
*The Current State
of
Japanese Shipping*

March 2004

The Japanese Shipowners' Association

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[Appendix] Shipping History

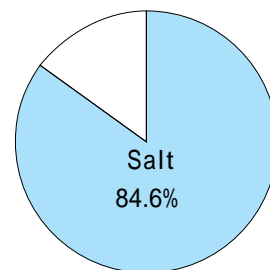
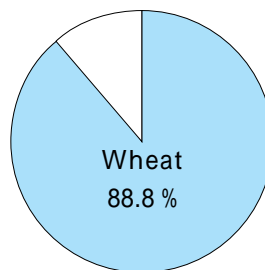
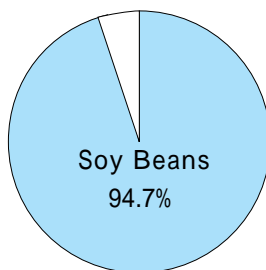
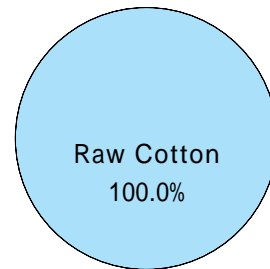
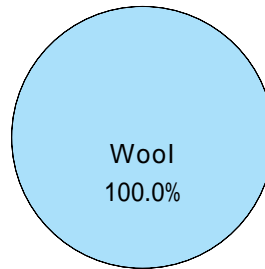
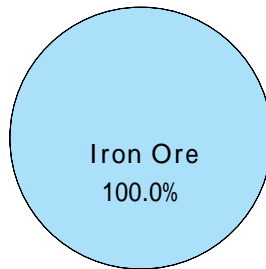
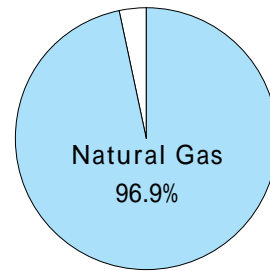
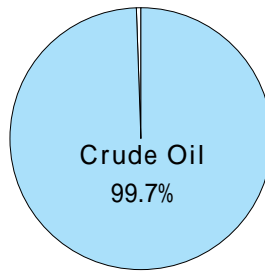
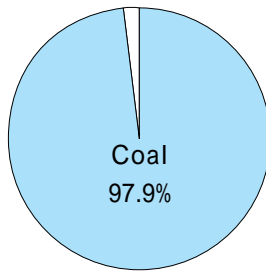
Notes:

All years are calendar years unless otherwise stated.
Certain figures are rounded and may not add up to the totals given.

1. Japan's Import Dependency in Major Resources

Japan depends heavily on imported energy resources as well as many indispensable commodities, such as food, clothing, and shelter.

Japan's shipping industry plays a pivotal role in providing the stable transportation of goods from overseas.



Notes:

Source : A Chartered Survey of Japan.

All figures are as of 2001.

Import Dependency = $\frac{\text{Import Volume}}{\text{Import Volume} + \text{Domestic Production Volume}} \times 100$

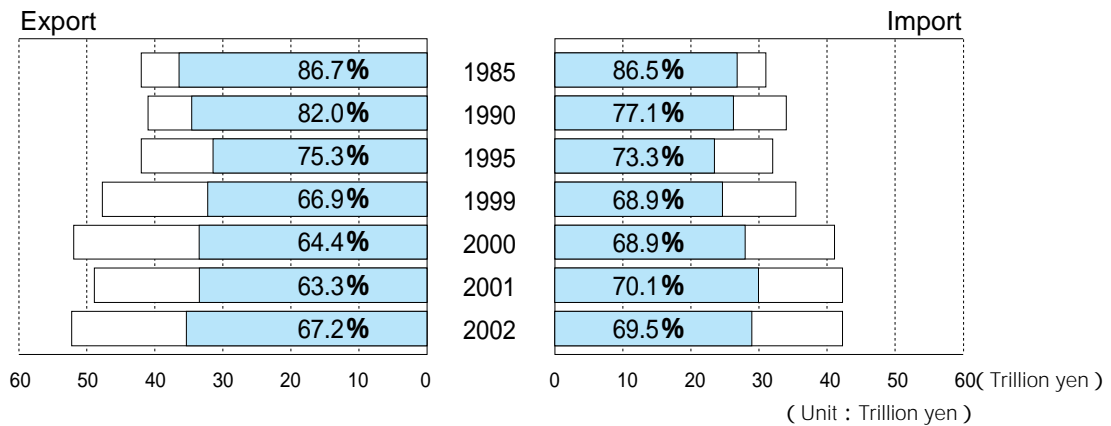
2. Ratio of Seaborne Trade to Japan's Trade

Japan's seaborne trade in 2002 decreased in terms of tonnage by 1.4%, to 942 million tons, and decreased in terms of value by 3.2% , to ¥94 trillion.

Seaborne trade accounted for 68.2% and 99.7% of Japan's trade in terms of value and tonnage, respectively. Shipping serves as a leading means of transport for Japan's trade.

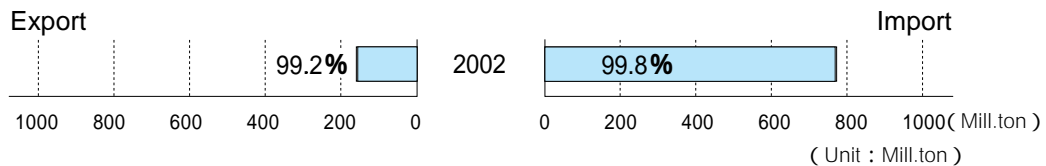
Seaborne trade ratios of Japan's trade(%)

Value



Year	Export		Import		Total	
	Total	Seaborne Trade Value(%)	Total	Seaborne Trade Value(%)	Total	Seaborne Trade Value(%)
1985	42	36 (86.7)	31	27 (86.5)	73	63 (86.6)
1990	41	34 (82.0)	34	26 (77.1)	75	60 (79.8)
1995	42	31 (75.3)	32	23 (73.3)	73	54 (74.5)
1999	48	32 (66.9)	35	24 (68.9)	83	56 (67.8)
2000	52	33 (63.3)	41	28 (68.9)	93	61 (65.8)
2001	49	33 (67.2)	42	30 (70.1)	91	63 (68.6)
2002	52	35 (67.2)	42	29 (69.5)	94	64 (68.2)

Tonnage



Year	Export		Import		Total	
	Total	Seaborne Trade Volume(%)	Total	Seaborne Trade Volume(%)	Total	Seaborne Trade Volume(%)
1985	94	94 (99.5)	604	603 (99.9)	698	697 (99.9)
1990	85	84 (99.1)	712	712 (99.9)	798	796 (99.8)
1995	117	116 (99.3)	772	771 (99.8)	889	886 (99.8)
1999	126	125 (99.0)	757	756 (99.8)	883	880 (99.7)
2000	131	130 (99.0)	808	807 (99.8)	940	937 (99.7)
2001	139	138 (99.2)	789	788 (99.8)	929	926 (99.7)
2002	155	154 (99.2)	787	785 (99.8)	942	939 (99.7)

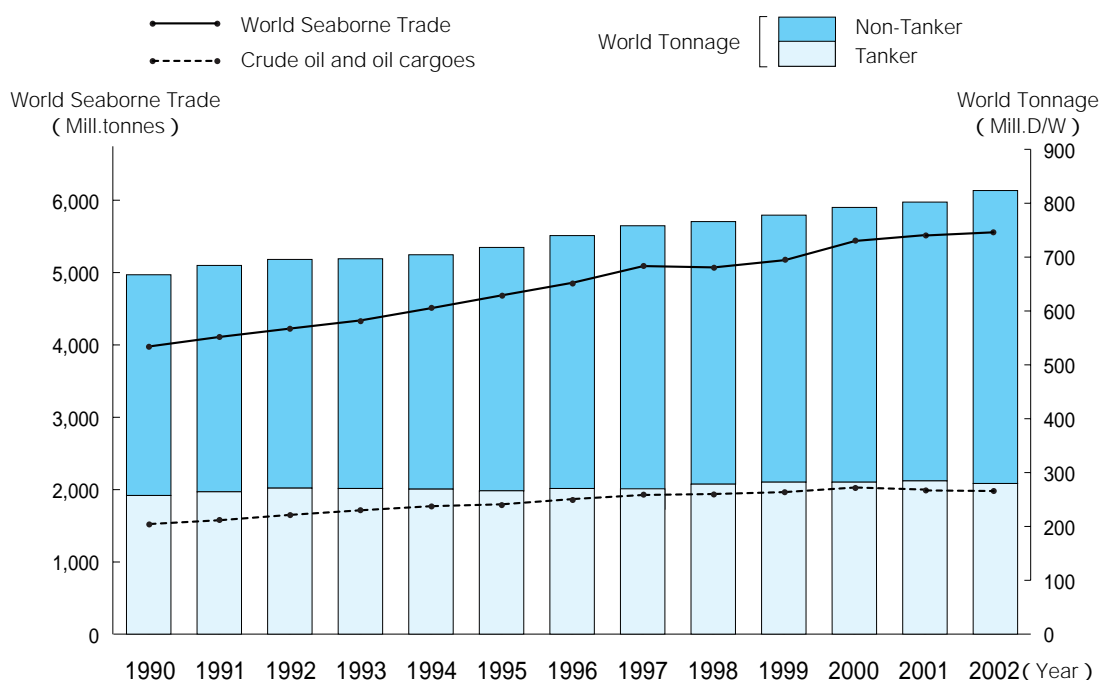
Notes:

Value and tonnage figures compiled by the JSA, based on the *Summary Report on Trade of Japan* published by the Japan Tariff Association

Figures for Seaborne Trade Value obtained by subtracting air cargo and vessel value from the total

3. Volume of World Seaborne Trade and Tonnage

The total volume of worldwide seaborne trade in 2002 increased to 5.549 billion tons, up 0.7% from that in the previous year. Of that amount, oil cargo decreased 1.5%, to 1.987 billion tons. World tonnage grew steadily, reaching 823 million dwt in 2002, a 2.6% increase from the 2001 level.



