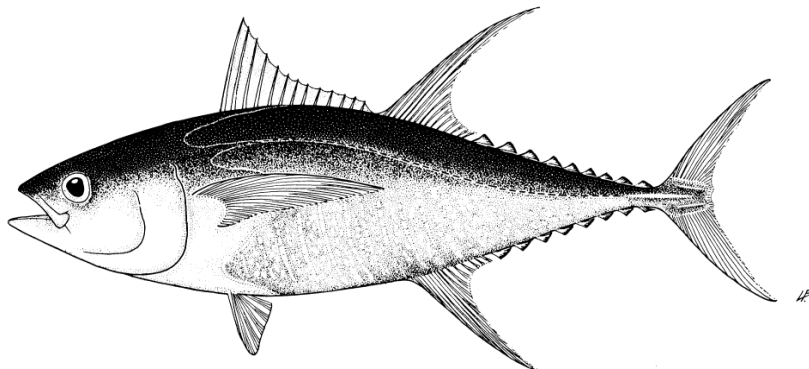


GEN-2



ECONOMIC OVERVIEW OF THE TUNA FISHERY



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Honiara, Solomon Islands

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WORKING PAPER #.#

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Introduction

1. This report, presented each year to SCTB, provides an overview of tuna catches in the western and central Pacific and price trends on various world tuna markets during 2002. In addition long term price series and estimates of catch values for the purse seine fishery are also provided.

The Purse Seine Fishery

Catch and vessel numbers

2. The preliminary estimate of the 2002 purse seine catch is 1,124,169 metric tonnes (Mt).¹ This represents an increase of approximately 3 per cent compared to the estimated 2001 catch of 1,088,771Mt and is the second highest catch ever recorded, surpassed only by catches in 1998. The estimated breakdown by species of the 2002 catch is as follows: skipjack 936,321Mt (up by 11 per cent from 2001), yellowfin 166,067Mt (down 25 per cent) and bigeye 21,781Mt (down 19 per cent).

DWFN Fleets

3. Of the four major DWFN fleets preliminary estimates for 2002 indicate that catches for the fleets of Taiwan, Korea and US increased while the catch of the Japanese fleet declined compared with 2001. Estimated 2002 catches for the fleets of the Philippines and Spain were significantly lower than 2001 catches while the catch of the Chinese fleet increased.

4. The largest increase in catch amongst the DWFNs was that of the Taiwanese fleet which caught an estimated 258,126Mt an increase of 12 per cent on 2001 levels. At this level the catch of Taiwan's fleet was only marginally below the record level of 1998. The US fleet's catch in 2002 increased by around 3 per cent to 119,228Mt with a 14 per cent rise in catch per active vessel more than offsetting a 9 per cent fall in the number of active vessels² from 32 in 2001 to 29 in 2002. While US fleet's catch rose in 2002 it was still significantly lower than the levels seen throughout the 1990s. The catch of the Korean fleet rose marginally by 1 per cent to 180,087Mt. The catch of the Japanese fleet in 2002 at 195,384Mt was down by 11 per cent compared with 2001 and at its lowest level since 1996

5. The estimated catch of both the Filipino and Spanish in 2002 were down significantly on 2001 levels. The catch of the Filipino fleet is estimated to have fallen by 42 per cent to 19,192Mt. The catch of the Spanish fleet continued to decline in 2002 with catch estimated at 214Mt. The Spanish fleet's catch in 2000 was estimated to be 12,898Mt.

6. In 2002 there were three Chinese vessels active in the fishery up from one in 2001. This increase in vessels numbers was accompanied by a similar rise in catch with estimated catch levels in 2002 at 9,281Mt up from 3,090Mt in 2001.

Regional vessels

7. According to licensing data made available to the Secretariat there are currently 51 vessels categorised as domestic or locally based foreign vessels registered on the FFA Regional Register of which 45 are flagged in FFA member countries. Vanuatu has the most number of flagged vessels at 18 followed by the Federated States of Micronesia with 8, Papua New Guinea 7, Marshall Islands 6, New Zealand 4 and Solomon Islands 2. In addition to the seven vessels flagged in Papua New Guinea there are currently 24 vessels based there that are categorised as locally based foreign vessels, including 9 from Vanuatu.

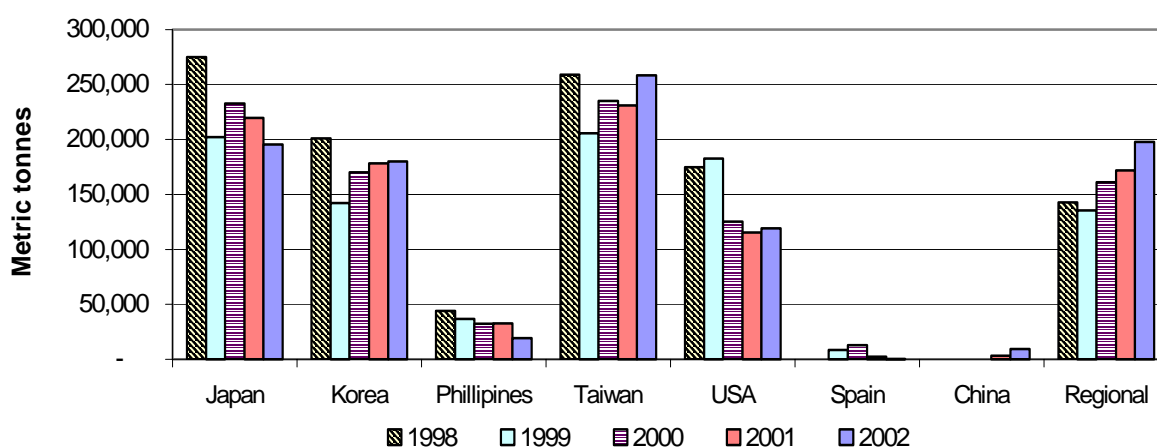
¹ All catch data presented in this paper are based on preliminary estimates supplied by the Secretariat of the Pacific Community (pers. com. Tim Lawson).

