

853

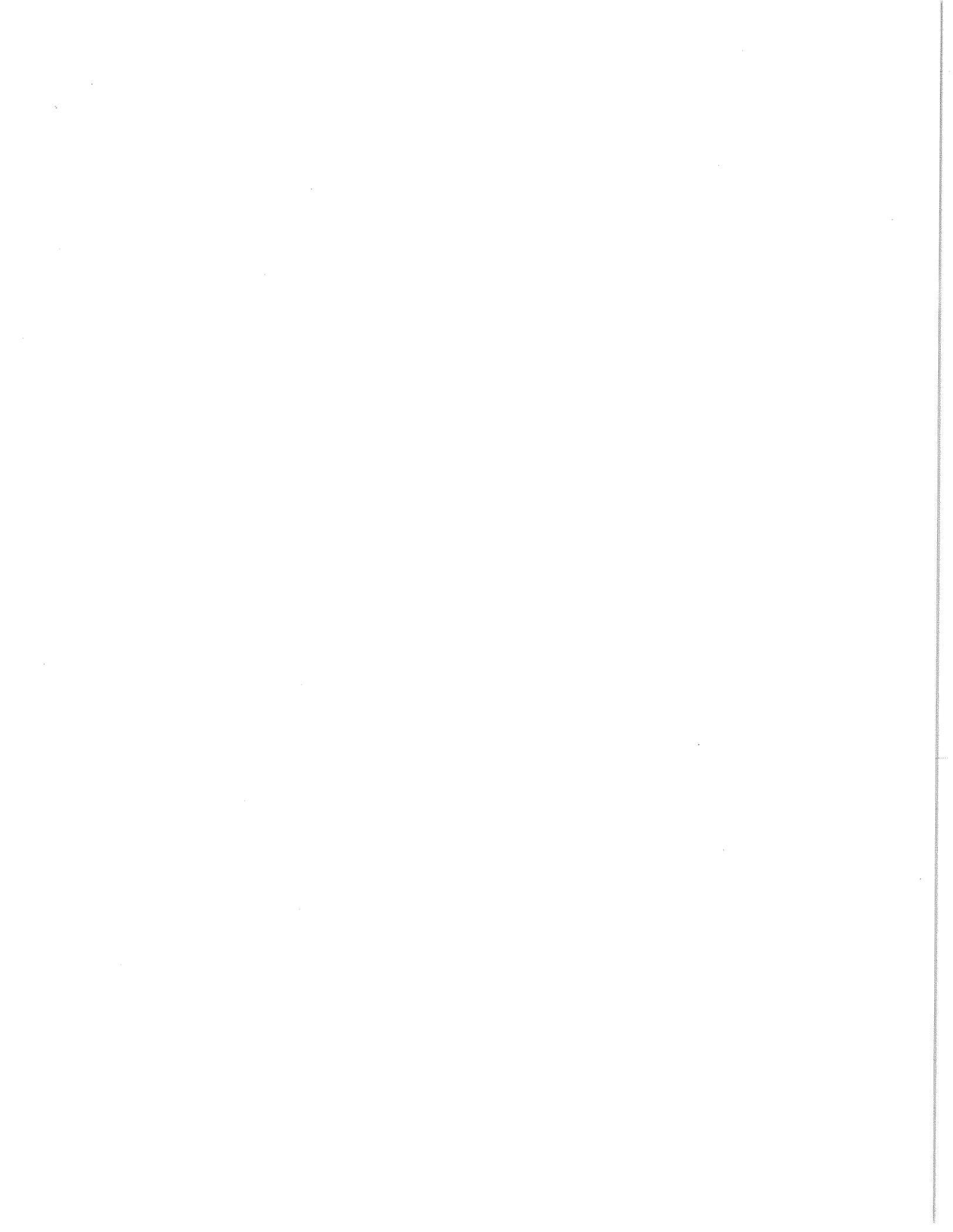
## **The Alaska Salmon Industry and Japan**

presented at a forum on  
the Alaska Fishing Industry and Japan  
Anchorage Museum of History and Art  
Anchorage, Alaska  
Thursday, September 23, 1993

by

Gunnar Knapp  
Professor of Economics  
Institute of Social and Economic Research  
University of Alaska Anchorage  
3211 Providence Drive  
Anchorage, Alaska 99508  
(907) 786-7717  
(907) 786-7739 (fax)







