Ministry of Economic Development also provided incentives for industrial development. This program shared costs up to a \$8,000 limit, to conduct feasability studies on British Columbia industrial projects.

"The ministry will pay 60 per cent of the first \$2,000 and 50 per cent of the remaining \$6,000 or portions thereof" (Foodwest Financial Consultants, 1979(B):63).

(vi) Federal Business Development Bank Loans Program

The F.B.D.B. extended loans to both fishermen and processors during the 1970s in order to stimulate industrial development. F.B.D.B. loans are made at a fixed interest rate of 12 per cent for first mortgages, and 12-1/2 per cent for second mortgages, and loans above \$50 thousand. F.B.D.B. policy is not to compete with the chartered banks, and therefore usually finances projects that the chartered banks refuse, or serves only to augment chartered bank financing. By 1981-82 total loans authorized to fishermen stood at \$450 thousand, but by July 1982, 116 loans were outstanding for a debt load of \$4 million (McMullan, 1983:24).

Between April 1, 1976 and September 30, 1977, forty six

F.B.D.B. loans were made to British Columbia fishermen for a

total of \$1,658,500 in order to purchase vessels (Foodwest

Financial Consultants, 1979(B):34). During the same time period

the F.B.D.B. extended at least two loans to the fish processing

sector to expand operations, but it is not possible to determine

the amounts. However, it has been determined that one such

F.B.D.B. loand was extended to the Central Native Fishermen's

Co-op for a ball park figure of \$1 million in 1978 (C.N.F.C.,

director, Interview, 1983).

(vii) Revenue Canada Taxation

Revenue Canada Taxation also provided fishermen with incentives to overcapitalize their operations and eroded the effectiveness of the Davis Plan. The Canadian Income Tax Act with Regulations traditionally allowed fishermen tax credits of ten per cent per annum on the purchase of new fishing vessel equipment and fifteen per cent per annum was allowed on the purchase of new fishing vessels. These tax credits meant that a fisherman could write off fifteen per cent of the cost of his vessel every year until the entire cost was written off. This capital cost allowance is intended to stimulate the purchase of capital goods. In the late 1970s however, new large fishing vessels were permitted a capital cost allowance of thirty three and one third per cent per annum. This large capital cost allowance on new large seine vessels provided a tax shelter equal to the cost of the vessel in a three year period, instead of the normal seven years, thus stimulating rapid expansion of the fleet in the late 1970s (Pearse, 1982:160). The purpose of this shelter was likely to encourage industrial expansion, shipbuilding and machinery production, etc., in the province of British Columbia.

The Boom Period and the Consequences of Government Intervention

The consequences of Government intervention in the British Columbia fishing industry can only be fully understood in light of a discussion of the 1970s boom period in herring roe and frozen salmon products. One of the key problems was that both government and industry thought the temporary market upswing in the mid-1970s would be permanent. The 1970s period was marked by a general increase in fish prices, capital expansion and the existence of a multitude of government financial programs and chartered bank loans. All of these factors served to increase investment in both the processing and harvesting sectors of the fishing industry thus exaggerating the historical problem of overcapitalization.

(i) Japanese Involvement

As early as 1970, the year following the implementation of the Davis Plan, a Japanese market appeared for "top" grade frozen sockeye salmon and in 1970-71 a market for herring roe appeared for the first time (Interview, Marketing director, Central Native Fishermen's Co-op:1983). Before 1970, herring roe was a waste product in British Columbia, but during the 1970s it became a very valuable seafood product. In 1979, British Columbia herring roe sales to Japan generated approximately \$250 million, of business in one year (Hay, 1979: 32,33). The

depletion of Japanese herring stocks along with other economic and political and social factors within Japan influenced Japanese fish prices and increased Japanese purchases of foreign seafood products. The Japanese herring catch fell from circa 674,000 tons in 1915 to only circa 80,000 tons by 1970, and during this same time Japan's population doubled. The rapid introduction of the new international fishing limits during the 1970s caused a serious disruption in the established patterns of the international fishery, and Japan therefore needed to import much more seafood product. These trends led to a greater Japanese interest in foreign herring sources.

Japanese import policy was also accompanied by an attempt to gain access to foreign fishing grounds. "This access was to be achieved through payments for fishing rights, joint ventures with foreign fishing companies and processors with a resultant claim to import the output, and through expansion of arms length imports (Schwindt, 1982:12)." Japanese companies loaned money to obtain the right of first refusal over parts of the British Columbia catch and also advanced loans for working capital. It was rumoured also that the Japanese companies offered domestic processors off the record loans with no strings attached (Proverbs, 1978:17). From 1974 to 1978, British Columbia fish companies obtained over \$19.5 million in debentures from Japanese companies (Proverbs, 1978:12, 16). From 1972 to 1980, fierce competition between Japanese firms for a supply of salmon and herring products was exported to the B.C. West coast where

Japanese backed participants in the British Columbia fishery avidly competed for a share of the valuable resource.

(ii) Price Increases

With the onset of the bocm, competition between processors for raw material increased, while concentration decreased due to entry of small-scale Japanese backed processors to the fish purchasing sector. Quadra Economic Consultants note that in 1979, approximately thirty different Japanese-related companies were active as roe buyers, and attempting to grasp the largest share possible (Quadra 1979: III-32). Both small and medium sized firms gained financial backing from Japanese sources after 1972, and therefore the tuying sector became more competitive and prices rose. Japanese entrants operating through cash buyers and small-scale processors emphasized 'price alone' as a method of procuring raw product, and therefore disrupted the normal market patterns, and corroded the 'no competition' fishermen's loyalty system of fish acquisition based on financing services and incentives. Between 1972 and 1978 the production share of the three largest firms fell from 61.3 per cent to 53.8 per cent while Japanese related companies increased their production share from 5.3 per cent to 19.4 per cent in the same period (Proverbs, 1980:9). Japanese investment therefore curbed oligopsony and pushed prices upward.

