

FISH EXPORTS

This article examines recent developments in New Zealand's fish exports with particular regard to industry development since the inception of the 200 mile exclusive economic zone in 1978.

Strong growth in both the volume and f.o.b. value of fish exports has been recorded in the last few years but the net gain in foreign exchange terms has been somewhat smaller. The ratio of O.E.T. receipts to f.o.b. exports has steadily declined over the last two years as joint venture activities have expanded. Offsetting arrangements enable joint venture companies to deduct vessel charter fees and other overseas expenses from the value of fish exports before remittance is made to the N.Z. banking system. The net foreign exchange gain is as little as 5 per cent of the f.o.b. value of fish caught in some cases.

March Years	FISH EXPORTS		FOB ¹ Value	OET/FOB Ratio
	OET Export Fish	Receipts % Total		
1976	33.7	1.5	28.3	1.191
1977	45.0	1.4	44.9	1.002
1978	52.7	1.6	50.4	1.046
1979	59.7	1.6	60.3	0.990
1980	96.5	2.0	116.2	0.830
1981	128.8	2.2	150.1	0.858

¹ Adjusted to exclude canned fish to obtain comparability with OET figures.

EXPORT VOLUME INDEX

Base: 1971 = 1000

June Years	Agricul- ture	Manu.	Forestry	Fishing	All Groups
1970/71	1000	1000	1000	1000	1000
1975/76	1005	1954	1227	1031	1094
1979/80	1082	3425	2036	2584	1332

The proportion of total fisheries production exported has risen from just under 20 per cent in 1970 to an estimated 60 — 65 per cent in 1980. In 1979 New Zealand's share of world trade in fisheries products was 1.05 per cent by weight and 0.75 per cent by value. It is anticipated that even when the exclusive economic zone is fully exploited New Zealand's share of world fisheries product trade will probably be only around 4 per cent.

Export Markets

Exports to Japan and Australia now exceed those to the previously dominant U.S. market. Squid and snapper are currently the two most important species exported to Japan but the expansion of joint venture operations has also seen growth in exports of less familiar fin fish species. New Zealand's influence on the Japanese market remains small, particularly with regard to fin fish exports which accounted for only 2 per cent by volume of Japanese imports in 1979. By way of contrast, New Zealand's share by value of Australian imports of fin fish stood at 24 per cent in 1980 making New Zealand the second most important supplier behind South Africa. The most important species currently exported to Australia are snapper, warehou and rock lobster. Rock lobster has traditionally been, and remains, the major fish export item to the U.S. Exports of fin fish have gradually increased in the last

few years but in value terms rock lobster still accounts for approximately 85 per cent of total fish exports to the U.S.

Emphasis has been placed on diversification of markets in recent years largely because of oversupply in the Japanese market and consequently depressed prices. Markets in Southern Europe, the Middle East and West Africa have been investigated by the Fishing Industry Board in recent times, but, as yet, exports to these areas remain small.

FISH EXPORTS BY DESTINATION; OET \$ million

March Years	Australia	USA	Japan	Other	Total
1970	2.1	11.3	0.2	1.2	14.8
1976	6.2	15.9	4.9	6.7	33.7
1981	32.2	27.0	44.0	25.6	128.8

Industry Structure

Under the provisions of the Law of the Sea Agreement, New Zealand is required to allocate to foreign fishing interests any part of the estimated total allowable catch (TAC) not able to be caught by domestic or joint venture interests. Current estimates of the sustainable biological yield or TAC range from 415,000 to 622,000 tonnes. Widespread scepticism surrounds the accuracy and usefulness of these estimates mainly because the biological yield concept takes no account of the economically sustainable yield; that is, when the marginal cost of increased fishing effort equates to the marginal yield. This point is usually below the biological yield.

Utilisation of the exclusive economic zone since 1977 is shown below:

TOTAL CATCH FROM THE NZ EEZ 000 tonnes

March Years	1977	1978	1979	1980
N.Z. domestic	78.8	90.9	101.3	113.0
N.Z. joint venture	6.3	8.3	40.1	102.8
Foreign licensed ¹	408.8	126.3	134.1	71.7
Total Catch:	493.9	225.5	275.5	287.5

¹ Foreign licence revenue totalled \$8 million in 1979/80.