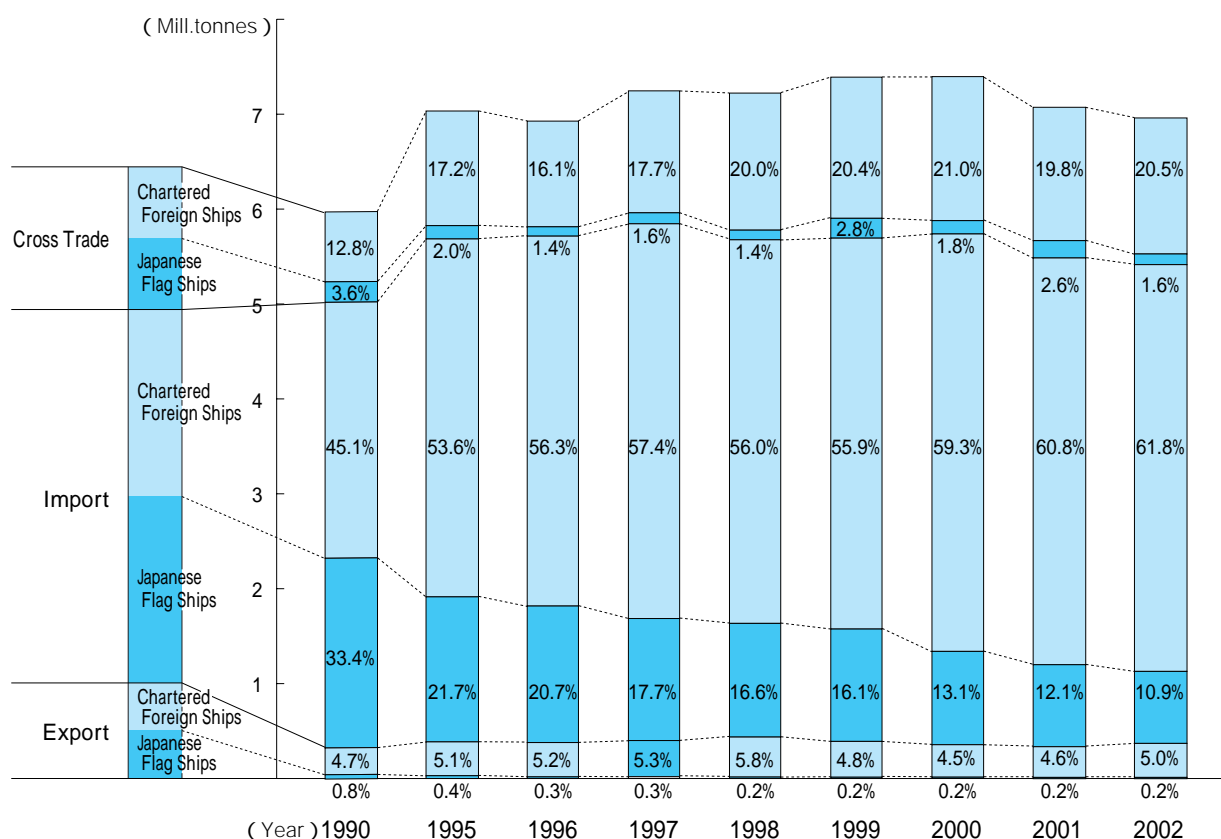
Year	World Seaborne Trade(Mill. tonnes)		World Tonnage(Mill.D/W)	
	Total	Crude oil and oil cargoes	Total	Tanker
1990	3,977	1,526	667	257
1991	4,110	1,573	684	264
1992	4,221	1,648	695	271
1993	4,339	1,714	696	270
1994	4,506	1,771	704	269
1995	4,687	1,796	718	266
1996	4,859	1,870	740	270
1997	5,092	1,929	758	271
1998	5,073	1,937	766	278
1999	5,169	1,965	778	282
2000	5,434	2,027	792	284
2001	5,513	2,017	802	284
2002	5,549	1,987	823	280

Notes:

Source :(Figures for World Seaborne Trade)Fearnleys, *Review 2002*; figures for 2002 are estimates.
 Tonnage figures up to 1992 are midyear figures obtained from Lloyd's Register of Shipping's *Statistical Tables*.
 Figures for 1993 and onward are year-end figures obtained from Lloyd's Register of Shipping's *World Fleet Statistics*.
 Tonnage figures for 1993 onwards are exclusive of fishing boats, etc.

4. Trade Volume Carried by Japanese Merchant Fleet

The trade volume carried by the Japanese merchant fleet in 2002 was approximately 700 million tons, down about 10 million tons (-1.5%) from that in the previous year. Imports decreased 1.7%, exports increased 6.5%, and cross trade decreased 2.5% from those in the previous year.



(Unit : Mill.ton)

Year	Export		Import			Cross Trade			Total			
	Japanese Merchant Fleet		Japanese Merchant Fleet			Japanese Merchant Fleet			Japanese Merchant Fleet			
	Japanese-flag	Foreign-flag	Japanese-flag	Foreign-flag	Japanese-flag	Foreign-flag	Japanese-flag	Foreign-flag				
1990	4.8	28.1	33.0	199.9	269.7	469.6	21.5	73.8	95.2	226.3	371.5	597.8
1995	3.0	35.8	38.8	152.7	377.2	530.0	14.0	120.9	134.9	169.7	533.9	703.6
1996	1.9	36.2	38.2	143.7	389.9	533.6	9.7	111.4	121.1	155.3	537.6	692.9
1997	2.0	38.2	40.2	128.5	415.9	544.4	11.7	128.4	140.1	142.2	582.5	724.7
1998	1.7	42.1	43.8	119.8	404.2	524.1	10.2	144.4	154.5	131.7	590.7	722.4
1999	1.5	37.7	39.2	118.4	412.0	530.4	20.9	148.8	169.7	140.9	598.5	739.2
2000	1.5	33.4	35.0	98.1	440.7	538.9	13.2	152.3	165.5	112.9	626.5	739.4
2001	1.5	32.2	33.7	85.3	429.3	514.6	18.1	140.0	158.1	104.9	601.6	706.5
2002	1.5	34.4	35.9	75.9	429.6	505.6	11.3	142.7	154.1	88.8	606.8	695.6

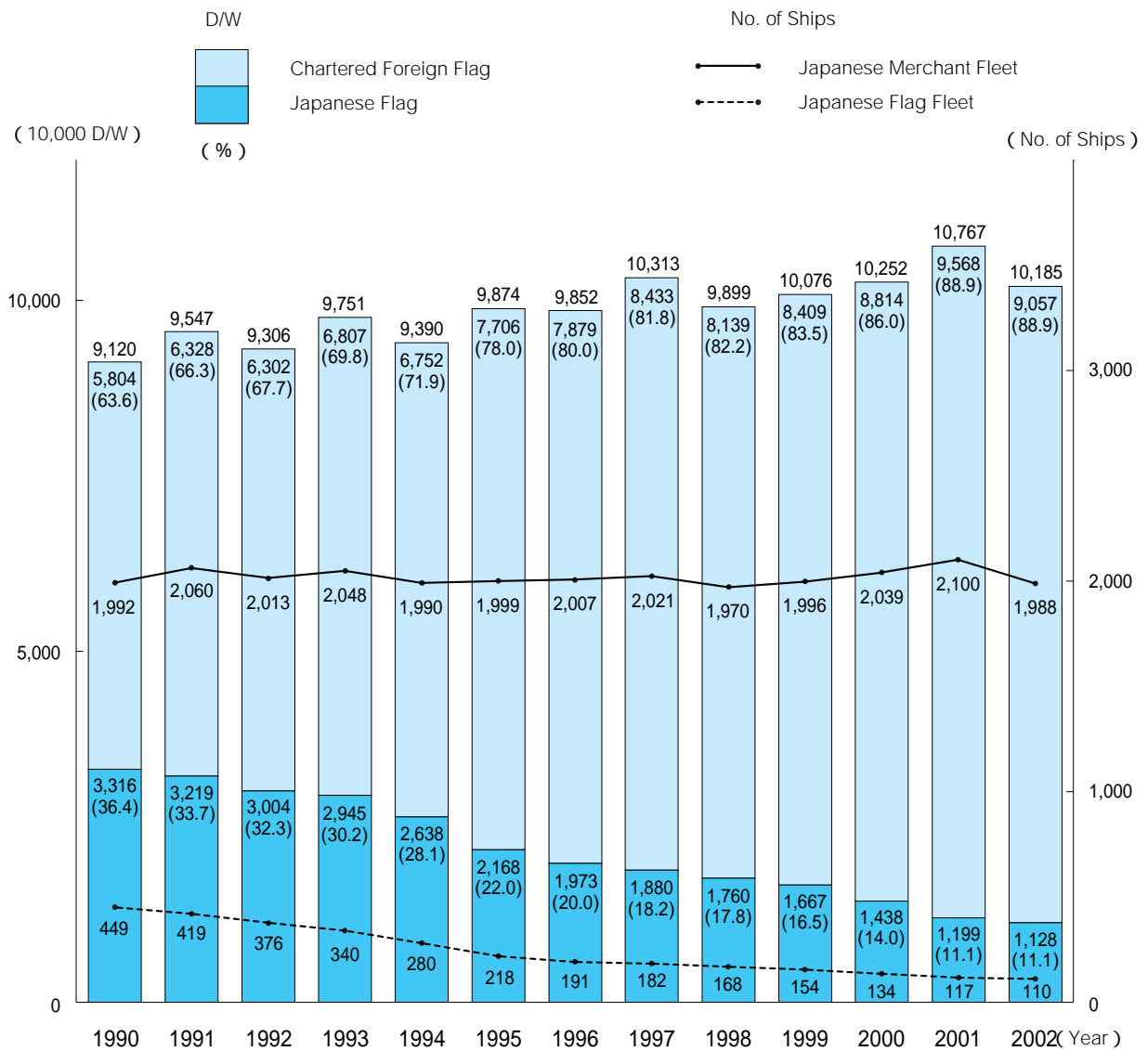
Notes:

Sources: Ministry of Land, Infrastructure and Transport, *Maritime Report*; former Ministry of Transport, *The Current Situation of Japanese Shipping*. Nonintegers are rounded and may not add up to the totals given. Figures for 2002 are provisional.

5. Japanese Merchant Fleet Tonnage

The tonnage of the Japanese merchant fleet comprising 1,988 vessels in mid-2002 was approximately 101.85 million dwt.

The number of Japanese-flag ships in 2002 fell 7 vessels, or 0.71 million dwt, from the 2001 level, to 110 vessels, or 11.28 million dwt, less than one-fifteenth its peak in 1972, with 1,580 Japanese-flag ships.



Notes:

Source : Ministry of Land, Infrastructure and Transport, *Maritime Report* ; former Ministry of Transport, *The Current Situation of Japanese Shipping*.
 Oceangoing vessels 2,000 G/T and over
 Figures are midyear figures.

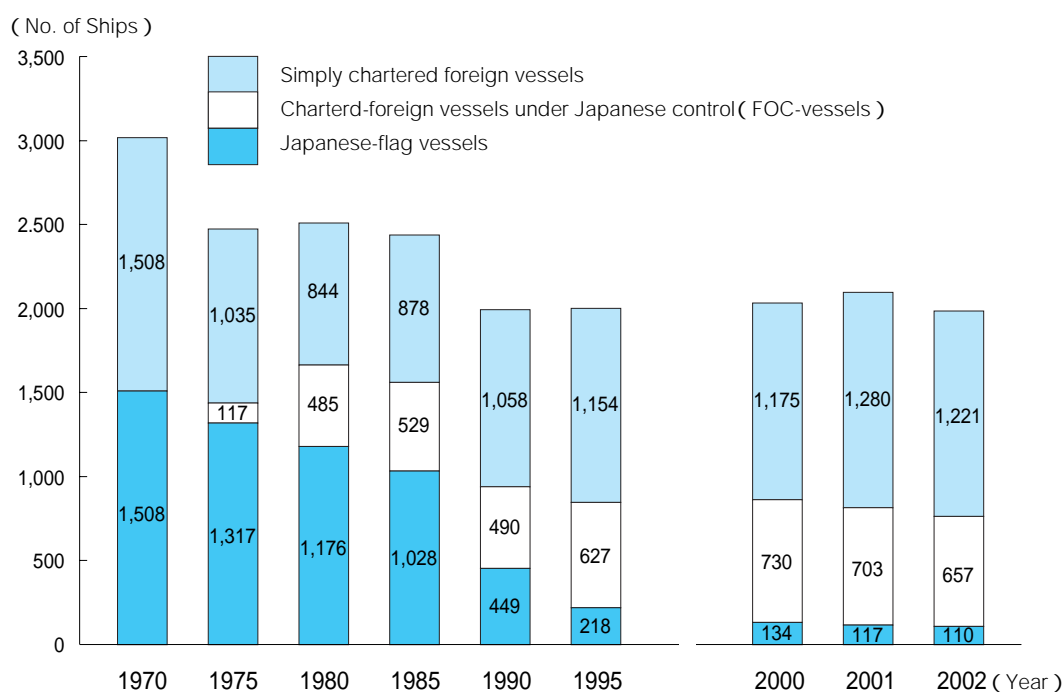
6. Composition of Japanese Merchant Fleet

The number of Japanese merchant vessels over 2,000 G/T and engaged in seaborne trade was 1,988 as of July 1, 2002. Of that number, 110 are Japanese flag.