By 1979 there were over 1,136 licenced buyers or buying stations fighting for a share of raw salmon, a marked increase over 709 licences in 1974 (Schwindt, 1982:43). Prices in B.C. for herring roe and salmon roe increased sharply between 1974 and 1979, and to a lesser extent salmon prices climbed during the same period. In real terms, the price for herring roe climbed from \$4.74 per pound in 1974 to \$12.47 per pound in 1978. The price for salmen roe climbed from \$7.71 per pound to \$8.96 per pound in the same period. Between 1974 and 1977, the price for frozen salmon rose from \$2.54 per pound to \$3.27 per pound (Quadra, 1979:III-33). These prices benefited the industry greatly in the short-term, showing an increase in the wholesale value of herring, in constant dollars, that grew from about \$1,889,000 in 1970 to about \$202,000,000 in 1978. The price increases were brought about by Japanese demand (Quadra, 1979:III-34). It was felt generally that the Japanese related firms commissioned to purchase salmon and herring had an inexhaustable supply of money, and that in certain cases in 1978, cash buyers paid as much as \$1,000 per ton for roe herring compared to the negotiated price of \$440 agreed upon by the United Fishermen's and Allied Workers Union. In 1979, some cash buyers paid up to \$5,000 per ton for roe herring (Proverbs, 1978:19, Hay, 1979:33). This should be understood in light of the fact that before 1970 no market for herring roe was in existence. The following quotation from Hay serves to demonstrate the size of profits taken by seine fishermen during

the boom period.

350 purse-seiners-the Cadillacs of the fishing fleet-using nets costing \$40,000 and up. These are vessels that have been known to take 50 tons of roe in an hour, and make almost \$200,000 from it. (Hay, 1979:12)

A rise particularly in sockeye and pink salmon prices, but also for other salmon species also took place in the 1970s.

"Between 1967 and 1972 the average landed price of salmon rose moderately. Since 1972, the price has shown sharp increases because of increased Japanese demand. For all salmon types, the 1978 landed price was between 2.5 and 3 times the 1972 price (Hay, 1979:41)." (See table and figure 1)

(iii) Increasing Capacity

During the 1970s tecm period a combination of Japanese investment, chartered bank credit, and government financial assistance programs led to a dramatic increase in capacity. Marvin Shaffer argues that the problem of insolvency in the fishing industry is closely related to the problem of "chronic excess capacity," and states that, "In the salmon industry it is primarily investment behavior which determines the exact extent to which costs are dissipated (Shaffer, 1979:92)." The B.C. Pisheries Association argues that industrial capacity reached a zenith in both harvesting and processing sectors by 1981-82, and the report further observes that excess capacity and overcapitalization had serious repercusions for the health and

longevity of the fishing industry (B.C. Fisheries Association, 1983: 22).

The tonnage escalation lcophole present in the Davis Plan and the resultant capital stuffing, allowed the tonnage of individual fishing vessels to expand and, therefore, the number of seine vessels that fished only for salmon rose from 286 in 1969 to 319 in 1980, and the number of salmon/herring vessels also increased from 83 in 1969 to 216 in 1980 (Pearse, 1982:99-102). During boom conditions, seine boat owners increased their debt lcad in order to improve their fishing boats or to build new ones.

The 1970s period also saw an increased capacity in the processing sector. Shaffer notes that in the 1970s peak week production capacity utilization in processing was usually less than 50 per cent (Shaffer, 1969:98). Shaffer suggests that part of the extra capacity can be attributed to the fact that increased competition broke up shared utility agreements among processors, especially in packing and collecting facilities, thereby bringing about more investment to those areas. But a more serious cause of the problem lay in an increased number of entrants to the processing sector, adding more capacity than was necessary to process the entire E.C. salmon pack (Shaffer, 1979:12, President, B.C. Fisheries Association, Financial Post, 1982:W2, Feb.13). All small and medium sized producers expanded capacity in response to foreign investment, and outstanding demand for frozen salmon and herring roe.

(iv) The Debt

With boom conditions in fishing in the 1970s the chartered banks willingly participated in a program of capital expansion as they had large deposits on hand and interest rates were abnormally high. The traditional method of fish company financing started to change in the 1970s due to the rising cost of financing the fishing effort; for this reason the companies encouraged fishermen to seek new sources of financing (McMullan, 1983:9). Banks were a convenient alternative for fishermen wishing to finance "capital stuffing" and the high cost of fishing licences during the boom. The shift from company financing to bank financing is shown as follows: "Of a total of 2,819 vessels reporting debt in 1970, 1,302 (46%) were in debt to companies for a total of at least \$7.9 million, 440 (15.5%) were in debt to credit unions for a total of at least \$4.8 million, 37 (1.3%) in debt to combined companies, and credit unions, for a total of \$400,000, and 133 (4.8%) were in debt to combined companies and banks for a total of \$1.7 million (McHullan, 1983:7). * In 1970, banks accounted for 585 debts (20.8%) for a total of \$4.8 million; by 1974 the role of bank financing had expanded to 1,203 vessels (45%) for a total of \$20 million. The average size of indebtedness increased from about \$7,800 per boat in 1970 to \$17,000 per boat in 1974 (McMullan, 1983:7) . This shows that between 1970 and 1974 the reported

debt burden of the fleet doubled, and by 1974 the source of debts had shifted from company financing to chartered bank financing.