For 1980/81 the total allocation given to licensed foreign vessels was 110,190 tonnes of fin fish (excluding tuna). Of this total Japan was allocated 76,000 tonnes, U.S.S.R. 32,500 tonnes and South Korea 1,690 tonnes. Squid trawl allocations were 9,900 tonnes Japan, 10,500 tonnes U.S.S.R. and 1,000 tonnes Korea. Also 98 Japanese and four Korean squid jigging vessels were licensed.

Since the inception of the exclusive economic zone in April 1978 joint venture operations have expended rapidly at the expense of foreign licensed operations. Joint ventures have provided a useful avenue for rapid expansion of the N.Z. catch with comparatively little capital commitment and risk. They have also provided greater throughput for processing factories and given both the processing and marketing sector the opportunity to gain experience with the less familiar deeper water species. It is anticipated that joint ventures will eventually become an integrated part of the New Zealand industry.

Employment

The number of people employed in the fishing industry is broken down into those employed in the catching sector and those employed in the processing and marketing sector (excluding employment in joint venture charter operations). The figures beyond 1976 were prepared from a Fishing Industry Board survey.

NUMBERS EMPLOYED
(% of total estimated workforce)

	1971	1976	1977	1978	1979	1980
Catching Sector	2,569 (0.23%)	2,884 (0.23%)	2,500 (0.20%)	2,900 (0.23%)	3,050 (0.23%)	3,005 (0.23%)
Processing Sector	1,779 (0.14%)	2,010 (0.16%)	2,370 (0.18%)	2,675 (0.20%)

Employment growth in the catching sector has been slow over the last decade. Rapid growth in employment appears unlikely as the 1980 Fishing Industry Board survey of companies shows that expansion plans are based on the introduction of modernised vessels of improved capability with much higher capital to labour ratios. In 1977/78 the surveyed companies averaged 7.5 crew per 1000 tonnes of fish caught, but it is expected that the crew to catch ratio will fall to around 3.5 or 4.0 in the next few years.

Employment in the processing sector is expected to increase along with the proportion of joint venture catch being processed in New Zealand.

Incentives and Assistance

A wide variety of government assistance and incentive measures are currently operative. These range from price support schemes for various fish species to export incentives and development grants. A number of Rural Bank loan schemes are available to assist in the purchase, building and up-grading of fishing vessels as well as loans for the development of processing facilities. Duty free importation of fishing vessels ceased at the end of March 1981 but while operative this concession enabled the domestic industry to quickly expand catching capacity at a lower cost than if New Zealand-made vessels were purchased. Between 1977 and 1980 26 fishing vessels valued at \$22 million were imported under this scheme. Training incentives are also provided for boat crews and fishing cadets. Lastly, the provision of research and technical data from the Fisheries Research and Fisheries Management Division of the Ministry of Agriculture and Fisheries is of considerable assistance to the industry. Government also contributes \$200,000 a year to the running of the Fishing Industry Board.

Domestic price controls

Despite vigorous opposition from all sectors of the industry, retail price controls were maintained for five years until April 1979. Maximum prices were set for prime fish species for each region in New Zealand. While in force these ad hoc controls discouraged supply of fish to the domestic market as well as depressing competition and returns to both fishermen and retailers.

CONCLUSION

Although fish exports have expanded rapidly since the inception of the 200 mile economic zone, the state of the New Zealand industry remains confused. Owner-operated fishing interests claim that profitability is low and that collapse of their section of the industry is imminent due to the combined effect of rising costs (particularly fuel) and over-fishing of prime in-shore resources. They also claim that fish caught in New Zealand waters by foreign vessels is being sold on foreign markets at prices designed to undercut N.Z. competition. Others claim, however, that much of the in-shore fleet (of which owner operators form the bulk) is over-capitalised, aging, inefficient and in need of rationalisation.

Despite rapid overall expansion, joint venture operations have not all been successful. Some ventures have been wound up because of poor catches while others have been hampered by industrial problems. Most ventures are still mainly 'foreign operations' with little or no risk being borne by the New Zealand partner, and with little or no commitment being made to increase New Zealand involvement. In most cases the vessels are foreign owned, they are crewed wholly or substantially by foreign nationals, much of the product undergoes no further processing in New Zealand and the sole benefit lies in the remission of as little as 5 per cent of the foreign exchange earnings.