² The number of active vessels refers to the number of vessels that fished during the relevant year and will not necessarily be same as the number of vessels that hold licences to fish within the region.

8. The preliminary catch estimate for 2002 for regional vessels is 197,629Mt.³ This represents an increase of approximately 25,832Mt or 15 per cent on the 2001 catch.

9. The fleet flagged or based in Papua New Guinea accounted for around 60 per cent of the regional fleets' catch in 2002 with an estimated catch of 119,668Mt an increase of 26,515Mt or 28 per cent on its 2002 catch. The Marshall Islands fleet landed the second highest catch taking 38,242Mt an increase of 3,198Mt or 9 per cent on the 2001 catch. The Federated States of Micronesia fleet's catch increased by 741Mt or 4 per cent to 18,012Mt, while the catch of Kiribati's fleet increased by less than 1 per cent to 4,660Mt. The Solomon Islands' fleet was the only one to record a decline in catch, down by 37 per cent to 8,080Mt.

Figure 1: Purse seine catch by flag 1998-2002



World market prices

Skipjack

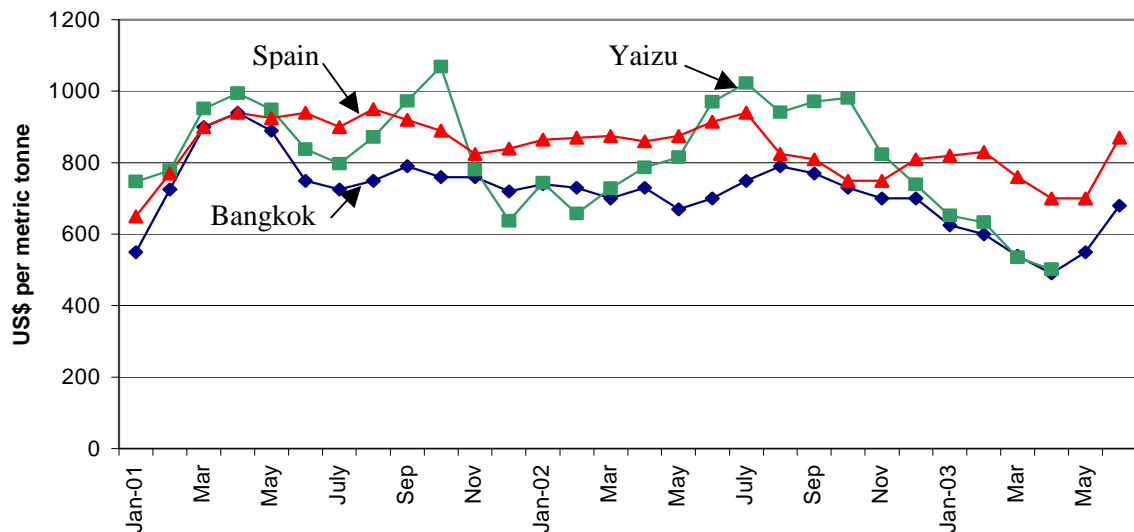
10. Bangkok skipjack prices trended downward between January and May of 2002 with prices (c&f) for 4-7.5lb skipjack falling from US\$740-750/Mt in mid-January to US\$650-670/Mt in May. Prices then recovered reaching US\$780-800/Mt in late July before once again declining from September onwards and ending 2002 at around US\$700/Mt. In the period to April 2003 prices continued to fall reaching a low of around US\$480/Mt toward the end of April. Prices then began to recover and at the end of June were around US\$720/Mt.

11. Skipjack prices in Spain and at Yaizu (Japan) increased through much of the first half of 2002. Prices of purse seine caught skipjack at Yaizu⁴ rose from an average of US\$744/Mt in January to an average of US\$1,023/Mt in July, while prices in Spain (4-7.5lbs, c&f) rose from around US\$850-860/Mt at the beginning of January to US\$950-965/Mt in the first half July. This trend was reversed in the 2nd half of the year with prices on a downward trend. Prices of purse seine caught skipjack at Yaizu during December averaged US\$740/Mt marginally below the average price for January. Prices in Spain (4-7.5lbs, c&f) reach a low for the year in November at around US\$740-750/Mt, a level not seen for almost 2 years, before recovering in December to finish the year above US\$800/Mt.

³ Includes catch from NZ vessels operating in NZ EEZ that are not registered on the FFA Regional Register. 2002 estimates for NZ fleet not available so are assumed to be the same as for 2001.

⁴ Yaizu prices presented in this report are obtained in JPY and converted to US\$ based on inter-bank exchange rates as given by www.oanda.com/convert/fxhistory.