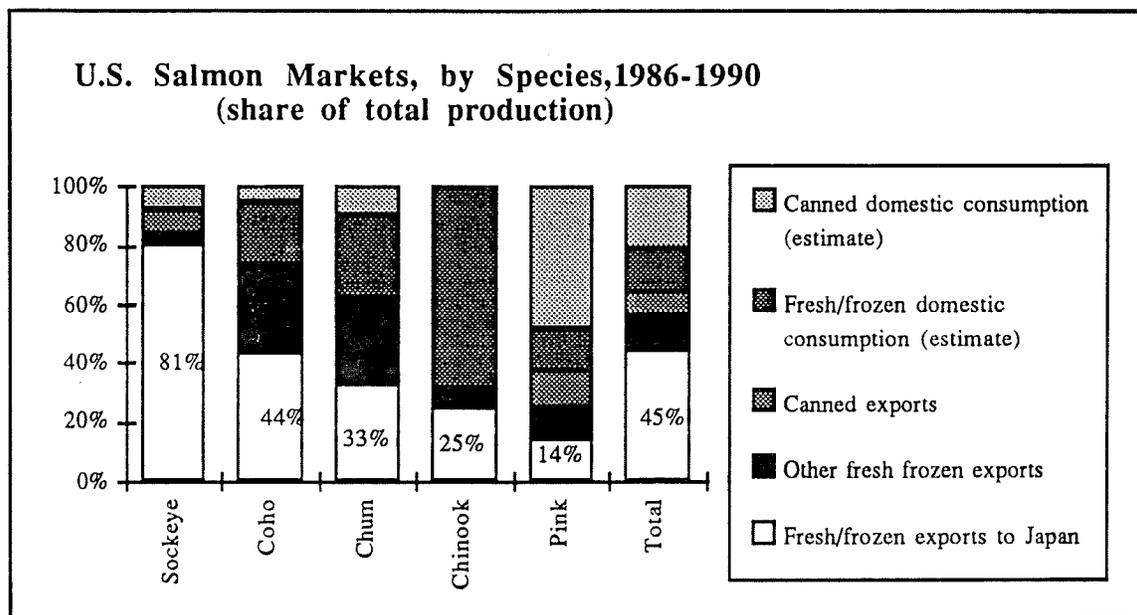
## Introduction

There are four main points I want to make tonight:

1. The Japanese salmon market is very important to Alaska.
2. Fundamental changes are going on in the Japanese salmon market.
3. For reasons which are subject to debate, the Japanese aren't willing to pay as much for our salmon as they used to be.
4. If we're going to adapt to the changes in the Japanese salmon market, and make the best of the situation we face, then the Alaska salmon industry--fishermen, processors and government--needs to learn more about Japan and the Japanese salmon market.

### 1. *The Japanese salmon market is very important to Alaska.*

Japan is Alaska's single most important salmon market. Of all the salmon harvested in Alaska, about 45 percent by volume is exported to Japan, mostly as frozen salmon. Between 1986 and 1990, fresh/frozen exports to Japan accounted for about 81 percent of sockeye production, 44 percent of coho production, 33 percent of chum production, 25 percent of chinook production, and 14 percent of pink production.<sup>1</sup>



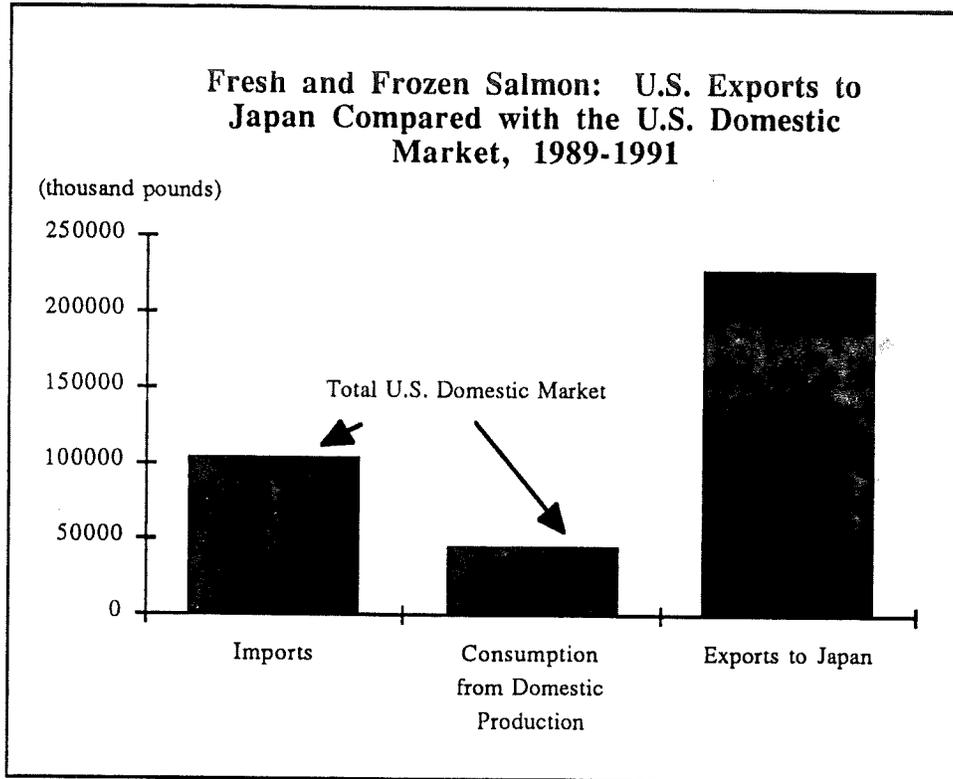
Japan accounts for about four-fifths of U.S. exports of fresh and frozen salmon. During the period 1987-1991, Japan accounted for 78 percent of U.S. exports of fresh and frozen salmon by volume, and 82 percent of U.S. exports by value. Japan accounts for almost all fresh and frozen sockeye salmon exports, and well over half of exports of other species.