The eventual replacement of all foreign and joint venture operations by New Zealand owned companies is seen as the long-term aim by industry spokesmen but achieving this will not be straightforward. It is apparent that the economically sustainable yield from the exclusive economic zone is considerably lower than the estimated biologically sustainable yield. The New Zealand industry generally operates on a higher cost structure than foreign competitors thus making exploitation of a significant portion of the resource unprofitable for N.Z. fishermen but viable for lower cost foreign operations, particularly the USSR. Currently, New Zealand fishermen generally lack the practical experience and equipment required to fish the deeper water fisheries where the most potential for development lies. Combined with this is a shortage of investment capital in the catching sector, which is difficult to attract due to the high risk and uncertainty attached.

PRE PUBLICATION ANNOUNCEMENT

**EXTERNAL ECONOMIC
STRUCTURE AND POLICY**

This new book will bring together in one volume a range of 26 articles on balance of payments policy.

It explains in a straightforward way the nature of the balance of payments, the exchange rate system, trends and patterns in overseas trade and international capital flows, problems associated with trade restrictions and the Bank's views on a range of important policy matters associated with these issues.

The text will be supplemented by some long term statistical series and a bibliography.

Publication is scheduled for later this year with distribution being effected in time for the commencement of the 1982 academic year.

Further details, including the retail price, will be noted in a later issue of the *Bulletin*.

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RESERVE BANK OF NEW ZEALAND
Liabilities and Assets

(NZ\$ millions)