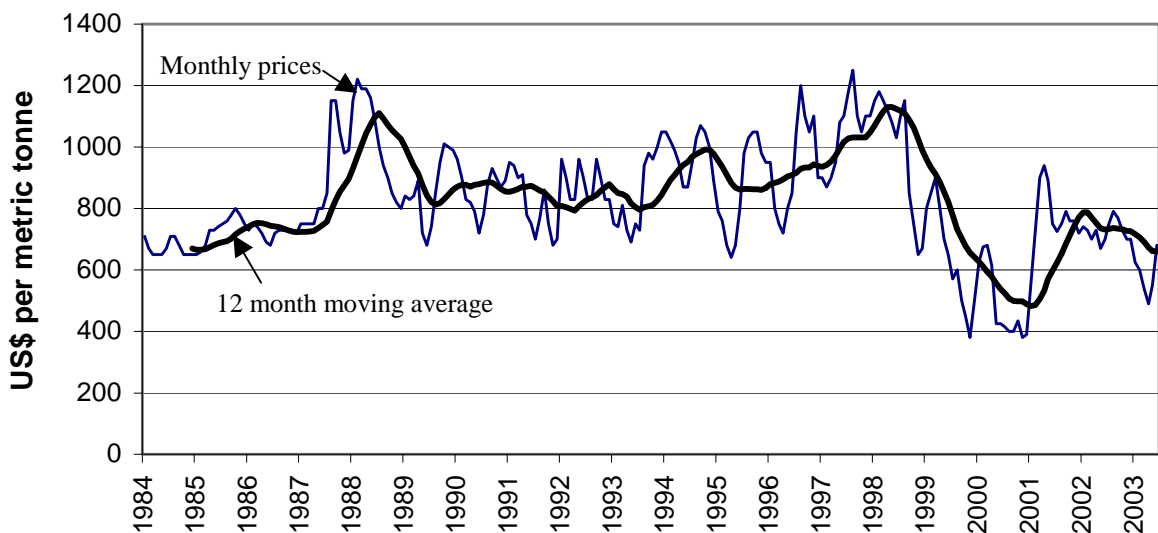
Figure 2: Skipjack prices; Bangkok (4-7.5lbs, c&f), Spain (4-7.5lbs, c&f), and Yaizu.



Note: The prices for Spain and Bangkok shown in the above figure are indicative figures only. They reflect mid-point estimates of prices paid during the respective month as obtained from a range of sources. Prices for Yaizu are weighted averages across all landings.

12. In Figure 3 monthly Bangkok skipjack prices (4-7.5lbs, c&f) for the period January 1984 to June 2003 are illustrated.

Figure 3: Monthly Bangkok skipjack prices (4-7.5lbs, c&f) January 1984 to June 2003



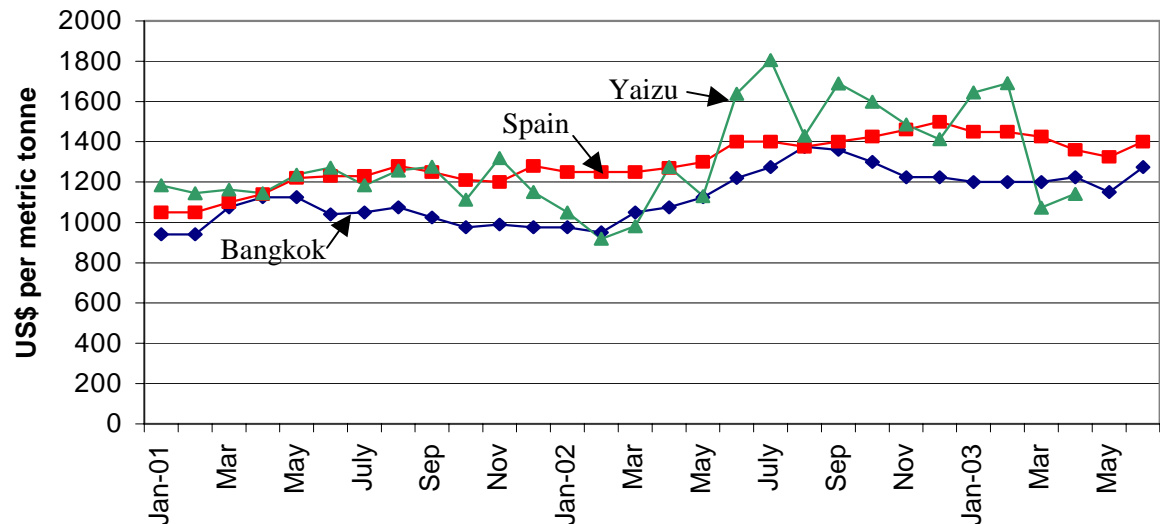
Note: The prices for shown in the above figure are indicative figures only. They reflect mid-point estimates of prices paid during the respective month as obtained from a range of sources.

Yellowfin

13. Yellowfin prices ended 2002 at significantly higher levels than seen at the start of the year. Bangkok prices for yellowfin (20lbs and up, c&f) started the year at US\$850-900/Mt and ended the year at US\$1200-1250/Mt having reached a 4 year high of US\$1350-1400 during August and September. Prices in 2003 were fairly steady though to May trading in a range of US\$1100-1250/Mt before rising in June and at the end of June were trading in a range of

US\$1300-1350/Mt. Yellowfin prices in Spain (20lbs and up, c&f) started the year at US\$1250-1300/Mt and increased throughout the year to US\$1500/Mt at the year's end. Yaizu purse seine caught yellowfin prices averaged US\$1049/mt in January trended upwards over the period to July, reaching a 6 year peak of US\$1806/Mt, before trending downward over the remainder of the year and averaging US\$1414/Mt in December.