<sup>1</sup>The data presented in this talk are from a wide variety of sources. For detailed information on sources, please contact Gunnar Knapp, ISER/UAA, 3211 Providence Drive, Anchorage, Alaska 99508; (907) 786-7717 (phone); (907) 786-7739 (fax). Sources for the graphs are listed at the end of this paper.



It wasn't always that way. In the mid 1970's, the United States exported less than 50,000 pounds of fresh and frozen salmon per year to all countries. In the past few years, we have exported well over 150,000 pounds of frozen sockeye salmon to Japan alone.

There's another way to put the importance of the Japanese salmon market in perspective. Our exports of fresh and frozen salmon to Japan are much larger than the entire United States market for fresh and frozen salmon. If we wanted to sell just half of what we sell to Japan in the United States, we would have to approximately double the size of the United States market.



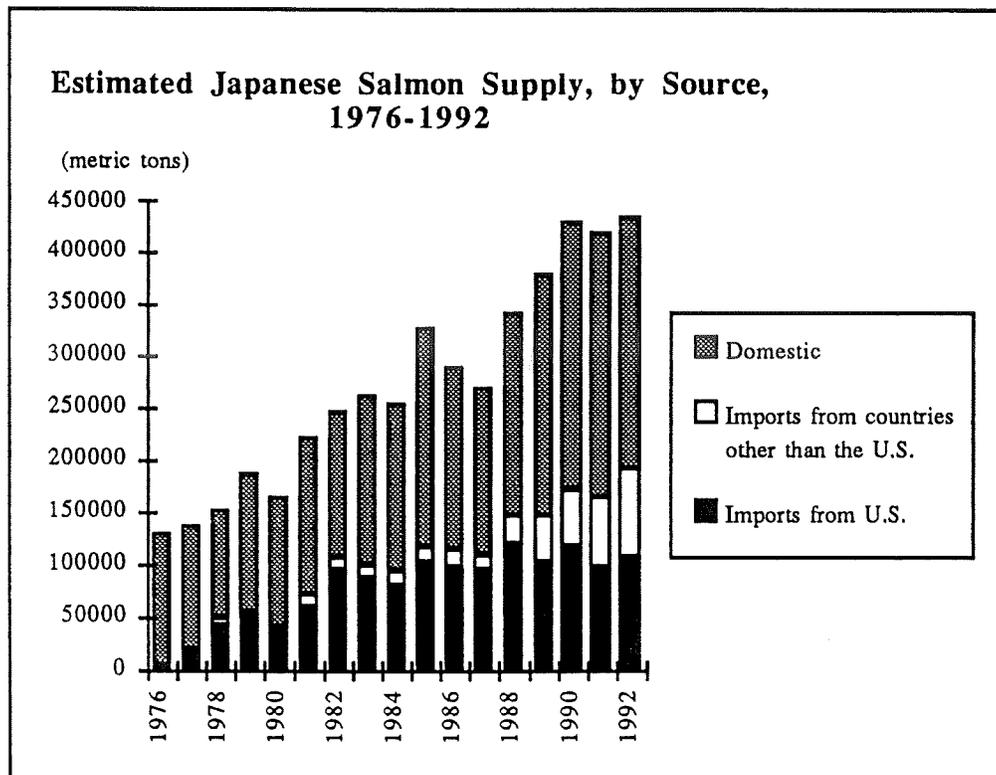
**2. Fundamental changes are going on in the Japanese salmon market.**

The Japanese salmon market, and Alaska's role in it, changed dramatically in the late 1970's. It's been changing again in the early 1990's.

The Japanese market has grown very dramatically, from less than 150 thousand metric tons in the mid-1970s to more than 400 thousand metric tons in the early 1990s. But this growth began to level off around 1990.

The sources of supply to the Japanese market have undergone two major changes. Japanese domestic harvests have grown, but the composition of supply has changed. Japanese high-seas harvests, which used to be very large, have dwindled since the imposition of 200-mile exclusive economic zones in 1976. But Japanese harvests from chum hatchery runs and farmed coho have grown very rapidly.





After the establishment of 200 mile exclusive economic zones in the mid-1970's, imports became an increasingly important source of salmon for Japan. Large fishing companies could no longer rely on their own harvests as a source of supply. Instead, they had to purchase salmon from suppliers in other countries. The volume of salmon imported to Japan grew very rapidly in the late 1970s and early 1980s. To help guarantee access to supply, some Japanese fishing companies invested in processing plants in Alaska.