Of the above mentioned 110 oceangoing Japanese-flag ships, 96 were international ships eligible for tax relief measures introduced in 1996.

The number of international ships with a Japanese captain, a Japanese chief engineer, and approved non-Japanese officers was 13.

Composition of the Japanese Merchant Fleet



Breakdown of Japanese-flag vessels(as of July,1 2002)

Ordinary Ship (all Japanese)	International Ships 96			
	New mixed-boarding "MARU" Ships	Modernized Ships (mixed-boarding)	LNG carriers (mixed-boarding)	Vessels with non-Japanese officers (licensed seafarers)
14	5	55	23	13

Breakdown of International Ship, as of September 1, 2003 (Figures are provisional)

International Ships 96			
New mixed-boarding "MARU" Ships	Modernized Ships (mixed-boarding)	LNG carriers (mixed-boarding)	Vessels with non-Japanese officers (licensed seafarers)
4	36	23	33

Notes:

Sources : Ministry of Land, Infrastructure and Transport, *Maritime Report* ; and JSA survey.

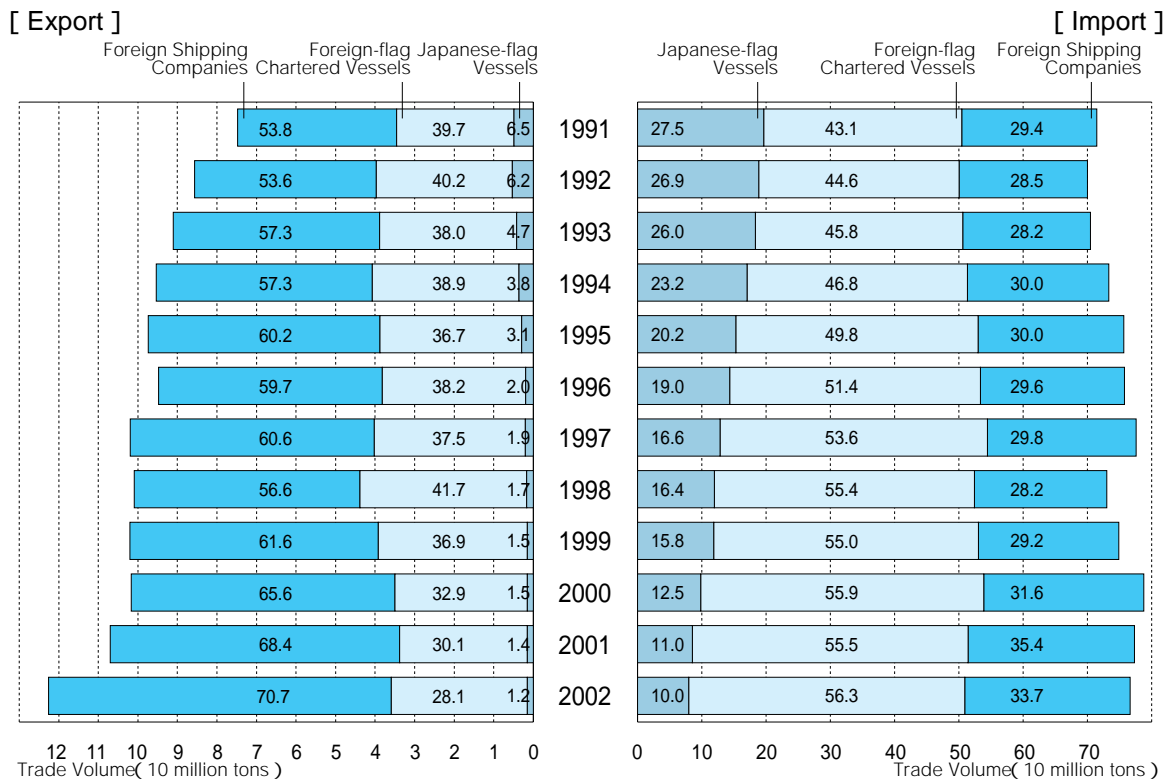
International ships are Japanese-flag ships that satisfy all of the following conditions

(Maritime Transport Law, Implementation Rule Article 43):

- Vessels 2,000 G/T and over
- Vessels navigating through oceangoing and adjacent sea areas
- Vessels used exclusively for oceangoing
- Vessels that are either of the following types:
 - Modernized ships(vessels equipped with high-level facilities and a few elite seafarers)
 - New mixed-boarding "MARU ships"(mixed-boarding vessels are rented overseas vessels licensed in and after 1990 according to Article 20, "Specially Exempted Ships," of the Ship Officers' Law)
 - LNG Carriers(vessels for carrying liquefied-natural gas exclusively)
 - RoRo Vessels(vessels on which automobiles are loaded/unloaded using the roll-on/roll-off system)
 - Vessels with non-Japanese officers(licensed seafarers)

7. Loading Ratios of Japanese Merchant Fleet

Japan's total seaborne trade volume in 2002 increased 14.6% for exports and decreased 1.3% for imports from the previous year's levels. Of these numbers, the trade volume by the Japanese merchant fleet increased 6.4% for exports and decreased 1.8% for imports. The loading ratios of Japanese merchant fleet decreased 2.3 points for exports and 0.3 points for imports.



Year	Export					Import				
	Trade Volume(10 thousand tons)		loading Ratio(%)			Trade Volume(10 thousand tons)		loading Ratio(%)		
	Japanese-flag Vessels	Foreign-flag Chartered Vessels	Japanese-flag Vessels	Japanese Merchant Fleet	Japanese-flag Vessels	Foreign-flag Chartered Vessels	Japanese-flag Vessels	Japanese Merchant Fleet		
1991	7,480	488	2,971	6.5	46.3	71,447	19,658	30,809	27.5	70.6
1992	8,562	529	3,440	6.2	46.4	69,988	18,838	31,180	26.9	71.5
1993	9,102	425	3,463	4.7	42.7	70,487	18,356	32,263	26.0	71.8
1994	9,535	365	3,705	3.8	42.7	73,309	17,040	34,314	23.2	70.1
1995	9,738	298	3,578	3.1	39.8	75,684	15,274	37,719	20.2	70.0
1996	9,478	193	3,623	2.0	40.3	75,793	14,370	38,992	19.0	70.4
1997	10,193	198	3,822	1.9	39.4	77,591	12,853	41,588	16.6	70.2
1998	10,091	172	4,209	1.7	43.4	73,022	11,981	40,425	16.4	71.8
1999	10,200	150	3,767	1.5	38.4	74,886	11,844	41,198	15.8	70.8
2000	10,174	151	3,345	1.5	34.4	78,800	9,814	44,073	12.5	68.4
2001	10,699	153	3,224	1.4	31.6	77,300	8,526	42,933	11.0	66.6
2002	12,260	148	3,444	1.2	29.3	76,293	7,593	42,963	10.0	66.3

Notes:

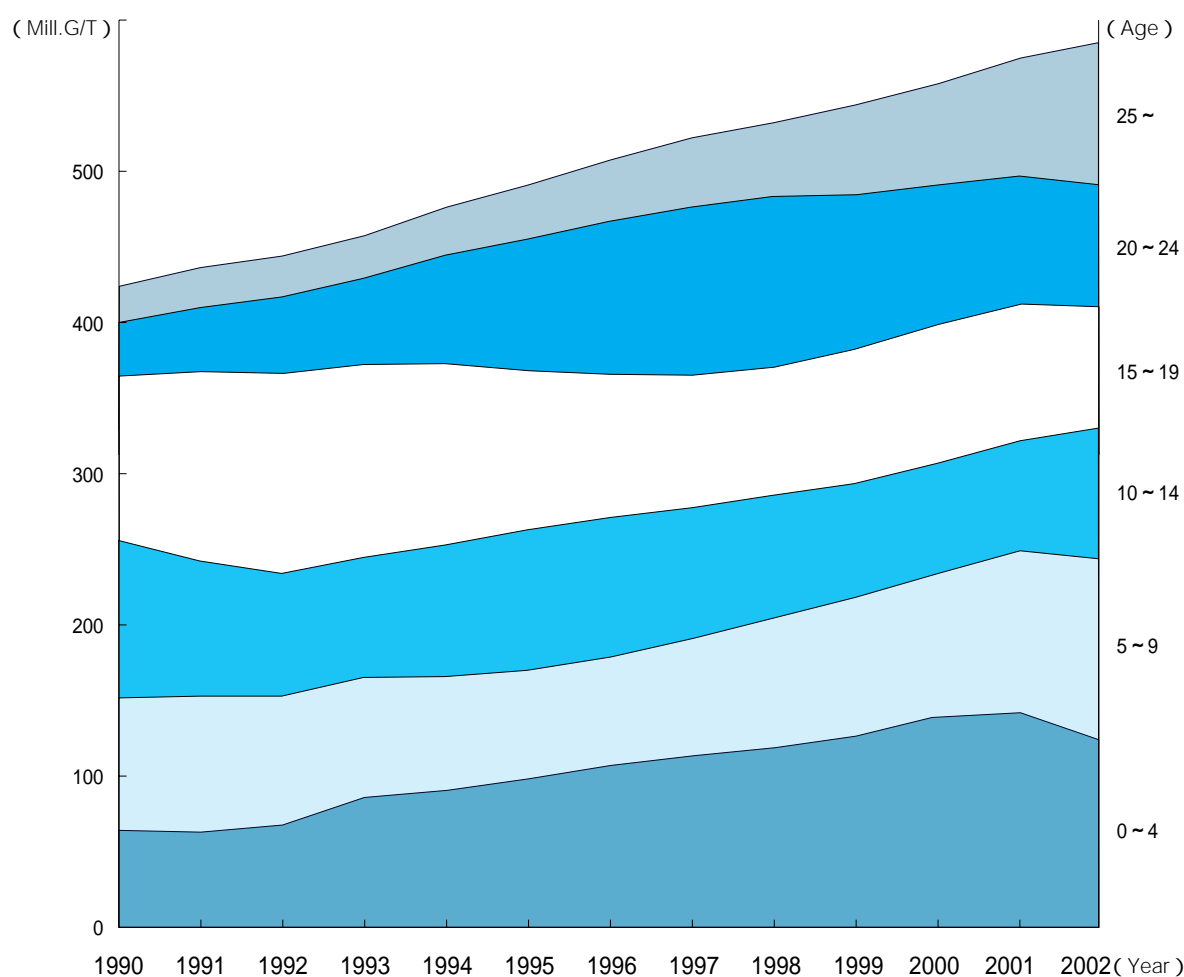
Sources: Ministry of Land, Infrastructure and Transport, *Maritime Report*; former Ministry of Transport, *The Current Situation of Japanese Shipping*.
 Load share ratios of the Japanese merchant fleet were obtained by adding the number of Japanese-flag ships and foreign-chartered vessels together.
 Figures in the bar graph indicate load share ratios(%)
 Figures for 2002 are provisional.

8. Volume of World Merchant Fleet by Age

The size of the world merchant fleet at the end of 2002 was 586 million G/T, approximately 30% of which was 20 years or older.

Some of these aged vessels may be considered substandard vessels that fall short of international standards and inappropriate for safe navigation.

To prevent accidents at sea and to protect the marine environment, they must be quickly eliminated from the world shipping market.