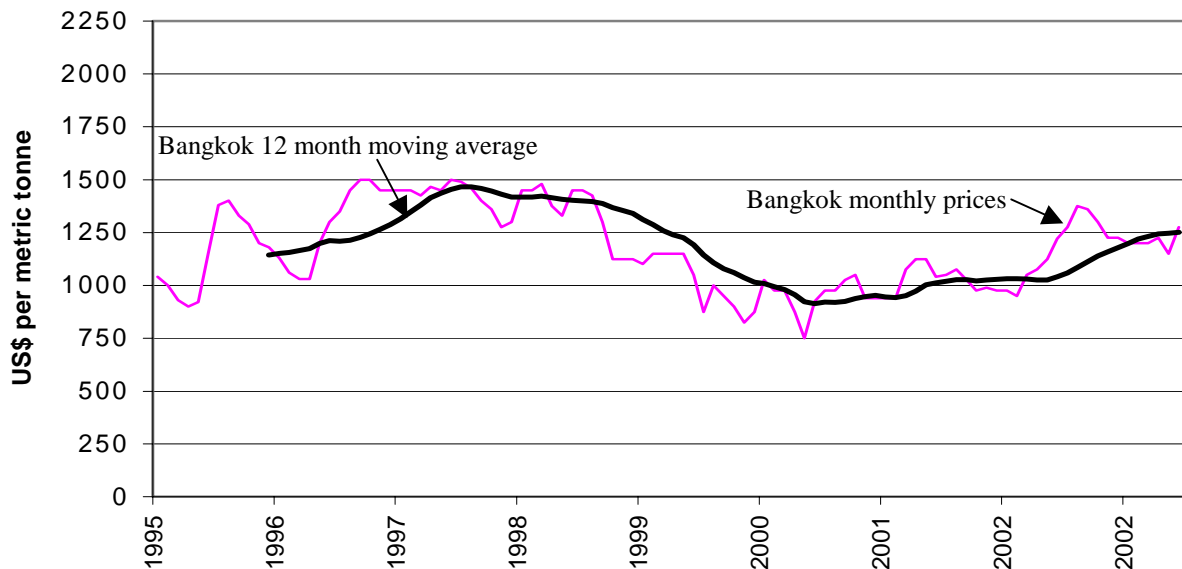
Figure 4: Yellowfin prices; Bangkok (20lbs and up, c&f), Spain (20lbs and up, c&f), and Yaizu.



Note: The prices for Spain and Bangkok shown in the above figure are indicative figures only. They reflect mid-point estimates of prices paid during the respective month as obtained from a range of sources.

14. In Figure 3 monthly Bangkok yellowfin prices (4-7.5lbs, c&f) for the period January 1995 to June 2003 are illustrated.

Figure 5: Monthly Bangkok yellowfin prices (20lbs and up, c&f), January 1995 to June 2003



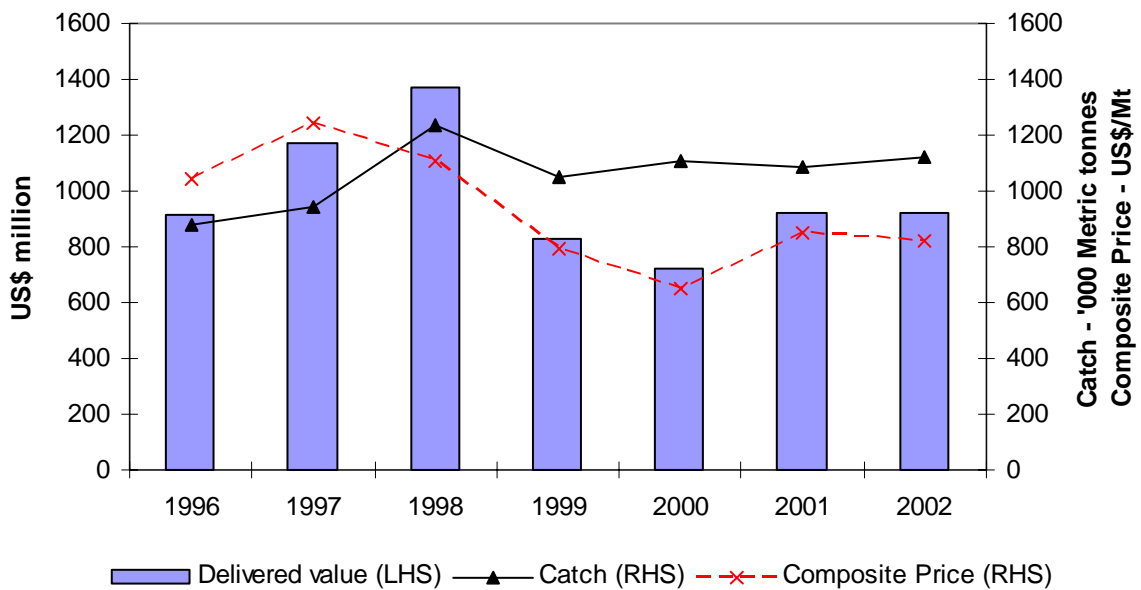
Note: The prices for shown in the above figure are indicative figures only. They reflect mid-point estimates of prices paid during the respective month as obtained from a range of sources.