Until the late 1980s, Alaska and Canadian wild salmon were the only significant sources of high-quality salmon available to Japan, and Alaska and Canada accounted for an overwhelming share of Japanese salmon imports. That has changed. Japanese processors and consumers have begun to treat farmed Chilean coho as a viable substitute for sockeye. In the past few years, imports from Chile have grown substantially. Chile and other salmon farming countries have the potential to vastly expand their production and their exports to Japan. Japanese imports of salmon from Russia have also grown rapidly.<sup>2</sup>

As a result of these changes, the U.S. import share has fallen substantially, from 85 percent in 1987 to less than 60 percent in 1992. We have suffered a very substantial decline in our market share in just a few years.

New patterns of supply are not the only changes in the Japanese salmon market. Changes are also happening in consumer demand. Japanese consumers, like consumers all over the world, are increasingly demanding higher quality and more variety in the food products that they eat. They are beginning to eat more meat products.

<sup>2</sup>I personally believe that the potential for further rapid growth in imports from Russia is less than many people fear, because of the political and economic problems Russia is having.

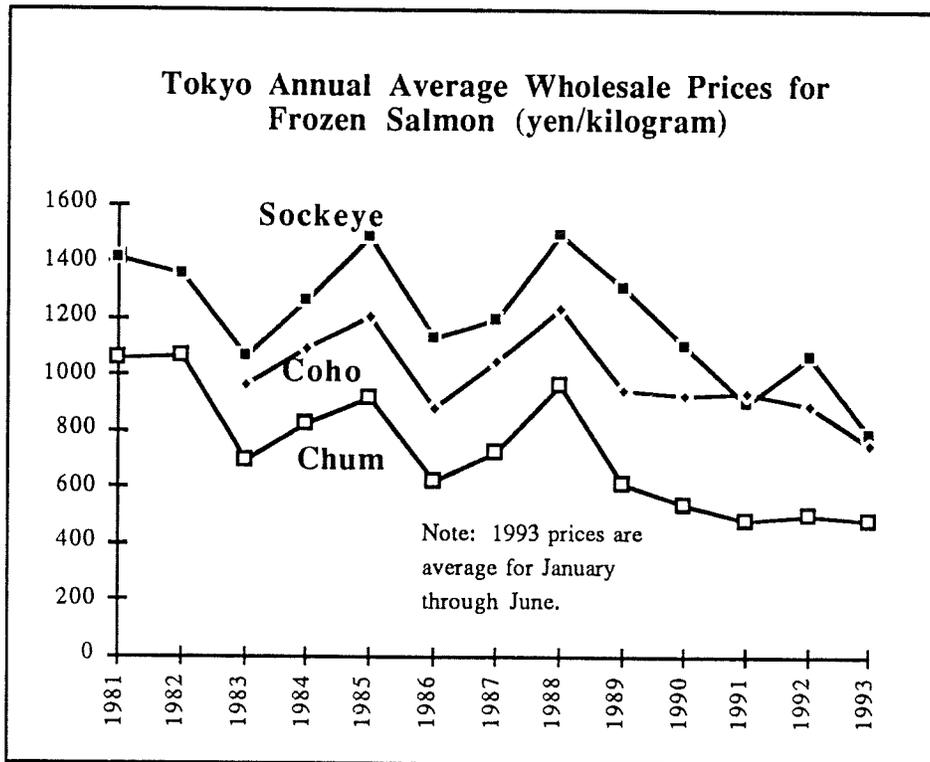


These changes in supply and demand represent fundamental changes in the Japanese salmon market.

3. *For reasons which are subject to debate, the Japanese aren't willing to pay as much for our salmon as they used to be.*

Next I'd like to talk about trends in Japanese salmon prices. Because my time is short, I'm just going to talk about prices of frozen salmon.<sup>3</sup>

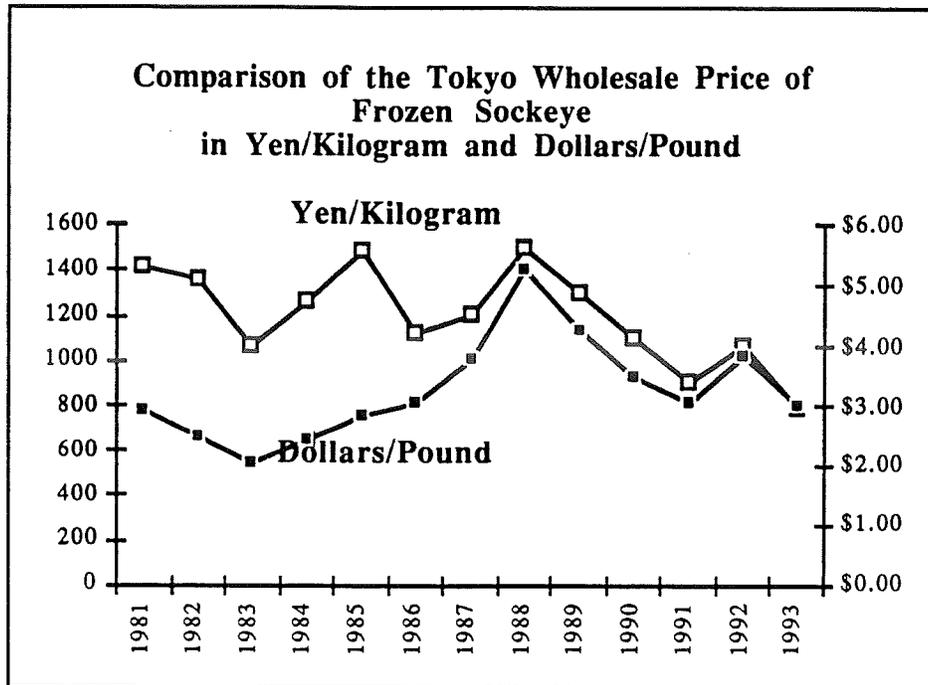
Let's look at the wholesale prices of frozen salmon at the Tokyo wholesale market, which give an indication of the general trends in wholesale prices in Japan. Expressed in yen, these wholesale prices have fluctuated up and down several times since the early 1980's. Wholesale prices fell sharply between 1988 and 1991. They rose slightly in 1992 and then fell again sharply in 1993. At present, they are at their lowest levels for at least the past decade.