Age	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
0~4	63.6	62.8	67.8	86.0	91.0	98.2	107.5	113.8	118.9	126.6	135.9	141.8	124.3
5~9	88.6	89.2	85.3	79.7	75.1	72.3	71.8	77.4	86.7	91.8	98.6	107.6	119.2
10~14	103.1	89.7	81.2	79.1	87.3	92.5	91.2	86.1	80.2	75.2	72.4	72.0	86.8
15~19	109.3	125.8	132.3	127.4	118.3	104.7	94.9	87.5	85.0	88.7	92.3	90.5	79.9
20~24	35.4	42.5	50.8	57.9	72.8	87.4	102.1	111.8	112.0	102.7	91.6	84.5	80.6
25~	23.6	26.1	27.1	27.9	31.4	35.7	40.5	45.6	49.1	58.7	67.2	78.2	94.8
Total	423.6	436.0	444.3	457.9	475.9	490.8	507.9	522.2	531.9	543.6	558.1	574.6	585.6

Notes:

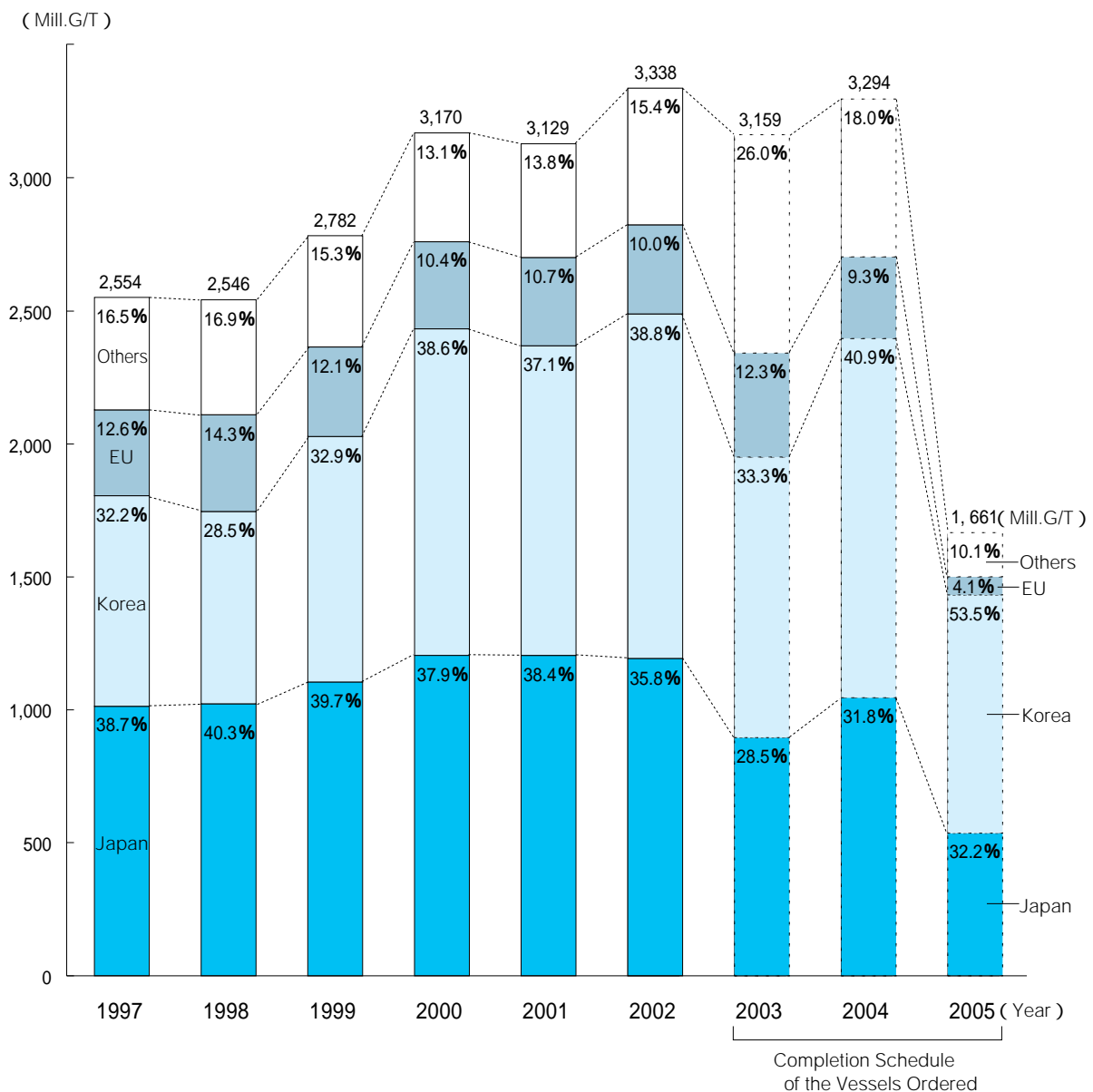
Figures up to 1992 are midyear figures obtained from Lloyd's Register of Shipping's *Statistical Tables*.

Figures for 1993 and onward are year-end figures obtained from Lloyd's Register of Shipping's *World Fleet Statistics*.

9. Newly Built Vessels and Completion Schedule

Since 2000, the world's newly built merchant fleet volume has remained at approximately 30 million G/T a year on a completion basis. During the past few years, Japan and South Korea each accounted for nearly 40% of the world's shipbuilding market, which makes them the world's two largest shipbuilding nations.

In 2002, South Korea once again superceded Japan on an actual completion basis and topped the world.



Notes:

The number of newly built vessels(up to 2002)was calculated based on figures on Lloyd's *World Fleet Statistics 2002*.

Figures for the completion schedule for vessels ordered(for 2003-2005)were calculated based on Lloyd's *World Shipbuilding Statistics 2002 March*.

Major shipbuilding nations within the EU are Denmark, Finland, France, Germany, Italy, Holland, Spain, the U.K., etc.

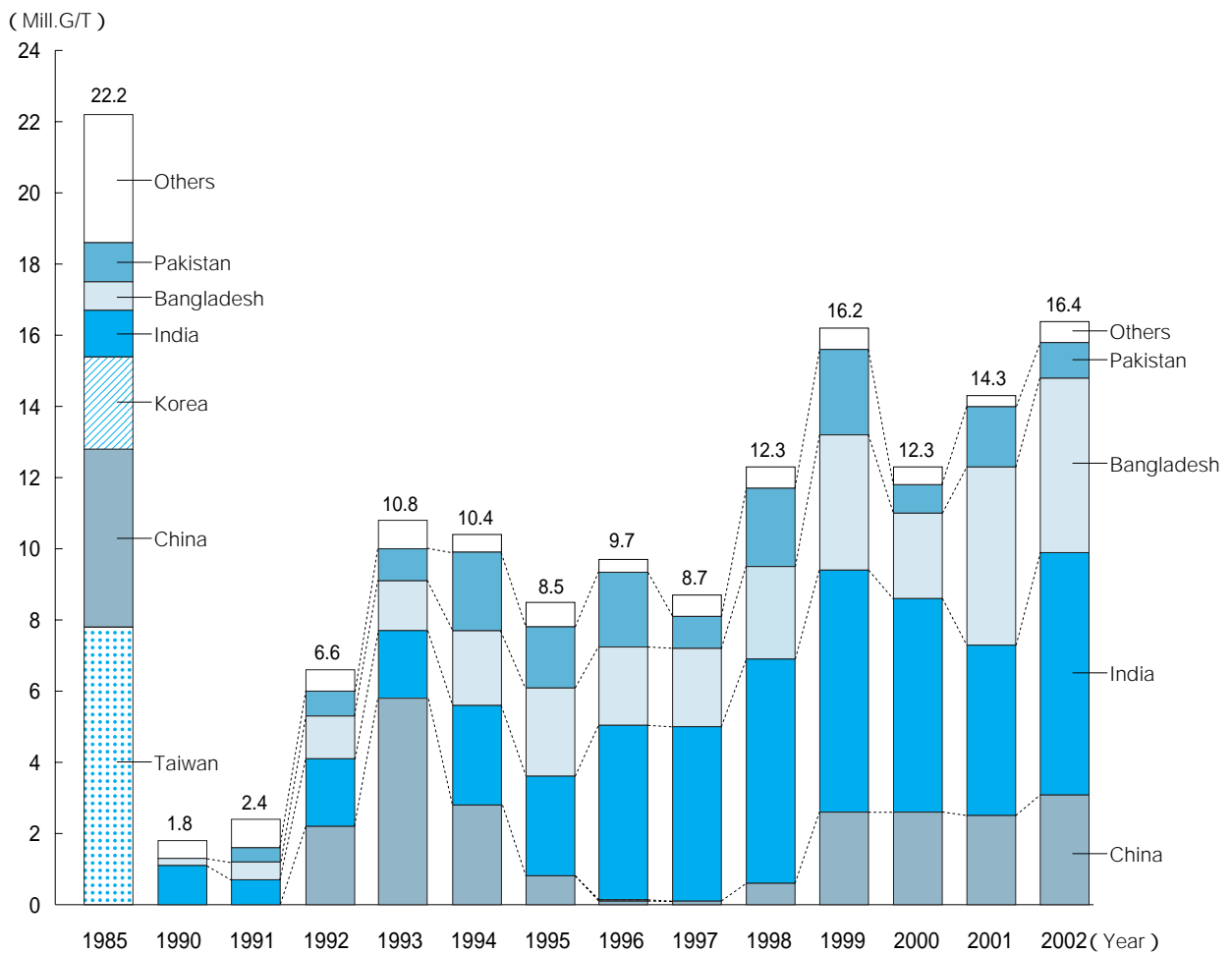
Major shipbuilding nations included in "Others" are China, Taiwan, Poland, Singapore, etc.

10. Ship Scrapping

The shipscrapping volume in 2002 was up 14.7% from that in the previous year, to 16.4 million G/T. India substantially increased its scrapping volume, overtaking Bangladesh and once again topped the world.

From now, a considerable level of ship scrapping is expected mainly built during the shipbuilding boom of the 1970s.

As concerns for the environment and the health of laborers who work around scrapping areas have grown in recent years, immediate measures to facilitate efficient scrapping with care for the environment must be taken.



Notes:

Sources : (figures up to 1993)Lloyd's Register of Shipping, *Casualty Return*;

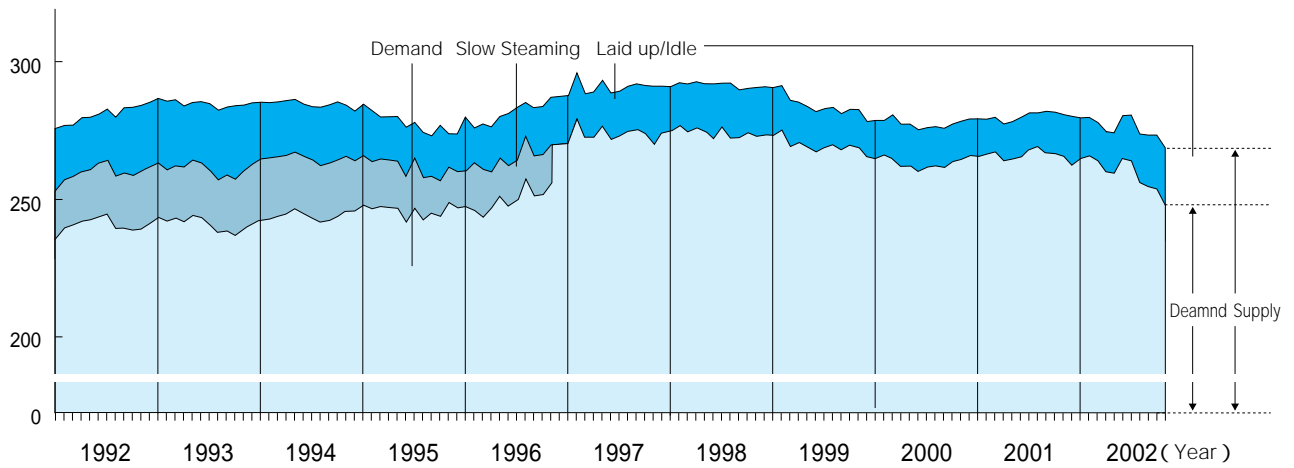
(figures for 1994 and onward)Lloyd's Register of Shipping, *World Casualty Statistics*.