Year and Month	LIABILITIES						ASSETS									
	DEMAND DEPOSITS						O'SEAS ASSETS ⁴				ADVANCES IN N.Z.					
	Note Issue	State	Marketing Organs	¹ Banks	Other	² All Other Liabilities	Gold	SDRs	³ Short Term	Investments	Investments in N.Z.	State	Marketing Organs	Other Advan & Disc.	Export Credits	All Other Assets in N.Z.
Weekly Average																
1969	173.9	74.2	4.5	36.3	60.2	40.8	1.0	...	72.0	44.9	69.2	13.2	150.8	24.0	...	14.8
1970	182.9	74.1	4.1	44.7	36.9	59.9	0.8	16.4	57.5	51.5	74.7	7.4	148.3	28.8	0.9	16.3
1971	201.8	80.1	3.4	32.3	15.9	76.4	0.7	20.6	86.2	60.3	65.3	5.7	135.9	11.7	7.4	16.1
1972	223.9	195.8	3.6	38.0	18.8	124.6	0.7	49.7	193.4	121.3	39.6	0.2	156.0	2.0	9.5	32.4
1973 ⁴	262.3	276.4	17.9	31.5	63.8	308.9	0.7	52.0	240.1	315.0	82.8	0.2	205.6	3.4	9.2	51.8
1974 ⁴	305.8	154.7	21.1	25.0	165.1	328.8	0.7	27.7	72.4	258.4	256.2	54.8	248.1	9.1	10.8	62.3
1975 ⁴	343.5	136.3	16.8	26.6	350.3	309.4	0.7	3.0	108.1	139.9	322.0	164.8	340.1	19.7	18.7	66.0
1976 ⁴	382.8	145.0	22.4	12.4	466.7	357.5	0.7	9.9	178.8	53.4	583.3	93.9	369.6	13.8	22.7	60.7
1977	414.9	164.9	33.4	11.4	538.1	455.6	0.7	25.8	166.7	55.7	796.9	113.3	377.1	6.2	28.2	47.8
1978 ⁴	447.4	198.7	13.8	4.6	507.1	509.0	0.7	51.2	242.9	53.3	496.8	256.5	426.8	94.9	28.5	47.1
1979	492.5	219.6	46.7	2.4	438.3	576.4	0.7	38.3	213.4	9.3	668.4	129.5	525.3	87.9	34.0	68.1
1980	539.0	226.3	71.2	1.0	366.6	760.1	0.7	31.2	163.7	9.6	582.4	308.5	642.3	104.8	46.8	76.3
As At —																
1979																
Jan. 31	477.0	184.2	9.2	--	512.8	559.9	0.7	71.5	296.4	8.3	650.7	49.9	544.0	12.8	29.5	79.3
Feb. 28	475.9	177.7	9.7	--	414.5	552.6	0.7	48.5	184.6	9.2	538.6	159.0	570.6	13.7	28.3	77.2
Mar. 28	477.4	482.0	8.7	--	411.5	561.4	0.7	48.5	222.8	8.9	561.1	17.8	570.0	411.0	28.8	71.3
Apr. 24	492.2	317.8	19.9	--	429.5	566.6	0.7	48.4	252.8	8.9	434.5	102.8	570.3	258.7	30.0	119.1
May 30	480.9	393.5	40.1	0.2	418.8	551.0	0.7	39.8	295.4	8.9	848.4	0.3	579.8	18.7	30.6	61.8
June 27	481.8	167.4	52.8	--	414.7	554.7	0.7	39.8	167.8	8.9	776.5	17.7	549.3	9.0	33.6	68.1
July 25	475.1	193.9	58.8	--	405.2	596.5	0.7	41.9	171.5	9.4	684.3	180.2	526.6	8.6	36.2	70.4
Aug 29	481.7	175.3	67.0	--	351.0	585.5	0.7	19.0	189.0	9.3	732.2	160.6	459.5	8.6	38.2	43.5
Sept. 26	486.6	176.4	68.4	--	356.1	577.2	0.7	19.0	142.1	9.4	606.6	177.7	467.3	154.9	38.5	48.5
Oct. 31	494.7	110.1	77.5	--	634.1	610.0	0.7	19.4	202.9	9.4	828.4	170.7	495.0	86.9	38.4	74.5
Nov. 28	504.1	133.1	84.8	--	436.5	616.2	0.7	19.4	244.9	9.4	737.0	102.4	535.7	19.5	40.2	65.5
Dec. 26	657.8	196.4	82.1	--	446.0	635.3	0.7	13.1	161.1	9.7	671.9	362.7	635.1	0.6	39.6	123.3
1980																
Jan. 30	514.2	140.6	82.0	--	371.0	662.6	0.7	45.5	131.1	9.6	766.8	28.3	635.1	9.3	37.6	110.2
Feb. 27	514.8	149.1	85.5	0.1	351.7	760.2	0.7	39.1	253.6	9.7	649.5	93.6	650.7	8.7	37.1	118.7
Mar. 26	513.8	629.8	90.8	--	361.5	755.2	0.7	39.2	302.2	9.5	573.9	--	652.7	644.8	38.0	90.2
Apr. 30	523.3	333.4	90.9	--	333.8	804.6	0.7	37.4	176.5	9.7	762.7	5.5	676.8	321.0	43.6	52.3
May 28	522.7	226.1	69.0	--	302.7	718.9	0.7	31.8	143.3	9.7	756.2	33.5	723.0	39.8	48.1	53.3
June 25	513.8	229.1	65.0	--	386.3	721.6	0.7	23.9	67.2	9.4	493.7	486.2	725.1	1.3	49.9	58.2
July 30	511.1	186.7	53.4	3.7	393.9	728.6	0.7	30.4	264.2	9.2	570.7	251.9	640.2	3.0	50.5	56.7
Aug 27	515.8	176.6	51.3	0.1	375.6	727.7	0.7	25.5	101.0	9.2	468.6	561.7	575.2	2.9	52.7	49.7
Sept 24	515.7	219.7	60.9	--	423.5	687.7	0.7	25.7	93.5	9.4	536.7	411.5	569.7	138.1	52.0	70.4
Oct. 29	530.3	142.6	59.1	--	395.4	728.9	0.7	32.3	184.9	9.3	502.7	351.0	585.6	82.4	49.4	58.0
Nov 26	536.0	201.5	56.6	--	395.4	762.5	0.7	28.2	125.0	9.3	411.8	624.3	624.6	9.3	49.7	69.0
Dec. 31	614.5	214.2	49.3	--	227.1	863.9	0.7	0.2	68.0	9.5	459.4	529.6	683.4	19.8	45.0	153.4
1981																
Jan 28	548.4	170.3	46.5	--	236.1	1,033.4	0.7	31.4	196.8	9.5	526.7	438.8	709.9	21.5	37.2	62.3
Feb 25	594.7	201.0	47.2	10.3	209.5	857.4	0.7	37.2	164.9	9.5	378.6	539.7	693.3	4.4	34.9	56.9
Mar 25	565.1	403.6	36.2	--	215.4	797.2	0.7	41.4	228.6	9.9	375.0	0.3	681.1	570.9	37.8	71.1

¹ Includes balances in special fund accounts and wool retention accounts² Includes capital accounts, reserves, miscellaneous liabilities in New Zealand, overseas liabilities, Special Drawing Rights and trading bank time deposits at Reserve Bank³ Current account balances and short-term bills⁴ Refer to Exchange Rates table in the Reserve Bank Bulletin