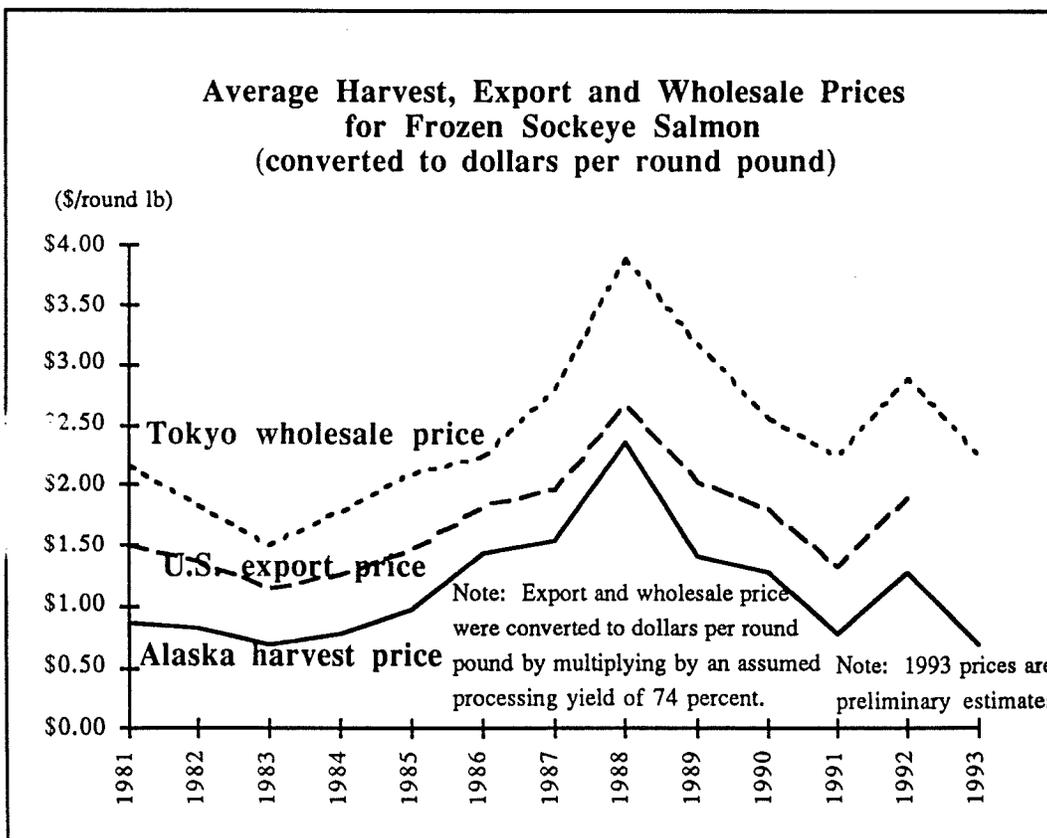
If we next look at Tokyo wholesale prices in dollars we get a different picture. The very rapid appreciation of the yen during the period 1986-1988 caused the price expressed in dollars to rise very sharply. The further strengthening of the yen in 1993 has dampened the fall in wholesale prices expressed in dollars, but by no means offset it, because the percentage fall in prices has been much higher than the percentage rise in the value of the yen.

<sup>3</sup>See the note at the end of this paper for a brief discussion of why it is reasonable to focus primarily on frozen salmon in discussing price trends.