Bank financing to vessel owners and general expansion in the fleet during the boom period was greatly stimulated by the government's policy. The Davis Plan's tonnage escalation loophole and the "capital stuffing" problem allowed the expansion of vessel capacity, while the D.F.O. offered loan guarantees through the Fishermen's Improvement Loan program. The Federal Government's Tax Act also offered huge tax incentives to fishermen to build large vessels and therefore excessive amounts of capital were made available to fishermen wanting to expand their fishing capacity.

The state and the banks by providing capital, grants and loan guarantees, subsidies, allowances, and tax benefits, radically reorganized the financial structure of fishermen. The introduction of licence limitation and the attendant rights of corporate property, exclusivity and regulatory access of seasons, openings and areas, facilitated the commodification of "rights for sale" and the rapid capitalization of the fleet. (McMullan, 1983:26).

(v) The Processing Sector

A similar profile can be observed for the processing sector. Before the 1970s, capital from traditional lending institutions was relatively unavailable to the British Columbia processing sector due to its volatile nature (Interview, director Millbanke Industries Ltd., 1983). In recent years

however, especially after the arrival of Japanese financing, "It is estimated that the six major chartered banks have financed between 90 and 150 million dollars in the form of capital and operating loans to fish processors annually in recent years (Foodwest Financial Consultants, 1979(B):11)."

A sample of twenty-one processing plants outside the lower mainland showed that the long-term debt for this group increased from a total of \$93 million in 1977, to \$287.7 million in 1980. Total assets for the group increased from \$255.5 million in 1978 to \$321.2 million in 1982, and bank loans tripled during this period (Interview,Co. directors:1983). As shown above, the processing sector also took advantage of government financial aid for capital cost financing, but by the late 1970s government assistance to fishermen was nearly three times that of the amount extended to processing firms. However twenty different financial programs were geared to the processing sector, and helped to guarantee company bank loans.

Examples of Combined Financing Packages

Two examples of companies in the British Columbia west coast salmon and herring industry that combined government funding, Japanese financing and share-capital from local private investors were Central Native Fishermen's Co-op conceived in 1975, and the Pacific North Coast Native Co-op, conceived in 1974, later to be called Port Simpson Native Co-op. Both these

ventures combined foreign investment, Royal Bank financing and local capital. Although the ventures received funding through varying government sources, both projects were funded to alleviate the unemployment problem of native peoples on the north west coast of British Columbia, and to act as an "employer of last resort."

The Pacific North West Coast Native Co-op came about due to a promise made by Bill Murray, a cabinet minister in W.A.C. Bennett's Social Credit cabinet, to seven west coast Indian willages surrounding Port Simpson. This promise was made to the villages just before the 1972 defeat of the Social Credit party by the New Democratic Party. When the N.D.P. party was elected to office in 1972 it decided to fulfill the former government's commitment by providing the seven villages with a \$12 million plant facility at Port Simpson. In 1974 the Pacific North Coast Co-op was formed of native fishermen and shoreworkers and authorized under the Provincial Co-operatives Act. 1

During the frozen salmon and herring roe boom starting in 1976 to 1977 two Japanese trading companies, Nozaki Trading Company and Nippon Suisan Limited provided the Co-op with guaranteed pre-season loans over a five to six year period in return for sales agreements. Nippon Suisan also installed a roe operation in the plant. In 1981-82, the Royal Bank of Canada started to provide inventory financing to the Co-op.

In the 1970s the Port Simpson plant facility was authorized under the B.C. Ministry of Labour however decisions regarding the plant are now authorized through the Ministry of the Attorney General.

In 1982 the North Ccast Native Co-op was restructured under the name Port Simpson Native Co-op. The new Co-op provided a members loan structure, meaning that the Co-op operated on the basis of co-operative share capital arrangements rather than an annual membership fee. In 1982, the Japanese trading companies withdrew their interests and the Co-op has experienced some financial difficulties (Interview, Director, Port Simpson Native Co-op, 1983).

A second example of a company that had a combination of government funding and fcreign financing and bank financing was the Central Native Fishermen 's Co-operative. In June, 1975, Millbanke Industries Limited sold its fixed assets in Bella Bella, British Columbia, to Central Native Fishermen's Co-op (C.N.F.C.) for approximately \$1,300,000, after which time the Co-op was financed as follows. The Royal Bank of Canada held a first debenture of approximately \$1 million together with Millbanke Industries Limited who held a second debenture of \$500 thousand. Marubeni Corporation provided all inventory and accounts receivable financing "as required," for a ball park figure of \$4 million. Working capital was provided by nominal shareholders loans. Maruteni corporation, enjoyed a "right of first refusal" sales agreement over frozen salmon, salmon roe, and herring roe products in return for the financing of inventories and accounts receivables. Millbanke Industries Limited stayed on as a broker to handle sales to non-Japanese customers.

In 1975, its first operating season, the Co-op enjoyed a good year. The Co-op being a non-union operation was able to continue working through the long strike of 1975 and gained favourable returns. In 1976 they were, therefore, able to purchase Babcock Fisheries Limited, a bankrupt Ucluelet fish company. This purchase was favoured in order to exploit Barkley Sound herring roe stocks during the boom period, that was just beginning at that time.