11. World Ship Supply and Demand

As of October 2003, surplus tankers and dry bulk carriers, either laid up or idle, account for 7.0% (18.9 million D/W) and 0.9% (2.2 million D/W) respectively, of the world total tonnage.

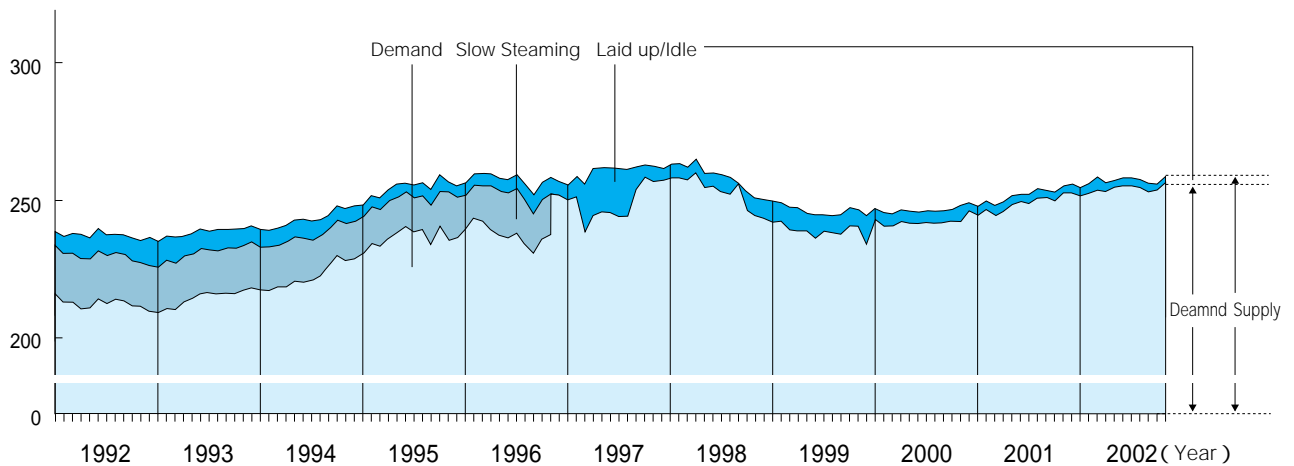
Tanker

(Mill.D/W)



Dry Bulk Carrier

(Mill.D/W)



Notes:

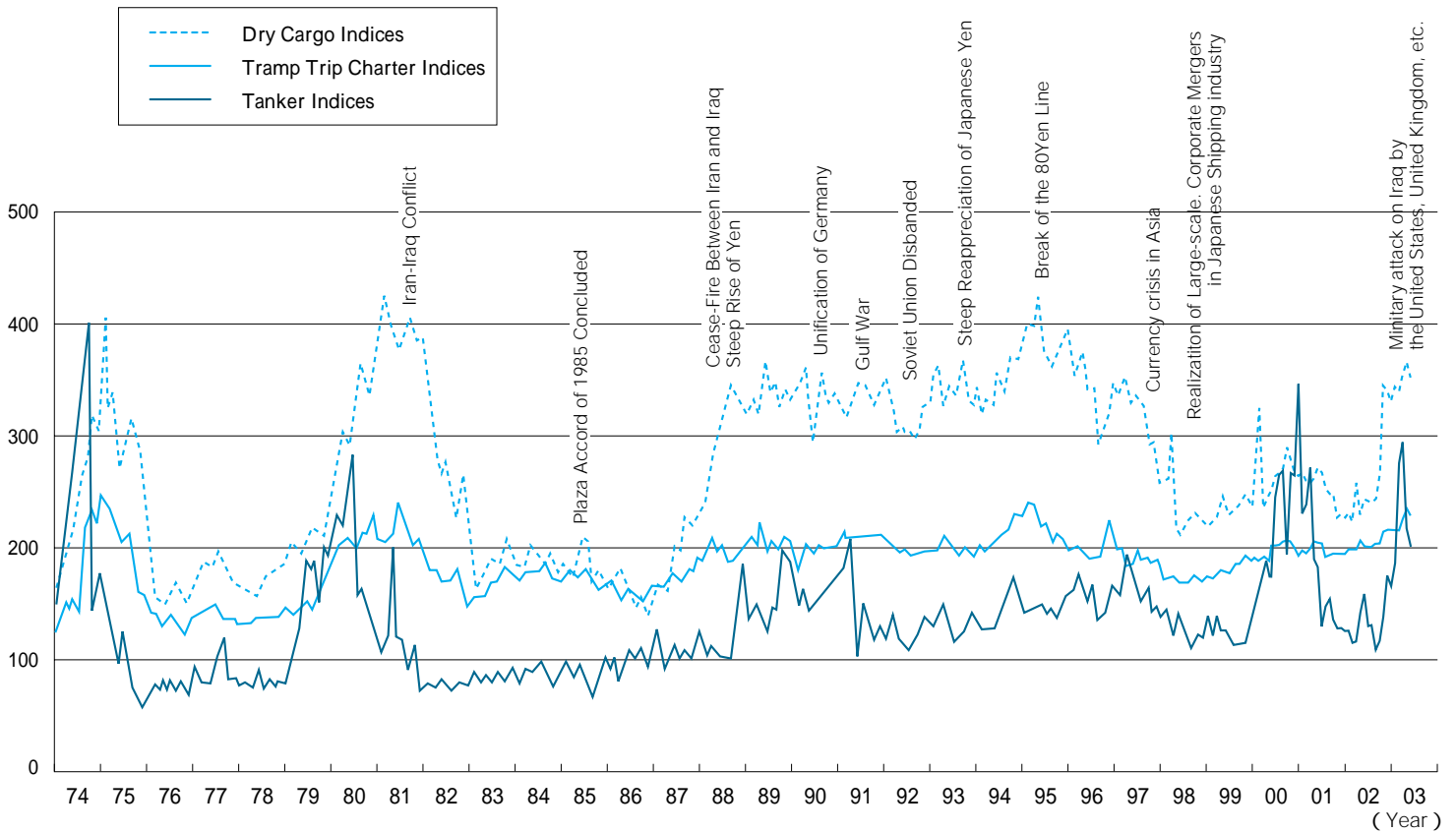
Source : Lloyd's Shipping Economist

Data on slow steaming has not been available since November 1996

1. Shipping Market

The tanker market in 2002 bounced back to its 2000 level when the World Scale Freight Index marked a record high. This was mostly due to an increase in stock by oil-consuming countries during the fourth quarter against a backdrop of the Iraqi crisis.

The tramp market in 2002 rose sharply because China substantially increased its iron ore imports from the fourth quarter, which led to a stronger demand for Cape-size bulk carriers. The market remained stable in early 2003 for both Panamax and Handy-size carriers.



Notes:

Source : Lloyd's Ship Manager

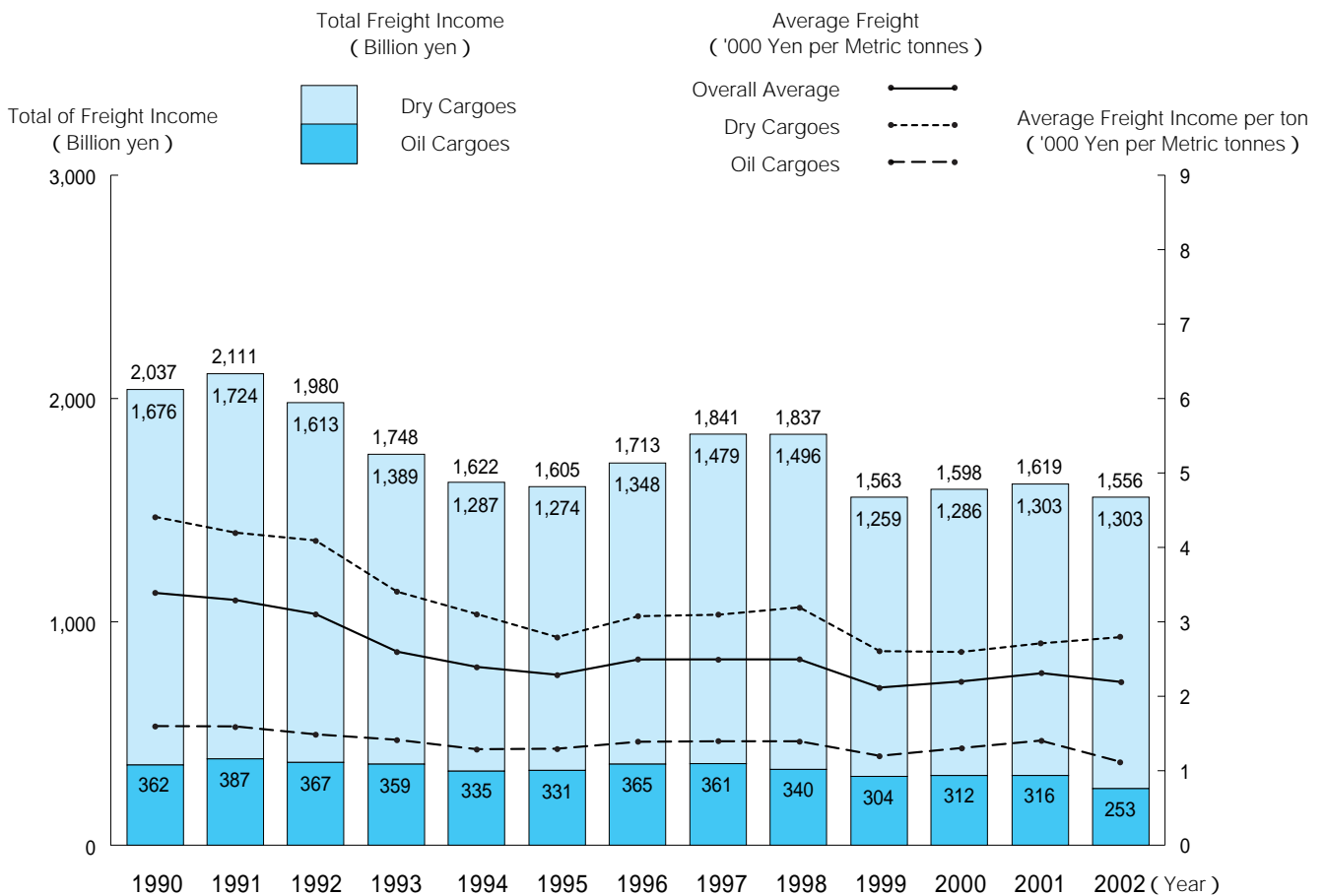
Average figures for July 1965–September 1966 are set at 100 for Tramp Steamer Freight and Dry Cargo Time Charter Fee Indices.

However, for the Time Charter Fee Indices for 1972 onwards, the 1971 average is set as 100.

Tanker Freight Indices up to 1988 are of World Scale Rates. Tanker Freight Indices for 1975 and onward are of small crude oil tankers (30,000–60,000tons) Indices for 1989 and onward are of World Scale Rates for Small Tankers(36,000–70,000tons)

2. Freight revenue of the Japanese Merchant Fleet

The overall freight income from the Japanese merchant fleet in calendar year 2002 was ¥1,556 billion, down ¥6.3 billion (-3.9%) from that in the previous year due to unfavorable influences such as a staggering freight market and a stronger yen in the first half of the year. The decline rate was, however, mitigated by a rise in tramp and tanker freight from the fourth quarter, reflecting signs of a slight economic recovery mainly in the United States and Asia.