Value of the catch

15. As a means of examining the effect of the changes to prices and catch levels since 1996 a rough estimate of the delivered value of the purse seine fishery catch from 1996 to 2002 are obtained (Figure 6). In deriving these estimates certain assumptions were made due to data and other constraints that may or may not be valid and as such caution is urged in the use of these figures.⁵

16. The estimated delivered value of the catch for 2002 is around US\$925 million. This represents a small increase of around US\$2 million on the estimated value of the catch in 2001. Thus, the 3 per cent increase in overall catch in 2002 was accompanied by a negligible increase in value despite a rise in yellowfin prices of around 11 per cent. This occurred as a result of the higher proportion of lower valued skipjack taken in the 2002 catch and the Thai skipjack import price and Yaizu price falling respectively by 5 and 3 per cent in US\$ terms.

Figure 6: Trend in catch, prices and value in WCPO purse seine fishery, 1996-2002



The Longline Fishery

Catch

17. The total estimated catch of the longline fishery in the WCPO in 2001 is 223,037Mt an increase of 4,448Mt on 2000 catches. Catches of albacore and yellowfin both increased by 5 and 2 per cent to 81,729Mt and 76,913Mt respectively. Bigeye catches declined by 1 per cent to 59,089Mt.

⁵ The delivered value of each years catch was estimated as the sum of the product of the annual catch of each species, excluding the Japanese fleet's catch, and the average annual Thai import price for each species (bigeye prices was assumed to attract the same price as for yellowfin) plus the product of the Japanese fleet's catch and the average Yaizu price for purse seine caught fish by species. Thai import and Yaizu market prices were used as they best reflect the actual price of all sales as opposed to prices provided in market reports which are based on benchmark prices, for example, for skipjack the benchmark price is for fish of size 4-7.5lbs.

18. The preliminary estimate of the total catch in the longline fishery in 2002 is 221,665Mt.⁶ This represents a reduction of 1,372Mt or less than 1 per cent on the 2001 catch. Preliminary catch estimates indicate that catches of bigeye and yellowfin both increased by 5 and 2 per cent to 62,308Mt and 78,150Mt respectively. Albacore catches declined by 5 per cent 77,590Mt.

Fleets of Distant Water Fishing Nations

19. In 2002 the Taiwanese distant water fleet's catch continued to increase. In 2002 total catch for this fleet rose by 12,600Mt (62 per cent) to 32,865t following a 2,469Mt (12 per cent) increase in 2001. The increase in total catch taken by the Taiwanese distant water fleet since 2000 has been driven by substantial increases in bigeye and yellowfin catches. In 2002 bigeye catches rose by 6,689Mt (170 per cent) to 10,626Mt following a 2,533Mt (64 per cent) rise in 2001. Similarly, yellowfin catches rose by 3,590Mt (105 per cent) to 7,008Mt in 2002 following a 1,924Mt (56 per cent) rise in 2001. In contrast, while the albacore catch increased in 2002 by 1,394Mt (13 per cent) to 12,444, it was still below the 14,290Mt caught in 2000.

20. The Taiwanese offshore catch (east of 130°E) also increased in 2002, albeit to a much lesser degree, with total catch up by 542Mt (4 per cent) to 13,649Mt. The yellowfin catch rose by 789Mt (11 per cent) to 7,895Mt, while the bigeye catch declined by 247Mt (4 per cent) to 5,754Mt.

21. In 2001 the combined catch of the Japanese offshore and distant-water longline fleet in the WCPO fell by 3,687Mt (6 per cent) to 60,103Mt compared with 2000. This decline was driven by a substantial fall in the yellowfin catch with albacore and bigeye catches both increasing. Yellowfin catches declined by 7,610Mt (41 per cent) to 10,865Mt. Albacore catches increased by 3,484Mt (23 per cent) to 19,117Mt while bigeye catches increased by 968Mt (5 per cent) to 21,424Mt.

22. In 2001 the catch of the Korean longline fleet in the WCPO fell by 189Mt (1 per cent) to 28,486Mt compared with 2000. This decline was driven by a fall in the bigeye catch with the albacore and yellowfin catch increasing. Bigeye catches declined by 2,087Mt (13 per cent) to 13,869Mt. Albacore catches increased by 1,297Mt (212 per cent) to 1,909Mt while yellowfin catches increased by 156Mt (2 per cent) to 9,475Mt.

23. The 2001 catch of Chinese longline was 7,682Mt up by 391Mt (5 per cent) on the 2000 catch. The albacore catch increased by 655Mt (32 per cent) to 2,711Mt while the bigeye catch increased by 246Mt (12 per cent) to 2,227Mt. The yellowfin catch declined by 288Mt (13 per cent) to 1,919Mt

24. No estimates for 2002 for the Chinese, Japanese or Korean fleets were available at the time of writing this report.

Fleets of Pacific Island Countries and Territories

25. The 2002 preliminary estimate catch of longline vessels based in Pacific Island Countries and Territories is 39,270Mt an increase of 1,234Mt (22 per cent) compared with 2001.⁷ This increase was driven by an increase in catches of albacore, up 557Mt (1 per cent) to 23,331Mt, bigeye, up 361Mt (12 per cent) to 3,339Mt and 'other' species, up 683Mt (12 per cent) to 6,669Mt. Catches of yellowfin fell by 367Mt (5 per cent) to 6,397Mt.