The purchase of these Ucluelet assets was financed by funds provided by Marubeni Corporation of Japan, who then secured their investment with a specific, and fixed, debenture on the assets at Ucluelet and a debenture ranking after the Royal Bank of Canada and Millbanke Industries on the assets at Bella Bella.

Approximately a year later, the Co-op management, and directors, elected to expand the Bella Bella facility by building a sharp freezer and cold storage complex and modern apartment facilities for key non-native personnel. This development cost approximately \$4 million. The money to finance this new expansion program came from a combination of government financing, the Royal Bank, and Credit Union, and Japanese capital.

The initial funding for the venture was provided by a "Special Arda" D.R.E.E. grant of \$1 million. The remaining funds were split fifty-fifty by the Federal Business Development Bank, (F.B.D.B.) and the B.C. Central Credit Union. Sufficient funds were also provied by these institutions to pay out the first and

second and third debentures held by Millbanke Industries

Limited, the Royal Bank of Canada, and Marubeni Corporation of

Japan. After this event, F.B.D.B. and the B.C. Central Credit

Union shared a fixed and floating debenture ranking "first" on

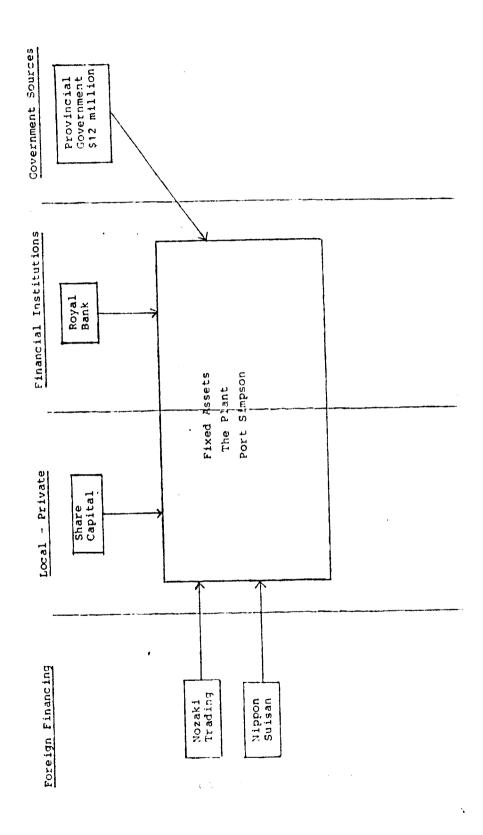
all C.N.F.C. assets, and the Royal Bank provided inventory

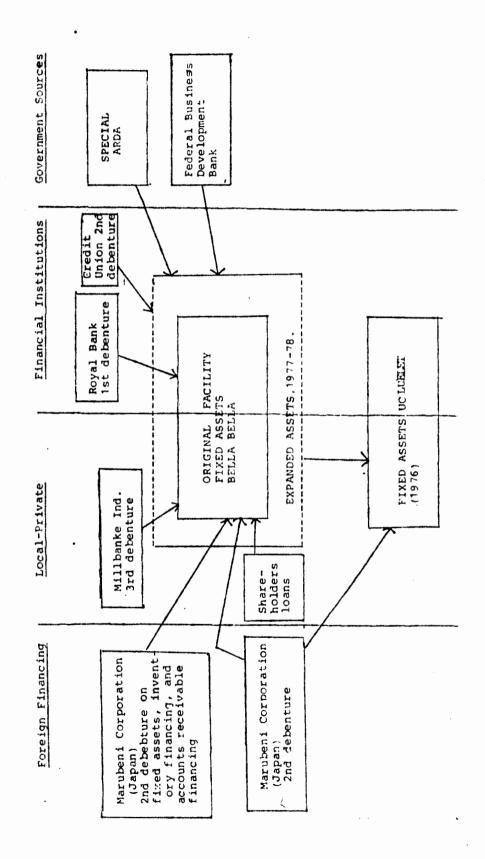
financing, while Marubeni Corporation advanced pre-season

financing in return for product (Interview, C.N.F.C. Company

directors, 1983).

It is believed by Cc-op management, that part of the reason why the C.N.F.C. experienced financial difficulties after 1980, was due to the overexpansion of assets at Bella Bella in 1977-78: a step that tied the Co-op into bank loans at high rates of interest. It should also be noted, that the expansion program at Bella Bella took place at a time when the salmon and herring industries experienced boom conditions, and Japanese money was abundant. The expansion was furthermore encouraged by a "Special Arda" grant from the federal government, that provided a guarantee for loans. After the 1980 slump, the Co-op experienced financial difficulties. This is not surprising due to high interest rates, falling markets for finished product, and slackening supplies.





III. Crisis in the B.C. Salmon and Herring Industries Starting in 1980

Starting with the 1980 salmon and herring seasons, the fishing industry in British Cclumbia began to experience serious downturns in landed values. The decline in Japanese demand for British Columbia seafood products during that year, together with other economic factors exogenous to the industry led to unfavourable conditions, and a general state of crisis among fishermen and processors. With the advent of lower prices for raw fish, and with the withdrawal of Japanese investment from the processing sector in 1980, the many fishermen, and processors that expanded operations during the boom, were left unable to meet heavy mortgage payments to traditional lending institutions. The problem in 1980 was one of too much capitalization once the fishing industry returned to normal price levels. This overcapitalization and redundant capacity was encouraged by government financial aid programs, as described in the last chapter. Many government programs proved to be wasteful, contradictory and counter productive in the long run.