Average Freight Income per ton ('000 Yen per Metric tonnes)

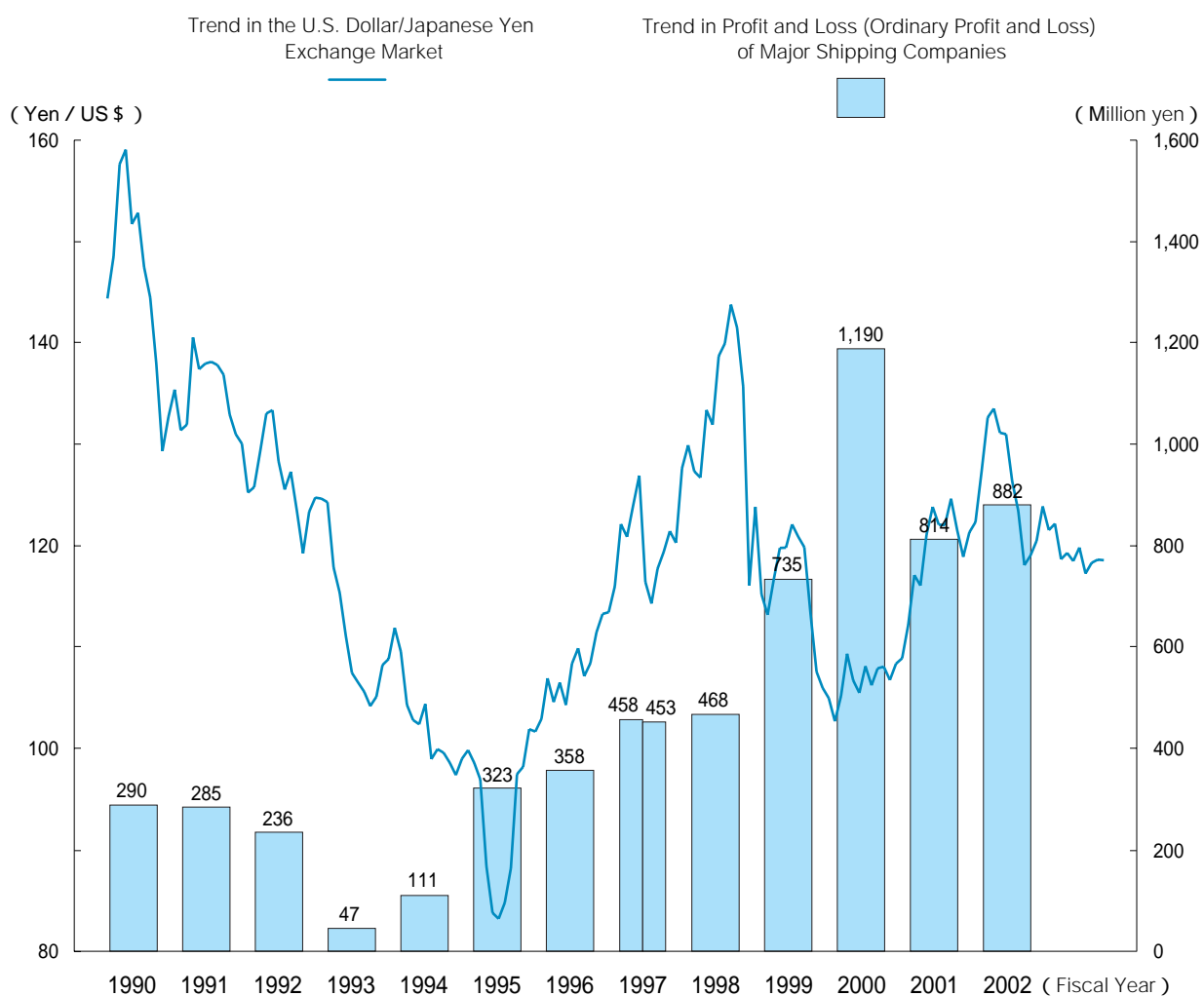
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Oil Cargoes	1.6	1.6	1.5	1.4	1.3	1.3	1.4	1.4	1.4	1.2	1.3	1.4	1.1
Dry Cargoes	4.4	4.2	4.1	3.4	3.1	2.8	3.1	3.1	3.2	2.6	2.6	2.7	2.8
Overall Average	3.4	3.3	3.1	2.6	2.4	2.3	2.5	2.5	2.5	2.1	2.2	2.3	2.2

Notes:

Sources : Ministry of Land, Infrastructure and Transport, *Maritime Report*; former Ministry of Transport, *The Current Situation of Japanese Shipping*.
 Figures for 2002 are provisional.

3. Profitability of Oceangoing Shipping Companies

Operating profit of three major oceangoing shipping companies in fiscal year 2002 was ¥1,910.1 billion, up ¥18.1 billion (1.0%) from that in the previous year. Operating expense increased ¥11.2 billion (0.6%), to ¥1,812.3 billion, despite various efforts leading to cost saving. The increase was due to such cost-rising factors as higher fuel expenses caused by the Iraqi tension, etc. Ordinary profit increased to ¥88.2 billion, up ¥6.8 billion (8.3%) from that in the previous year. (See graph.)



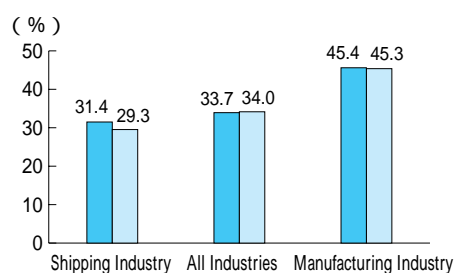
Notes:

Frequent company mergers dwindled the number of major Japanese shipping companies:
 five for fiscal 1989-fiscal 1997(Nippon Yusen Kaisha, Mitsui OSK Lines, Kawasaki Kisen Kaisha, Navix Line, and Showa Line)
 four for fiscal 1998(Nippon Yusen Kaisha, Mitsui OSK Lines, Kawasaki Kisen Kaisha, and Navix Line)
 and three as of fiscal 1999(Nippon Yusen Kaisha, Mitsui OSK Lines, and Kawasaki Kisen Kaisha)

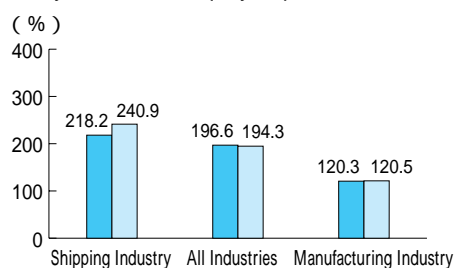
4. Financial Status of Oceangoing Shipping Companies

The financial status of the three major Japanese oceangoing shipping companies worsened during fiscal year 2002. The owner's equity ratio was down 6.7%, debt ratio was up 10.4%, and retained profit was down 8.8% from their respective figures in the previous year. The reason shipping companies have higher borrowed capital and lower owner's equity than those in other industries is due to the character of the industry, which requires a larger capital investment to build ships, etc. Return on investment increased 5.5 points, up 8% from that in the previous year, thanks mostly to an active market in the fourth quarter of fiscal year 2002.

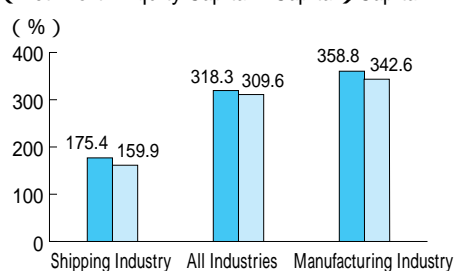
Owner's Equity Ratio
= Net Worth Equity Capital / Gross Capital × 100



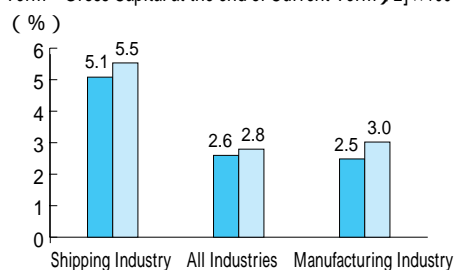
Debt Ratio =
Liability / Net Worth Equity Capital × 100



Ratio of Surplus to Capital
= (Net Worth Equity Capital - Capital) / Capital × 100



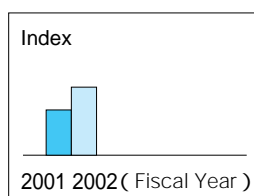
Total Capital Profit Ratio (ROI)
= Ordinary Profit or Loss / [(Gross Capital at the end of Previous Term + Gross Capital at the end of Current Term) / 2] × 100



Balance Sheet for Major Oceangoing Shipping Companies

(Billion Yen)

Classification		Fiscal 2001 (3 companies)		Fiscal 2002 (3 companies)	
		Amount	Share (%)	Amount	Share (%)
Assets	Current Assets	3,977	24.8	4,724	29.1
	Fixed Assets	12,070	75.2	11,500	70.9
	• Assets	5,074	31.6	4,776	29.4
	• Vessels	3,243	20.2	2,951	18.2
	• Temporary Account for Building	14	0.1	12	0.1
	• Others	1,818	11.3	1,813	11.2
	• Intangible Assets	173	1.1	179	1.1
	• Investments / Other Assets	6,823	42.5	6,546	40.3
	• Deferred Assets	0	0.0	3	0.0
	Total Assets		16,047	100.0	16,228
Liabilities	Current Liabilities	5,129	32.0	5,385	33.2
	Fixed Liabilities	5,875	36.6	6,082	37.5
	• Corporate Bonds	1,253	7.8	1,718	10.6
	• Long-Term Borrowing	4,141	25.8	3,923	24.2
	• Reserve for Liabilities	145	0.9	135	0.8
	• Others	337	2.1	306	1.9
Total Liabilities		11,004	68.6	11,467	70.7
Equity	Share Capital	1,831	11.4	1,831	11.3
	Others	3,211	20.0	2,929	18.0
	Total Share Capital	5,043	31.4	4,760	29.3
Total Liabilities and Share Capital		16,047	100.0	16,228	100.0



Notes:

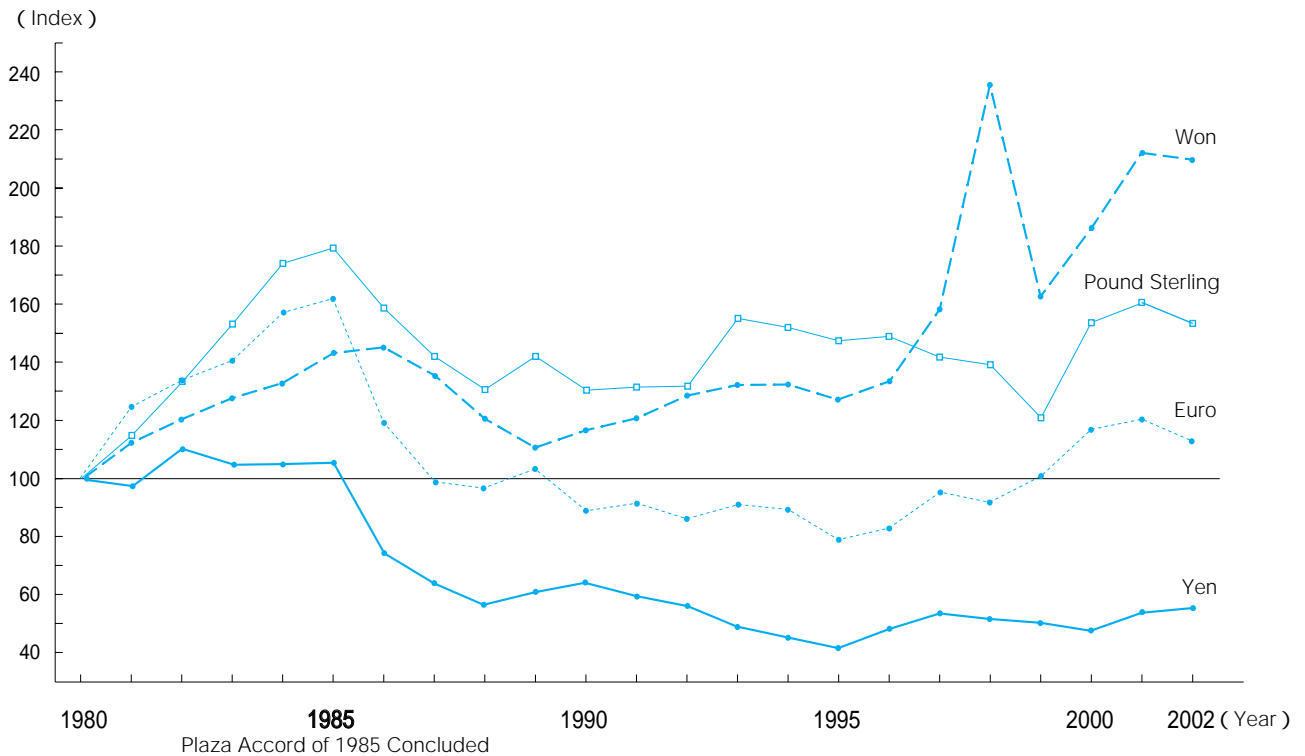
Source of figures for All Industries (548 companies) and Manufacturing Industry (419 companies): Mitsubishi Research Institute, Inc., Analysis of Company Management (First Half of Fiscal 2002)

Source of figures for Oceangoing Shipping Companies: Financial statement report
Data on oceangoing shipping companies are for the big three companies.

5. Impact of the Exchange Rate on Shipping Business

The performance of the oceangoing shipping companies is strongly affected by the exchange rate of U.S. dollar of value on foreign-exchange markets. When setting the exchange rates of major currencies against the U.S. dollar to 100 in 1980, the Japanese yen index in 2002 was 55.22, nearly half of that in 1980. This indicates that almost 50% of freight income was lost when exchanged to yen, which means that the Japanese oceangoing shipping industry has suffered greatly from a fluctuating exchange rate compared to its counterparts in other nations.

Trend in the exchange rate of currencies against the US dollar



Country	Currency	1980		2002	
		equivalent to one USD	index	equivalent to one USD	index
Japan	Yen	226.74	100.0	125.21	55.22
U.K.	Pound Sterling	0.43	100.0	0.66	153.49
Germany	Euro	0.93	100.0	1.05	112.90
Korea	Won	607.43	100.0	1274.46	209.81

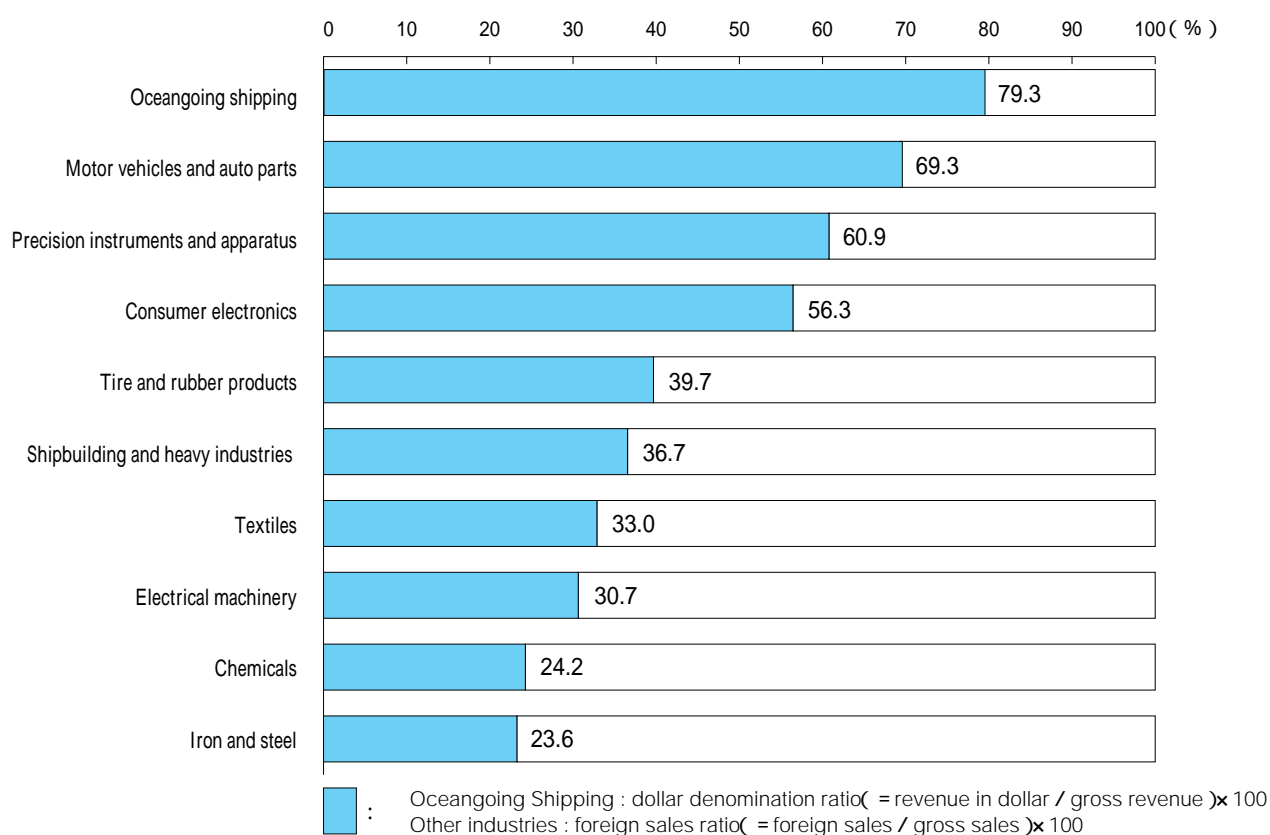
Notes:
Sources: (Figures up to 1995)IMF, *International Financial Statistics* ;

6. Dollar Denomination Ratio of the Revenues Earned by the Japanese Oceangoing Shipping

Dollar-denominated amounts account for nearly 80% of the total sales of the Japanese oceangoing shipping industry. This makes the industry much more vulnerable to exchange market fluctuations than other industries.

To make their financial structures less susceptible to exchange-rate fluctuations, the Japanese shipping companies are trying to increase yen-based revenue while striving to offset it with dollar-based expenditures.

Comparison of Dollar Denomination Ratio of the revenues earned by the Japanese Oceangoing shipping with the foreign sales ratio of Other Industries in Japan



Dollar Denomination Ratio of the Freight Income

	(%)						
Proportion of Dollar (The largest three oceangoing shipping companies)	1996	1997	1998	1999	2000	2001	2002
Operating revenues	69.4	72.2	73.9	73.2	76.1	77.5	79.3
Operating costs	61.4	65.0	68.0	65.4	69.7	70.3	72.1

Notes:

Source(Proportion of Dollar): The Japanese Shipowners' Association

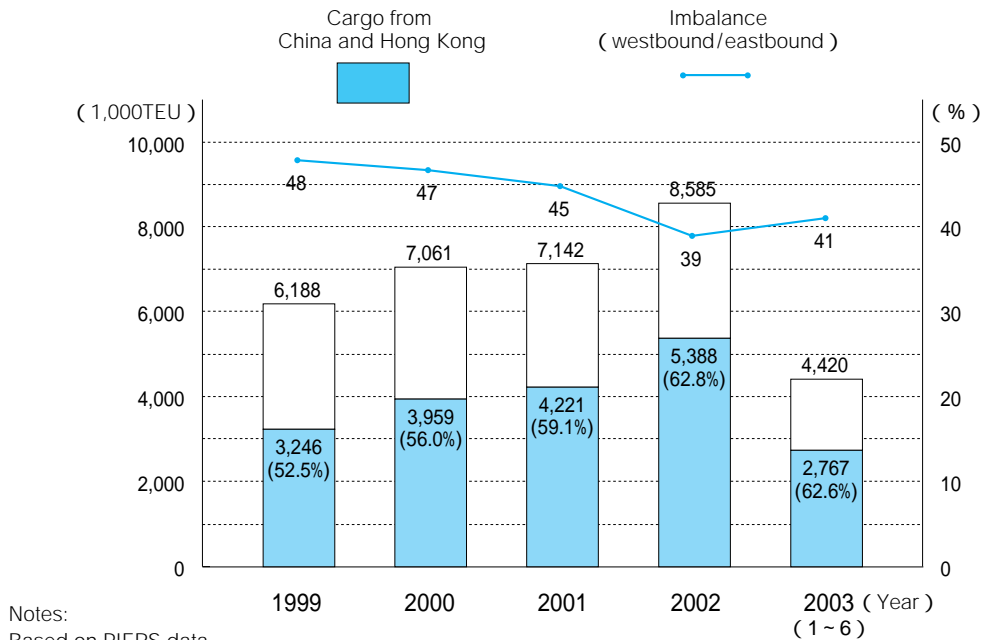
7. Container Cargo Movement in the Asia / North America Trade

Container cargo movement from Asia to the United States was favorable in September 2003. Cargo from China and Hong Kong steadily increased in share against all cargo from Asia to the United States.

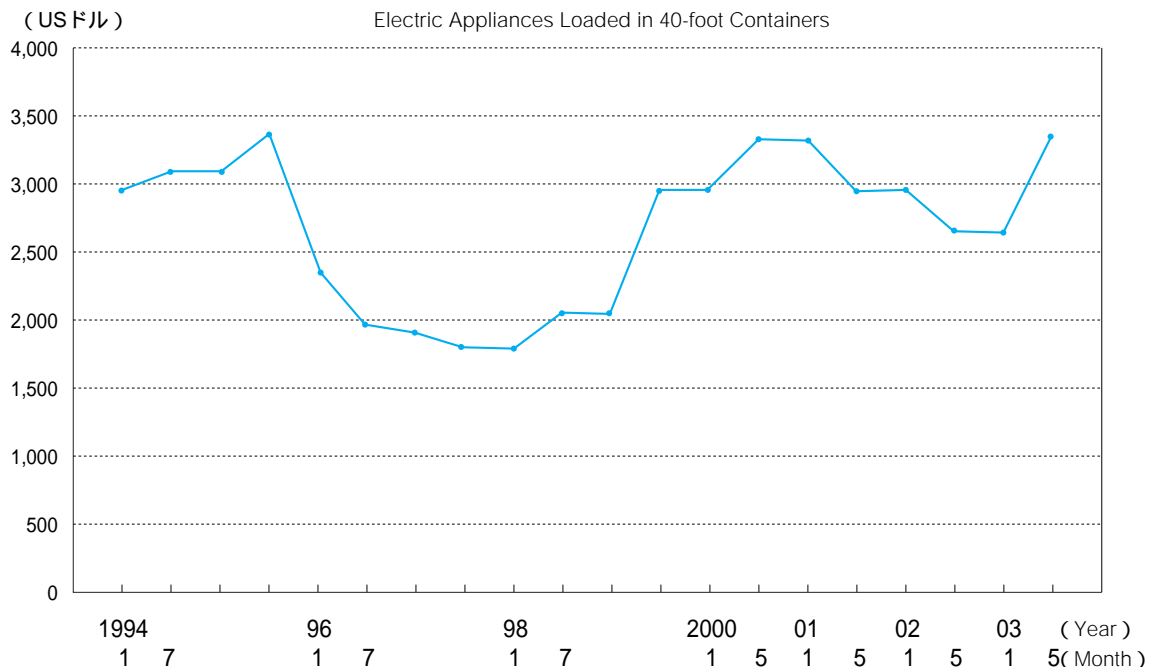
A well-balanced supply-and-demand led to restoration of the healthy freight market in eastbound trade in spring 2003.