26. Catch by vessels based in Papua New Guinea continued its recent growth. The catch of the Papuan fleet increased by 1,017Mt (36 per cent) driven by a 995Mt increase in the catch of

⁶ Estimates for many of the longline fleets including that of Japan, Korea, China and Fiji were not available at the time of writing of this report, hence, the figure presented are preliminary estimated present that will be revised as more data becomes available.

⁷ Estimates for 2002 of catches from Fiji and American Samoa were not available at the time of writing this report. The preliminary estimates for Pacific Island Countries and Territories reported in this paper are calculated assuming catches from these two nations remained the same as for 2001.

'other' species. Bigeye catches also saw continued rapid growth with catches up 64Mt (25 per cent) to 324Mt. The Solomon Islands fleet's catch also increased significantly in 2002, up by 462Mt (113 per cent) to 870Mt following three years of declining catches.

27. The catch for vessels based New Caledonia (up 147 Mt to 2211Mt) also rose while catches for fleets from the Federated States of Micronesia (down 10Mt to 865Mt) French Polynesia (down 409Mt to 7,402Mt), Samoa (down 821Mt to 5,359Mt), and Tonga (down 74Mt to 1914Mt) fell. The Cook Islands and Vanuatu both recorded catches for the first time in number of years of 494Mt and 428Mt respectively.

Japanese market prices

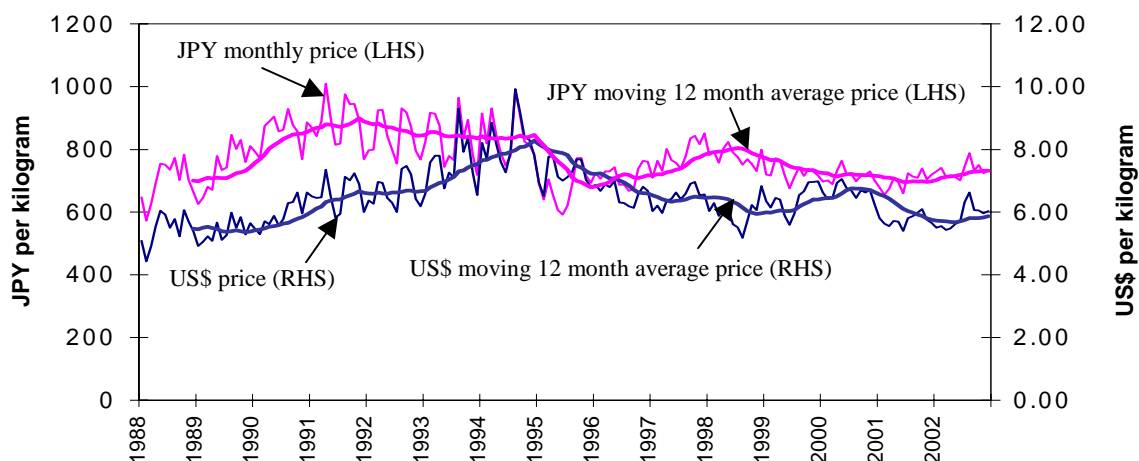
Yellowfin

28. Yellowfin prices on a number of Japanese markets rose in 2002 with average prices at 10 major Japanese wholesale markets rising by 1 per cent for fresh yellowfin and 3 per cent for frozen yellowfin, longline caught yellowfin prices landed at Yaizu increased by 2 per cent, average fresh yellowfin prices at selected Japanese ports increased by 6 per cent and fresh yellowfin import prices increased by 3 per cent.

29. Prices at 10 major Japanese wholesale markets in 2002 averaged 1,025JPY/kg for fresh yellowfin, up 1 per cent on 2001, and 741/kg do frozen yellowfin, up 3 per cent. While prices rose sales volumes fell with fresh yellowfin volumes declining by 13 per cent to 21,796Mt and frozen yellowfin volumes declining 6 per cent to 18,081Mt. Longline caught yellowfin volumes at Yaizu increased by 2 per cent to 4,520Mt in 2002 following a 6 per cent rise in 2001. Prices increased by 4 per cent to 442JPY/kg following a 20 per cent decline in 2000. Fresh yellowfin landings at 49 selected Japanese ports in 2002 declined, falling 12 per cent to 5,188Mt. Average price of fresh yellowfin for the 49 ports in 2002 was 697JPY/kg up by 6 per cent when compared with 2001.

30. After steadily increasing over the period 1997 to 2001, Japanese imports of fresh yellowfin fell sharply in 2002. Japanese imports of fresh yellowfin were 31,902Mt in 2002 down by 4,412Mt or 12 per cent compared with 2000 and at their lowest level since 1990. In contrast average fresh yellowfin import prices increased in 2002 for the first time since 1997. Prices increased by 3 per cent to 721JPY/kg. While prices for imported fresh yellowfin in JPY increased marginally between 2000 and 2001 the declining value of the JPY against the US\$ saw prices in US\$ remain steady at around US\$5.84/kg. Import volumes and average import prices from Oceania in 2002 declined by 7 and 5 per cent respectively. Imports volumes in 2002 were 8,147Mt while average prices were 774JPY/kg.