The expansion program of the 1970s, that led to bankruptcies and receiverships was caused by the unrealistic assessment of the 1970s boom period by both government and private capital. The boom conditions were incorrectly interpreted to be a permanent phenomenon. Government financing

programs were extended to the industry to help fishermen expand their capital investment in their vessels in order to take advantage of boom conditions. The same was true to a lesser degree in the processing sector through grants such as D.R.E.E. and A.R.D.A. Most of the capital expansion that occurred proved deleterious when the fishing industry faced job losses, receiverships and general insolvency. When prices dropped in 1980 efficiency was lost and the industry became overcapitalized again, and entered a period of crisis.

Fishermen were up against dwindling fish stocks, rising fuel and gear costs, shorter fishing seasons, and low company prices for fish. Lured into buying bigger and better boats to compete against other fishermen during the boom-time fishing of the 1970s many boat owners have crushing debts. In order to stay afloat economically, they have to catch mcre fish. (Vancouver Sun, The Magazine, May 29, 1983:3)

While banks are seizing boats, fishermen giving up, and fish plants going under, the industry remains crucial to B.C.'s economy. The wholesale value of B.C. fish products was about \$400 million in 1980, and its estimated that about 20,000 people work directly in the industry and in related businesses like boat yards, marinas, and supply stores that serve commercial and sports fishermen. (Vancouver Sun, The Magazine, May 29, 1983:3)

Over the 1970s landed fish values rose steadily, whereas the annual volume landed fluctuated annually. The tables on pages 20 and 21 show that during the boom years "Salmon prices have risen considerably over this period, and so the value of landings shows a much stronger upward trend than landed weight (Pearse, 1982:100)." The fact that capital expansion took place as a result of a price increase and not an increase in product made the British Columbia salmon and herring industry

particularly tenuous (Pearse, 1982:100). Landed values declined significantly for salmon after 1978, showing a drop off in the landed per pound value of salmon from \$1.37 per pound in 1978, to 95 cents per pound in 1982 (D.F.O. Statistics Office, Vancouver).

An even more drastic decline in landed values was seen in the roe herring industry after 1979, when weak demand coupled with a 'fishermen's strike' caused landed values to fall from a record high of \$125 million in 1979 to \$24 million in 1980 (Pearse, 1982:101). Gross Canadian fish product exports to Japan dropped off from \$254.4 million in 1979 to only \$110.2 million in 1980 (Hay, 1979:14). In constant (1982) dollar terms exports dropped from \$344 million in 1979 to only \$135 million in 1980, this indicates a loss of \$209 million in exports to Japan, a drop of approximately 61 per cent. The international escalation in price brought on by stiff competition in the 1970s was not reflective of normal price levels for salmon and herring products on the west coast of B.C. A speculative trend of this kind could represent little more than a short-term boom period.

The boom was partly precipitated by a competition between the huge Japanese trading companies to gain control of British Columbia seafood products. The most outstanding example of speculative behaviour was an attempt by the powerful Japanese trading company, Mitsubishi Soji Kaisha Limited to corner the Japanese herring roe market in late 1979. In an effort to corner the market, Mitsubishi purchased all available herring roe at

therefore, met with a grand-scale consumer boycott of that product by the Japanese consumer. Thus, the company suffered a loss of \$500 million and withdrew from those markets (Schwindt, 1982:72). As a result of the market collapse, inventories of salmon and herring roe were carried over into the following year, and therefore British Columbia prices for salmon and roe herring dropped off drastically in 1980.

Other factors in the world market also contributed to the price collapse in the market for roe, and salmon. The Japanese consumer started buying more meat products, and the 1970s knee-jerk response to the 200-mile fishing limit softened as satisfactory new supplies were discovered. The Hokkaido salmon run in Japan returned with a substantial yield and Japanese buyers purchased more sockeye salmon from Alaska (U.S. General Accounting Office, 1981:29). Botulism scares in Europe led to John West Seafoods, Britain's largest buyer of B.C. seafood products, plan to remove certain west coast canned salmon products from inventories until 1986, causing a further decline in demand (Interview, Co. director, C.N.F.C. Marketing Ltd.). Together these factors caused prices to fall.

Currency changes also contributed to price declines on the British Columbia west coast for salmon and roe herring. The Canadian and American dollar strengthened while the currencies of major export markets weakened. The weakness of the pound, the franc and the yen have all made B.C. fish products more

expensive for importers and, therefore, quelled demand (B.C. Fisheries Association, 1983:20, Marketing director, C.N.F.C., 1983).

Starting in 1980, part of B.C.'s share of foreign salmon markets was lost to Alaska who had increased yields and cheaper labour costs. "Whereas B.C. landings have been quite stable over the last decade (and longer) the Alaskan production has been increasing and has reached pre-1970 historical levels. Costs of fishing expressed on the basis of per pound of fish are highly sensitive to volume. As a result of this recovery of volume in Alaska, their fishermen have become far more cost effective (Fisheries Association of B.C., 1983:23). The Americans gained 83 per cent of the Japanese trade compared to 11 per cent for British Columbia, and 53 per cent of the British trade compared to 23.7 per cent for British Columbia (B.C. Fisheries Association, 1983:8, 9, 10, 11, 12). A comparison of salmon harvests and landed values, in Canadian dollars, will serve to indicate why British Columbia is not competitive with the Alaskan fishery (B.C. Fisheries Association, 1983:23).