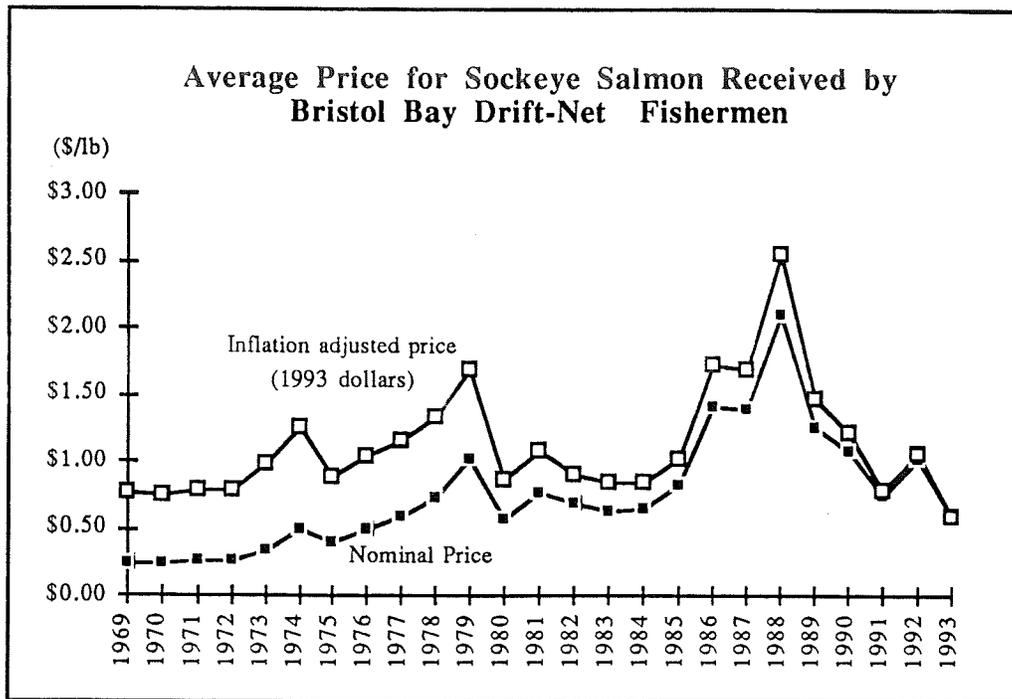
If we compare the Japanese wholesale price expressed in dollars with the U.S. export price and the Alaska harvest price, we see that there has been a very obvious relationship in the trends. When the Japanese wholesale prices went up, Alaska fishermen received higher prices. When the Japanese wholesale prices fell, Alaska fishermen received lower prices.





I am not claiming that there is an exact relationship between the two prices. Nor is there any reason to expect there to be. My only point is that there is an obvious relationship. In particular, as Japanese wholesale prices have fallen, the prices paid to fishermen have fallen by roughly similar amounts. But the *percentage* change in prices has been much higher for fishermen.

The effect of the price decline on fishermen has been severe. The sockeye salmon prices received by Bristol Bay fishermen, adjusted for inflation, were lower in 1993 than they have been at any time since the late 1960's.



The reasons for the decline in Japanese wholesale prices and Alaska harvest prices are subject to debate. Almost everyone agrees that the increased supply of salmon on the Japanese market, combined with changes in demand which have been exacerbated by the current recession, have contributed to the decline in prices. Japanese fishermen are also experiencing sharply lower prices.

Many Alaskans, however, are convinced that supply and demand is not the whole answer. Many Alaskans believe that the fall in prices is--at least in part--the result of a conspiracy by large Japanese companies to reduce competition and drive prices down. This theory was endorsed in an report issued this past spring by an Alaska Assistant Attorney General about his investigation of potential price-fixing in the Bristol Bay salmon fishery.<sup>4</sup>

4. *If we're going to adapt to the changes in the Japanese salmon market, and make the best of the situation we face, then the Alaska salmon industry--fishermen, processors and government--needs to learn more about Japan and the Japanese salmon market.*

<sup>4</sup>My personal opinion is that the report did not provide any evidence of such a conspiracy. However, my purpose in this talk is not to debate this issue. Interested readers may contact me to obtain a detailed written critique of the Assistant Attorney General's report.



What should we do about falling prices and our declining market share in the Japanese salmon market? Should we improve the quality of our salmon? Should we pay more for Alaska salmon promotions in Japan? Should we do more processing--valued added production--here in Alaska? Should we form a salmon OPEC, and try to force the Japanese to pay more? Or do we have to learn to live with lower prices?

Unfortunately, most of us--not only fishermen, but processors, state and federal officials, journalists and professors too--don't really know enough about the Japanese salmon industry to really answer these questions. What has been happening to salmon prices and our Japanese market is alarming. But I believe it's also alarming how poorly we understand our most important market, and how little we have been trying to understand it.

How do you feel about people who have never been on a fishing boat, but who can tell you all the problems caused by fishermen--and don't trust your opinion because you're a fisherman? How do you feel about people who are experts on wildlife management because they're seen "Dances with Wolves?" Unfortunately, that's what a lot of the recent debate about the Japanese salmon market reminds me of. How many of the people expressing opinions have any real knowledge of how the Japanese seafood industry actually works? Some. But too many seem to have based their opinions more on reading "Rising Sun" than on actual information about how the Japanese salmon industry really works.