Figure 7: Monthly Japanese import prices for fresh yellowfin in JPY and US\$, January 1988 to December 2002



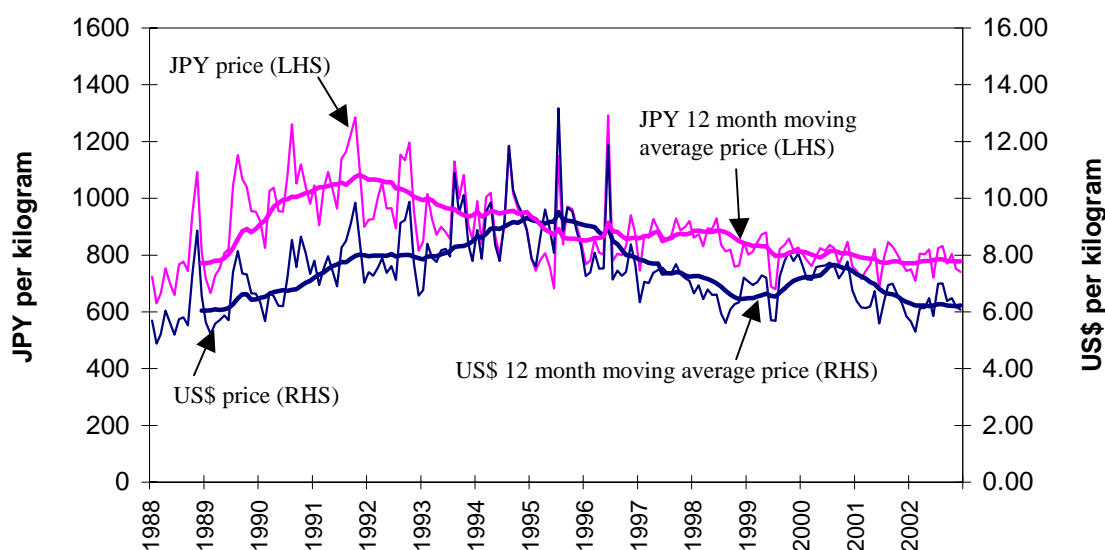
Bigeye

31. Significant declines in the average price of fresh bigeye landed at 49 selected Japanese ports in 2002 and imports from the Oceania region were recorded in 2002 while the average price at 10 major Japanese wholesale markets also declined but to a lesser extent and the average price of fresh bigeye imports in total was steady.

32. Prices at 10 major Japanese wholesale markets in 2002 averaged 1,250JPY/kg for fresh bigeye, down 5 per cent on 2001, and 846/kg for frozen bigeye, up 3 per cent. Sales volumes for fresh bigeye also fell, albeit marginally, by 1 per cent to 12,350Mt. In contrast sales volumes of frozen bigeye rose 8 per cent to 54,780Mt. Fresh bigeye landings at 49 selected Japanese ports in 2002 rose sharply in 2002, increasing by 28 per cent to 7,312Mt. While volumes were up significantly prices fell sharply down 19 per cent to 1085JPY/kg.

33. In contrast to fresh yellowfin Japanese imports of fresh bigeye were steady in 2002, increasing by less than 1 per cent to 21,801Mt. Average prices of Japanese imports of fresh bigeye were also reasonably steady, once again increasing by less than 1 per cent, to 777JPY/kg. In contrast to total imports, import volumes and average import prices from Oceania both suffered significant falls in 2002. Volumes declined by 15 per cent to 7,088Mt, while prices fell 18 per cent to 824JPY/kg.

Figure 8: Monthly Japanese import prices for fresh bigeye in JPY and US\$, January 1988 to December 2002



Albacore

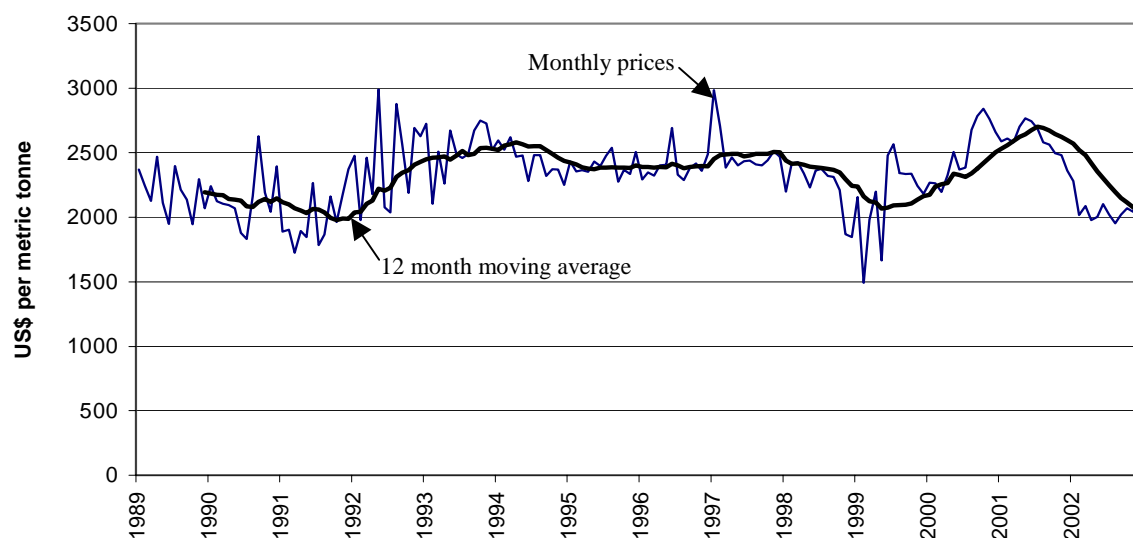
34. Average import prices for frozen albacore into the US and Thailand, and frozen albacore prices for selected ports in Japan all declined sharply in 2002.