	British Columbia	Alaska
Number of salmon fishermen	11,000	18,000
Annual salmon harvest	134,745,000lbs	558,770,000lbs
Average catch per fisherman	12,250lbs	31,0431bs
Average annual landed value	\$135,733,000	\$396,600,000
Average price paid to		
fishermen per lb (Can.\$)	\$1.10/1b	•71/1b

The crisis in the British Columbia salmon and herring prices occurred due to a decline in markets, prices, and earnings that occurred at the same time as rising production costs, rising interest rates, and strong international competition. Between the years 1978 and 1982, fuel prices escalated by 140 per cent, making conditions ever harder for fishermen (McNullan, 1983:30). In 1981 the pink salmon run was the largest since 1962 and therefore caused unsold inventories and precipitated further price declines (Pearse, 1982:100).

The irrational price bidding that was carried out on the west coast during the 1970s brought about losses for both domestic processos and the Japanese. "The price escalation, which did result in some expansion of processing capacity also led to significant losses for several of the Japanese participants in the market. In fact some of these losses were incurred in British Columbia as a result of the bankruptcy of Japanese firms" (Schwindt, 1982:17). All the major Japanese companies active in British Columbia in the 1970s have sustained losses, and these losses have affected all sectors of the fishery in British Columbia.

The large-scale exit of Japanese capital from the British Columbia fishery also helped to cause serious problems for the survival of many fishermen and processors in the domestic sector. Plant closures that followed the loss of Japanese capital have caused the significant disruption of the industry

as a whole. Most small-scale and medium-scale processing companies secured bank lcans in order to take advantage of the favourable price climate of the late 1970s, only to find themselves in a falling market by 1980. Some of these firms were given government subsidies to guarantee bank loans as illustrated in Chapter II. Most small and medium-scale firms could not meet the high interest costs of bank-financing, once they were confronted by a massive loss of profits (Interview, Co. directors, 1983).

The collapse of salmon and herring roe markets in Japan at the end of 1979 effectively suppressed Japanese interests in the B.C. fishing industry. "In fact, the failure of Kiwood Industries, Norpac Fisheries, Pacific Rim Mariculture and North Western Fisheries, all of which had some degree of Japanese backing resulted in a rather dramatic foreign dis-investment in these particular firms (Schwindt, 1982:57)." It is evident that the domestic processors with a high dependency on Japanese financing have suffered the most from the dramatic correction in market prices. The Japanese divestitures shown above were only the first on a list of similar divestitures that occurred after 1980.

Oakland Industries plant in Victoria in 1982 is illustrative. During the boom period of the mid-1970s, Oakland employed up to 800 workers and regularly had up to 200 on payroll, but in 1982 the plant discontinued operations.

Marubeni of Canada, which three years ago rescued Oakland industries from receivership has been advised to

pull the rug out from beneath the Victoria canning operation this year and concentrate activities at Cassiar Packing Company Ltd. in Vancouver.

"Processors can't afford the luxury of having half a dozen plants operating at half capacity," says Barry J. McMillan, president of the Fisheries Association of B.C. which represents major processing companies. (Financial Post, W1, February 13, 1982)

Another example of a shut-down of a Japanese-related process is Millerd Fisheries. Early in 1983, the operation was placed in receivership when the Royal Bank of Canada refused to extend working capital to the failing venture. "When Millerd was placed in receivership on January the 17th, it owed about \$5 million to creditors including \$1.9 million to Nippon Suisan, a Japanese fishing company, \$1.8 million to the Royal Bank, \$1 million to other trade creditors and \$300,000 to fishermen (North Shore News, A-9, March 6, 1983)." The article explains that Millerd Fisheries suffered large losses in 1981 and 1982, and the company's total debt exceeded its assets by \$700,000 early in the Spring of 1983. The closure of Millerd Fisheries sacrificed the jobs of approximately 150 shoreworkers and fishermen during the peak of the season.

In order to grasp the scale of growing indebtedness in the B.C. fish processing sector after 1978, a D.F.O. study was done of company records for twenty-one processing plants outside the lower mainland. After 1978, short-term debts for the group rose from \$60 million to \$115 million, while long-term debts rose from \$28 million to \$52 million, an 85 per cent increase. Interest cost on long-term debt for the same group grew from \$2.3 million in 1978 to \$9.4 million in 1982, this figure

dropped to \$8.9 million in 1982 as interest rates declined. The balance sheets of the companies cutside the lower mainland group show less than \$5 million equity to support \$60 million of assets in 1982. Between the years 1978 and 1982, the group declined from a comfortable position of 40 per cent of assets carried by equity, to an exposed position of 25 per cent. It is shown that 15 per cent of all assets are owned by companies with a less than 20 per cent equity to asset ratio, and an overall shareholders deficiency position. For the most part plants outside the lower mainland are not as well financed by equity or long-term debt as lower mainland plants. Companies outside the lower mainland have relied on both short-term and long-term debt financing, and also on Japanese, and local, private loans (D.F.O. Internal publication:1983).

It is clear that all companies in the British Columbia fishery have sustained significant losses since 1980. It is widely rumoured that E.C. Packers Corporation registered losses of \$14 million in 1982. Eany small and medium sized processing companies were forced to shut down, lay off workers and generally rationalize their operations (Schwindt, 1982:57, Financial Post, W2, February 13, 1982, North Shore News, A-9, March 6, 1983).