We don't all need to be experts on the Japanese salmon industry. But we ought to get our information from people who are. It seems to me that experts should speak Japanese, or have access to someone who can translate well for them. And experts should have spent a fair amount of time in Japan in work related to the fishing industry. You don't find out what's going on in the Japanese salmon industry in Naknek, or Anchorage, or Seattle. You find out in Japan.

I don't think we have very many experts on the Japanese salmon industry in Alaska. There are a few fishermen and probably a number of processors who pay close attention to what is happening in the Japanese salmon industry. But most of these people are concerned, reasonably enough, primarily enough with their own businesses rather than explaining to the rest of the industry what is going on.

Within state government, for a number of years the Alaska Office of International Trade has published a free weekly fish report about Japanese seafood market conditions, prepared by a state employee in Tokyo who tracks market conditions. Private industry newsletters, such as *Bill Atkinson's News Report*, also provide detailed information about the Japanese market. But our understanding of the Japanese market needs to extend well beyond the information which can be provided by these newsletters if individual fishermen and processors, or the industry as a whole, are to develop sound strategies for dealing with the growing challenges we face in our Japanese market.

We need to understand how the Japanese do business. We need to understand what kinds of salmon products they want, and what our competitors are able to provide. We need to understand what drives prices, and how prices are likely to change in the future. And then we need to use this information and work hard to sell into what will become an increasingly competitive market--one in which we may have to run faster and faster just to stay in the same place.

I don't think we've been doing our homework about the Japanese salmon industry. When prices were high, we thought we didn't need to. When prices are low, perhaps we think we can't afford to. But I don't see how we can afford not to.



### Suggestions for further reading

For those interested in further reading about the Japanese Salmon Market, the Department of Commerce report *The Japanese Salmon Market: An Introduction for Alaskans*, is available from the Department of Commerce and Economic Development, Division of Economic Development, P.O. Box 110804, Juneau, Alaska 99811-0804 (telephone 907-465-2017).

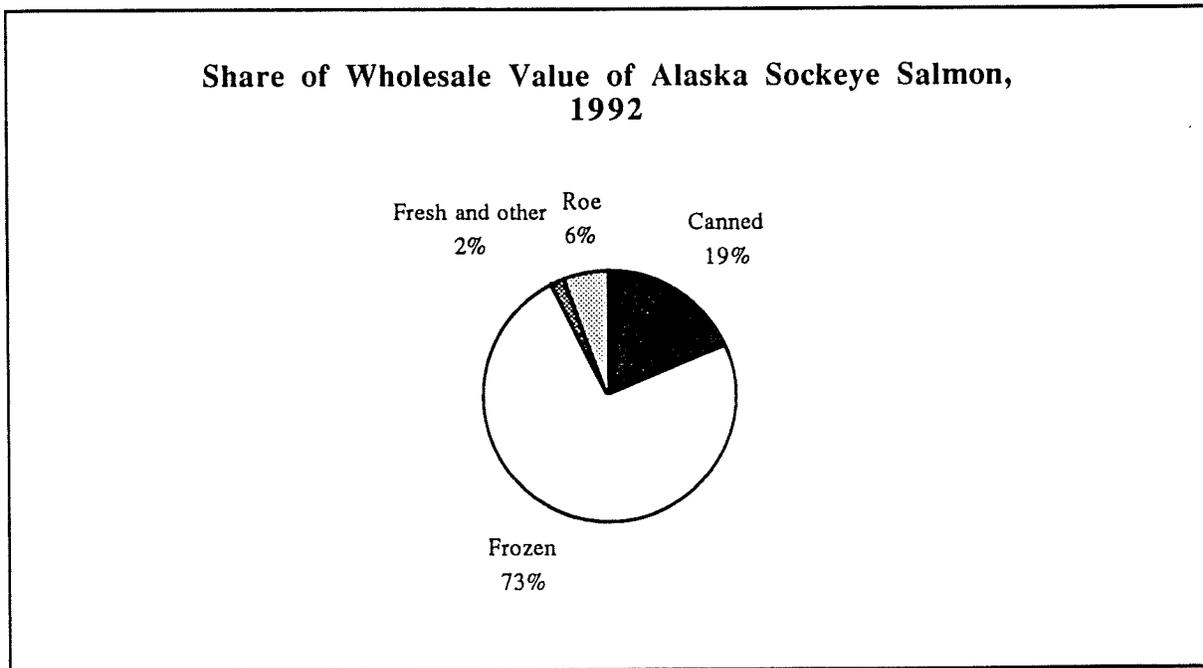
For information about the State of Alaska's Weekly Fish Report, contact the Alaska Office of International Trade at 3601 C Street, Suite 798, Anchorage, Alaska 99503 (telephone 907-561-5585).

For information about *Bill Atkinson's News Report*, write to BANR, 5507 N.E. 58th Street, Seattle, Washington 98105-2111 (telephone 206-525-3235).