35. US frozen albacore imports volumes declined by over 70 per cent in 2002 to 11,902Mt while the average price declined by 21 per cent to US\$2,058/Mt (f.a.s.).

36. Thai frozen albacore imports rose by 5 per cent in 2002 to 35,082Mt. Prices, however, declined by 32 per cent in Thai Baht (THB) terms to 77THB/kg and 28 per cent in US\$ terms to US\$1,790/Mt.

37. The average price of frozen albacore for the 49 ports in 2002 was 276JPY/kg (US\$2206/Mt) down by 54 per cent when compared with the 2001. Volumes in 2002 totalled 46,994Mt up by 63 per cent on 2001 levels.

Figure 9: US frozen albacore import prices, January 1989 to December 2002^a



Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division, Silver Spring, MD (www.st.nmfs.gov)

Notes: a. Prices are calculated from the customs value of the volume imported. Customs value is defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance and other charges incurred in delivering the merchandise to the United States. This value approximates the free alongside ship value (f.a.s.)

Pole and Line Fishery

Catch

38. The preliminary estimate of the total catch in the pole and line fishery in 2002 is 346,020Mt. This represents an increase of 4,990Mt on the 1999 catch, an increase around 1 per cent.⁸

39. The catch of the Solomon Islands pole-and-line fleet continued to recover in 2002 after collapsing in 2000 as a result of the political situation and unrest in the country. In 2002 the fleet caught 9,652Mt more than double that landed in 2001, however, catch levels are still substantially lower than seen throughout the 1990s when catch levels ranged between just under 18,000Mt to just over 36,000Mt. The pole and line catch of the fleet from French Polynesia declined 20 per cent to 709Mt.

Market conditions

40. Japanese pole and line caught skipjack prices were mixed in 2002. Average 2001 Yaizu Market prices for skipjack caught by pole and line in southern WCPO waters rose by 5 per cent to 159JPY/kg. On the other hand prices for pole and line skipjack caught in Japanese waters fell 5 per cent from 281Yen/kg in 2001 to 265Yen/kg in 2002.

⁸ No estimate is available for the 2002 catch of the Japanese pole and line fleet which landed about 48 per cent of the total WCPO pole and line catch in 2001. In deriving the preliminary estimate of the WCPO pole and line catch it has been assumed that the Japanese fleet's catch in 2002 was the same as for 2001.

Figure 10: Yaizu market skipjack price for Japanese “south” pole and line fleet.

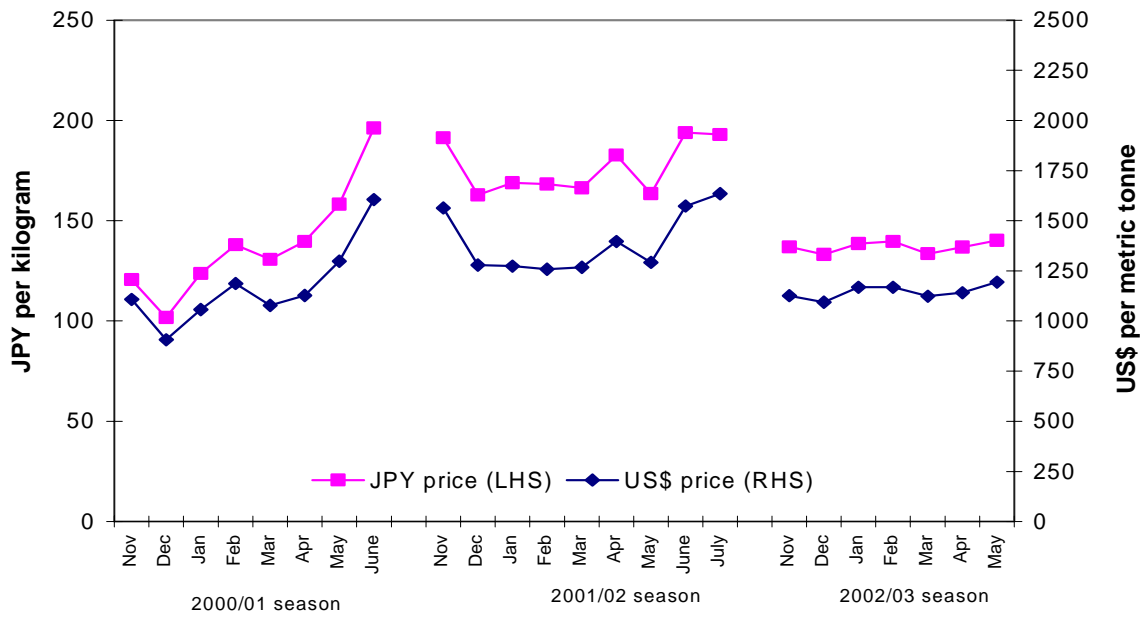


Figure 11: Yaizu market skipjack price for Japanese “other” pole and line fleet.