By the beginning of the 1980 fishing season, fishermen were also facing falling prices. The heavy mortgages, and rising interest rates made fishermen dependent on the boom prices of the 1970s. By 1980, prices in the herring fishery were cut to

half the level of the 1979 prices, therefore the 1980s herring fishery experienced a 'strike' for higher prices. "The loss of income from roe-herring as a supplement to other earnings made many fishermen highly vulnerable to defaulting on their loans, since there was little additional income that could be derived from the already slumping salmon, halibut, and groundfish fisheries, and since equity in liences and vessels, once solid and of high value, was now depressed (McMullan, 1982:31)."

The crisis, in salmon and herring therefore has led to both processors bankruptcies, and fishermen's growing indebtedness, vessel repossessions, seizures, defaults, etc. By the close of the 1980 fishing season, out of a sample of 1,266 fishing vessels financed, 46 per cent were not able to make full payments compared to a pre-1980 level of 3 per cent, and 12 per cent of the total were making no payments at all on their vessel loans, compared to a usual 0.5 per cent. Fishermen belonging to the lower mainland were in a better economic position than those in the north. On the lower mainland 24 per cent of vessel owners were behind on their mortgage payments, and 16 per cent could not make payments at all, equalling 5 per cent of the total lower mainland fleet. Out of some 460 vessels reviewed in the north coast region, there were 70 per cent in arrears, and 13 per cent of these, 9 per cent of the entire northern fleet, made no payments at all. The troll fleet especially experienced difficulty with almost all fishermen behind on loan payments (McMullan, 1983:32).

IV. Conclusion

We have shown how government policy embodied contradictory processes resulting in administrative irrationality, overlapping programs and economic wastage because government carried out the dual processes of "accumulation and legitimation". The British Columbia salmon and herring industries provide an excellent example of this dynamic in the 1969-1982 period, when the Federal Government encouraged a worsening or intensification of the long-term chronic excess capacity characteristic of the industry. It has been shown that government administration of the fishery favoured the institution of private enterprise instead of taking steps to insure the efficient management of the common property resources, when it offered funds to various sectors of the fishery for 'capital expansion' and 'labour stability. At the federal level fisheries have been seen as a politically important sector due to its common property status -- the Federal Government's Department of Fisheries and Oceans tends to occupy a managerial role. However, Government spending programs present from 1969 to 1980 were wasteful because they increased the capacity of individual fishermen and caused the resultant dissipation of resource rents. This process was destructive to the west coast fishery because it encouraged overcapitalization, in the face cf shorter and shorter fishing times. Some federal and provincial "legitimation" policies were

also offered to the B.C. fishing industry through other departments and agencies to stabilize the labour force and create greater harmony and stability in rural areas. This has been especially true with respect to the Department of Indian and Northern Affairs and the Department of Regional Economic Expansion. Legitimation is therefore a major concept in explaining fisheries policy.

A number of "accumulation" policies were also present in the British Columbia fishing industry during the 1970s boom period. These programs in the form of tax incentives, loans, and grants to capital for the purpose of industrial expansion, were issued during a period of economic optimism with the hope of engendering rapid growth in the fishing industry. In some cases these programs guaranteed chartered bank loans and operated in tandem with Japanese investment to bring about modernization, expansion, and overcapitalization.

We have investigated government financial programs present in the British Columbia fishing industry between 1969 and 1982 emphasizing the boom years of the 1970s. It was subsequently shown that government grants, tax incentives, and loans to industry and fishermen, in fact exacerbated the problem of overcapitalization. These government programs were extended to the industry to facilitate "capital accumulation", and to stabilize incomes and employment in the fishing industry and in the province of British Columbia. The theoretical hypothesis that the government acted in the interests of "accumulation and

legitimation" has been useful in explaining government motives in implementing programs that contradicted the original Davis Plan, thereby adding to economic waste, overcapitalization and crisis.

In response to boom years in the 1970s marked by short-term international demand, the government encouraged a period of industrial expansion. This it did, in conjunction with both foreign financing and chartered bank financing, both relatively non-existent in the industry before 1972. Both private and public sector judged the boom incorrectly as having lasting benefits for the British Columbia salmon and herring industries Government programs therefore provided guarantees for bank loans, and in some cases Japanese debentures, thus adding far more capital to the sector than was warranted, considering that landings remained the same.

Although some programs represented only 'legitimation' policies, such as the Indian Fishermen's Emergency Program, conceived to protect the Indian fishery against losses, most programs included elements of both 'legitimation and accumulation'. An example of this is the Special Arda grants to processors intended to create jobs for rural northern areas. In one case at least, it was shown that Special Arda, also served an accumulation function, because it combined with chartered bank financing, Japanese financing, and private shareholders loans to accommodate capital expansion in the Central Native Fishermen's Co-op in Bella Bella.

Programs that fell under the general heading of legitimation programs were: 1. The Department of Fisheries and Oceans, a) Fishing Vessel Construction Assistance Program, b) The Fishermen's Improvement Loan Act, c) the Fish Chilling Assistance Program; 2. The Department of Indian and Northern Affairs, a) Indian Fishermen's Assistance Program, b) Indian Fishermen's Emergency Program, c) The Northern Native Fishing Corporation; 3. The Department of Regional Economic Expansion, a) Special Arda. All programs offered under this heading were offered to provide assistance to the labour force.

Programs that fell under the general heading of accumulation programs were: 1. The Department of Regional Economic Expansion, a) Regional Development Incentive Act, b) Agricultural Rural Development Subsidy Agreement, Parts I and IV, c) The Assistance to Small Business Enterprise Program. 2. The Department of Industry Trade and Commerce, a) subsidies to shipyards to build large vessels. 3. British Columbia Development Corporation, a) Low interest Loan Assistance Program, b) Business Assistance Program. 4. B.C. Ministry of Economic Development, a) Technical Assistance Program. 5. Federal Business Development Bank, a) loans program. 6. The Department of Revenue and Taxation, a) 33-1/3 per cent capital cost allowance on large vessel construction. All programs listed under this heading supplied subsidies, loans, or tax incentives for industrial development.