### What about salmon roe?

Some Alaska fishermen have told me that I should also be talking about the prices and the value of the salmon roe which we sell to Japan. They're right: yes, I should. But I don't have much time tonight, and I don't have very good information on the salmon roe market or prices.

In addition, sockeye salmon roe represented only 6 percent of the wholesale value received by Alaska processors in 1991, while frozen salmon accounted for 73 percent. This is why I would argue that trends in the price of frozen salmon are much more important in determining the price of salmon for Alaska fishermen.





## Notes on Data Sources for the Graphs for this Talk

**U.S. Salmon Markets, by Species, 1986-1990.** These derivation of these estimates is presented in detail in Gunnar Knapp, *Alaska Salmon Markets and Prices*, Anchorage, Institute of Social and Economic Research, May 1992, pages A-23, A-24 and A-27. The data and the graph are in ISER EXCEL file *US MARKETS*.

**Fresh and Frozen Salmon: U.S. Exports to Japan Compared with the U.S. Domestic Market, 1989-1991.** The import and export data are from National Marine Fisheries Service statistics published annually in NMFS' *Fisheries of the United States*. Consumption from domestic production is my own estimate based on harvests, canned production, exports, and assumed yields in canning and fresh/frozen processing. Because this estimate is very sensitive to yield assumptions, it should be considered only a rough approximation. The data and the graph are in ISER EXCEL file *US MARKET ANALYSIS*.

**Estimated Japanese Salmon Supply, by Source, 1976-1992.** Data for this graph are from several sources. Data for the years 1976-1985 are from Yuko Kusakabe and James Anderson, *The Japanese Seafood Market: Salmon* (prepared in 1989 for the Canadian Department of Fisheries and Oceans, Report No. 56 of the Economic and Commercial Analysis Directorate), page 37. The sources for domestic harvests and total imports since 1986 are estimates for the year running from May-April published annually by the Japanese fisheries newspaper *Hokkai Keizai Shinbun* and reprinted in *Bill Atkinson's News Report*. U.S. imports since 1987 for this period were estimated by multiplying total imports by the share of U.S imports in total Japanese imports of fresh and frozen during the corresponding calendar year. The U.S. share used to adjust the 1992 figure was based on imports during the period January-October of 1992. The data and the graph are in ISER EXCEL file *JAP SUPPLY BY SOURCE SINCE 76*.

**Tokyo Annual Average Wholesale Prices for Frozen Salmon.** The original source is the Tokyo Metropolitan Government's *Central Wholesale Market Report*. Data from this report are reprinted in Bill Atkinson's News Report and the Alaska Office of International Trade's *Weekly Fish Report*. The average prices for 1993 are calculated by dividing the total value sold in the first six months of the year by the total volume sold. The data and the graph are in ISER EXCEL file *TSUKIJI ANNUAL DATA*.

**Comparison of the Tokyo Wholesale Price of Frozen Sockeye in Yen/Kilogram and Dollars/Pound.** For all years except 1993, the price in dollars per pound was calculated as the price in yen/kilogram divided by the annual average exchange rate divided by 2.2064 (one kilogram is 2.2064 pounds). For the first six months of 1993, the total dollar value of sales in each month was calculated using the exchange rate for that month. The total dollar value for all six months was then divided by the number of pounds sold. The data and the graph are in ISER EXCEL file *TSUKIJI ANNUAL DATA*.

**Average Harvest, Export and Wholesale Prices for Frozen Sockeye Salmon.** The wholesale prices are from the sources described in the previous two graphs, adjusted to dollars per round pound by multiplying by 74 percent. The export prices are based on total U.S. export value divided by total U.S. export volume for frozen sockeye, as calculated from export data on U.S. Bureau of the Census data tapes. The harvest price data for years through 1991 are from the Commercial Fisheries Entry Commission. The harvest price data for 1992 are preliminary estimates of the Alaska Department of Fish and Game. An average harvest price of 70 cents per pound was assumed for 1993 (Bristol Bay fishermen received an average price during the season of 60 cents per pound). The data and the graph are in ISER EXCEL file *SOCKEYE ANNUAL PRICES ANALYSIS*.

**Average Price for Sockeye Salmon Received by Bristol Bay Driftnet Fishermen.** Harvest price data for 1969-1991 are from the Commercial Fisheries Entry Commission. Data for nominal price in 1991 is based on the Alaska Department of Fish and Game's season summary for the Bristol Bay salmon fishery. A harvest price of 60 cents for 1993 was assumed based upon press accounts. Inflation-adjusted prices were calculated using the Anchorage consumer price index. Prices are adjusted to 1993 dollars. The data and the graph are in ISER EXCEL file *Bristol Bay Driftnet EV Prices*.

**Share of Wholesale Value of Alaska Sockeye Salmon, 1992.** Source: Alaska Department of Fish and Game, preliminary estimates of wholesale value by product and species. Based on processor annual reports. The data and the graph are in ISER EXCEL file *SOCKEYE PRODUCTION VALUE ANALYSIS*.