Many programs researched, were found to be counterproductive to the development of an efficiently managed fishing industry. Together both the "legitimation" policies extended to labour, and the "accumulation" policies extended to capital, have added to the overcapitalization, and excess capacity historically characteristic of the sector. Programs were extended through a plethora of departments and agencies with relatively low levels of interdepartmental planning and communication. For this reason incentives for growth were extended to the harvesting sector inspite of the Department of Fisheries and Oceans recognition of excess capacity, and the "capital stuffing" problem.

Inspite of the 1969 intentions of the D.F.O. to remove capacity from the sector, the opposite came about in the ten years that followed. As an indication of unclear policy objectives, the thesis showed that in constant dollar terms capital investment in the fleet increased by some \$500 million between 1969 to 1982. Due to ad hoc measures, to respond to fishermen's lobbies, the D.F.O. increased its fishermen's improvement loans from \$50,000 to \$75,000 in 1978, in full knowledge of the "capital stuffing" problem. This occurred during the peak of the bcom when many fishermen wished to become more efficient. Through this program fishermen's loans were increased to a critical level, a move that was further encouraged by large tax incentives. It is likely that

the interests of east ccast, west coast uniformity, in an attempt by the D.F.O. to promote national "fairness".

It is clear that programs to both 'labour' and 'capital' in the British Columbia salmon and herring industries reflect little clarity of objectives for fisheries on the part of the federal government. Programs were implemented on an ad hoc basis in response to economic optimism with little thought to long-term results, or historical problems. Starting in 1980 with the post boom slump, the destructive effects of these methods became apparent.

Overcapitalization in the processing sector presents a situation parallel to that in the harvesting sector. This excess capacity was also to a lesser extent aided by government grants and loans through departments and agencies such as the Department of Regional Economic Expansion and the Federal Business Development Bank. The balance sheets of companies outside the lower mainland show less than \$5 million equity to \$60 million in assets in 1982. These companies were financed during the boom through a combination of foreign, public, chartered bank, and private loans (Interview, company directors, 1983).

Starting in 1980 the fishery experienced losses, exaggerated by an unreasonably high level of debt financing across the industry. Almost all companies, and fishermen borrowed money from chartered banks, public, and private sources in order to expand during the boom. This expansion was aided by

the public incentives mentioned. Deterioration of financial strength in the industry, was brought about largely by investment in assets without any corresponding increase in equity. This brought about the resulting financial crisis, and receiverships after 1979, when fishermen and processors were forced to pay high interest rates on large loans in a falling market situation.

After 1980 the industry experienced a small degree of recovery, but prices generally levelled out at levels a lot lower than in the 1970s. As the slump conditions continued into 1981 and 1982, high interest rates caused the unpayed debts to accumulate at a quick rate. After 1980, many firms started to flounder and many vessels were repossessed by the chartered banks. By 1980 to 1981, the government was left wondering what to do to relieve the disastrous situation.

The federal government D.F.O. therefore commissioned Peter Pearse, a U.B.C. economist to make an investigation of the British Columbia fisheries. Pearse's main conclusion in 1982 was that the industry was overcapitalized, and required a buy-back program, for which he made several recommendations. He furthermore, felt that as the government contributed to the problem it owed the industry a solution (Pearse, 1982). It was also rumoured that a more comprehensive data base for west coast fisheries was being devised for 1982-83, so the D.F.O. could deepen its comprehension of the British Columbia fishing industry.

In conclusion, it can be judged that the government's method of dealing with the industry between the years 1969 and 1980, were contradictory, wasteful, and counterproductive in light of the market collapse of 1980. The resulting addition of capacity that took place after 1969 was partly the product of ad hoc policy measures, a low level of understanding of the industry, and excessive optimism regarding a short-term boom on the part of both the public and the private sector.

Although the 1980's crisis was brought on by factors other than government intervention, such as currency differentials, international competition, botulism scares, excessive numbers of pink salmon, and high interest rates, and high labour costs compared to Alaska, the effects of the slump were intensified by the government's mismanagement of fisheries. The joint contradictory processes of "accumulation and legitimation" are helpful in explaining the role of government in the management of the B.C. salmon and herring industries. Financial incentives to both capital and labour stimulated the increase of debt to a critical level, and encouraged the increase of excess capacity.

Summary

The thesis has argued that the government fulfilled the joint contradictory processes of "accumulation and legitimation" through the extension of financial programs to the British Columbia fishing industry, therefore encouraging increasing debt

and excess capacity. We have shown that inspite of the premises of the Davis Plan in 1969 which advocated a withdrawal of fishing capacity, the opposite took place with the help of government. The resulting overcapitalization precipitated a grand-scale crisis experienced by the fishing industry starting in 1980. It was shown that government mismanagement policies in the fishing industry after 1969 were ad hoc policies in response to a price boom, that acted to increase the government's role as an accumulator and a legitimator. In light of "capital stuffing" it appears that the various government programs, including the Davis Plan, did not improve existing conditions in the fishery after 1969. Instead the Davis Plan combined with conflicting government policies and factors exogenous to the fishing industry to bring about "capital stuffing", greater inequalities in the harvesting sector, unrealistically high debts, and ultimately crisis conditions.

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