The imbalance between homeward and outward cargo movement needs to be tackled.

Container Cargo Movement from Asia to the United States

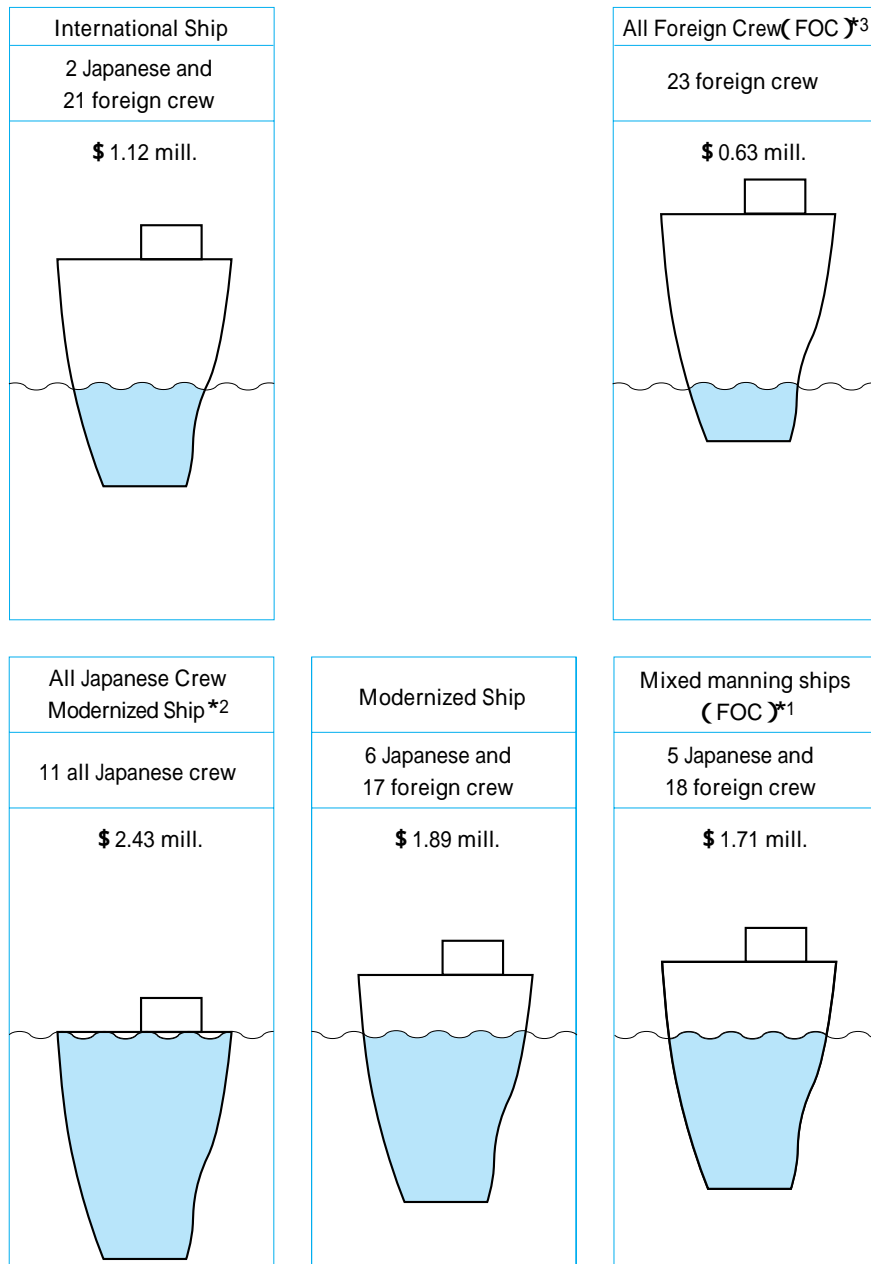


Level of Freight in the North American Route



8. Annual Manning Costs per Vessel

Comparing crew manning, which is a major factor in determining the international competitiveness of ships, a Japanese flag vessel fully manned by a Japanese crew costs about four to five times more than a ship fully manned by seaman from Southeast Asian countries.



Notes:

Source: JSA estimates.

Exchange rate: US\$1=¥112

Based on a 46.3% Japanese crew in reserve

- *1 FOC ships under the control of Japanese oceangoing shipping companies have a more diverse crew with Indian and East European seafarers joining the massive number of Southeast Asian (Filipinos, etc.) seafarers. Crewmembers of various nationalities result in different annual manning costs per vessel. The figure here is given as a reference for cases in which there are five Japanese crewmembers and 18 Southeast Asian crewmembers.
- *2 As of September 2003, no modernized Japanese flag ship is manned by an all-Japanese crew. The figure here is given as a reference for the crew costs of modernized vessels that were in operation up until October 2000.
- *3 This figure is an example of an FOC vessel manned by an all-Southeast Asian (Filipino) crew.

9. Policies to Strengthen the Shipping Industry

Many countries, especially those in Europe, actively introduce policies to beef up the international competitiveness of their shipping industry.

[policies introduced by shipping countries]

	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Holland	Norway	Portugal	Spain	Sweden	U.K.	U.S.A.	South Korea	Japan
1 Favorable depreciation measures																	
2 Special exemption for the replacement of vessels with new ones(roll-over relief)																	
3 Reduction in corporate tax using a tonnage-based taxation system																	
4 Vessel registry system (e.g., Second Ship Registry System)																	
5 Reduction in/Exemption of crewmembers' income tax																	
6 Reduction in crewmembers' social security premiums																	
7 Subsidy for the dispatch/repatriation of seafarers																	
8 Subsidy for the training of seafarers																	
9 Vessel operation subsidy(U.S.)																	

Source : JSA survey (known information as of September 30,2003)

1 Favorable Depreciation Measures

Accelerated depreciation(shorter depreciation period) advance depreciation(depreciation allowed before actual acquisition of vessel) initial depreciation(additional depreciation ratio over normal depreciation in the year of vessel acquisition)and favorable depreciation rate for vessel acquisition(100% final depreciable limit, etc.)

2 Special Exemption for the Replacement of Vessels with New Ones(Roll-over Relief)

Special exemption measures, such as tax-deferred income from the sale of old vessels when replacing with a new one

3 Reduction in Corporate Tax Using a Tonnage-Based Tax System

Shipowners are allowed to use either the traditional income taxation system or a tonnage-based taxation system (taxation based on net operating tonnage)when calculating corporate tax for its shipping business. (See pages 23 and 24.)

4 Vessel Registry System(e.g., Second Ship Registry System)

A system that allows the employment of foreign seafarers at a pay scale equal to that in their home country and/or a reduction in or exemption of their income tax under certain conditions

5 Reduction in/Exemption of Crewmembers' Income Tax

Tax refund, in whole or in part, for shipowners or seafarers on board Japanese-flag ships or second ship register ships

6 Reduction in Crewmembers' Social Security Premiums

Social security premiums refunded, in whole or in part, to shipowners or seafarers on board Japanese-flag ships or second ship register ships.

7 Subsidy for the Dispatch/Repatriation of Seafarers

Part of the repatriation fee subsidized for seafarers' embarkation/disembarkation at foreign ports

8 Subsidy for the Training of Seafarers

Part of seafarers' training expense subsidized to secure crewmembers for flag ships.

9 Vessel Operation Subsidy(U.S.: Maritime Security Program(MSP))

Annual subsidy totaling \$100 million(approximately ¥11.1 billion) or \$2.13 million(approximately ¥240 million)per vessel. Forty-seven vessels were qualified for MSP subsidy at the end of September 2003. (Exchange rate: US\$1 = ¥111)

10. Policies in Major Shipping Countries to Strengthen the Industry

European countries actively take measures to strengthen the international competitiveness of their shipping industry. Such measures include tonnage tax (corporate tax based on operating tonnage) a new taxation system that replaces the traditional corporate taxation system based on profit from the shipping business, in addition to conventional cost cutting measures, such as a ship register system designed to prevent flagging out.

Country	Major Policies to Strengthen the Shipping Industry		Remarks
U.K.	Relief in nationality restrictions for crewmembers (since August 1995)	<ul style="list-style-type: none"> Abolish all restrictions on the nationality of crewmembers (excluding those for captains of strategically important U.K.-flag ships deployed during times of emergency) to U.K., Commonwealth, EU, or NATO-country nationals. The above also applies to Commonwealth-flag ships of Mann Island Registry 	
	Roll-over relief system	<ul style="list-style-type: none"> Taxes on income from the sale of old vessels deferred for six years if new replacement vessels are of U.K., Commonwealth, or EU registry. No regulation on term of registry 	Finance Act approved in 1996 (now includes income from the sale of vessels within the same group)
	Reduction in social security premiums	<ul style="list-style-type: none"> Medical insurance fee reduced 0.5% for U.K.-registered oceangoing shipping companies 	Applies to seafarers on board vessels navigating in non-European waters.
	Exemption of seafarers' income tax	<ul style="list-style-type: none"> Exemption/refund of income tax to seafarers staying outside the U.K. for 183 days or more a year. 	Annual budget: approx. £40 million (approx. ¥7.5 billion) Applied regardless of registry of boarding vessel
	Crewmember relief cost scheme (CRCS) (since 1988)	<ul style="list-style-type: none"> Subsidize 20% of normal economy class airfare. 	Annual budget: approx. £1.5 million (approx. ¥280 million)
	Support for maritime training (SMarT) (since April 1998)	<ul style="list-style-type: none"> SMarT1 : Training for first Seaman's Competency Certificate; maximum £12,000 (approx. ¥2.26 million) per person SMarT2 : Onshore training for second (upper) level Seaman's Competency Certificate; maximum £6,000 (approx. ¥1.13 million) per person SMarT3 : Onshore training to upgrade ratings' skills SMarT4 : Onshore training for officers in line with the Amended STCW Convention 	SMarT SMarT is a system that integrates the former GAFT (training expense aid for trainees working toward the first Seaman's Competency Certificate) and DOCS (training expense aid for junior officers aiming to acquire a higher license) Annual budget: approx. £6.4 million (approx. ¥1.2 billion)
	Tonnage tax (tonnage-based taxation)	<ul style="list-style-type: none"> Similar to Holland's system Shipping companies that choose tonnage tax must either provide training at a rate of one trainee per 15 officers or bear financial responsibility. 	Tonnage tax was enacted in Aug. 2000 and is applied retroactively from Jan. 1, 2000.
Norway	Norwegian International Ship Registry System (NIS) (since July 1987)	<ul style="list-style-type: none"> Allows the employment of non-Norwegian seafarers, except captains, at a pay scale equal to that in their home country (although the rule is flexible enough to include captains) Exemption of income tax for non-Norwegian crewmembers on board NIS vessels 	NIS registry vessels at the end of 2002: 750 vessels, 28.4 million G/T
	Reduction in crewmembers' income taxes	<ul style="list-style-type: none"> Up to Nkr 70,000 (approx. ¥1.11 million) is deducted from the total income of Norwegian crewmembers Shipowners are given an income tax refund equal to 12% of the total wages paid to Norwegian crewmembers. 	Income tax refunds are given to shipowners in six installments a year. Since 1998, crewmembers on ferryboats and passenger cruise ships are excluded from this tax relief.
	Net Wage System	<ul style="list-style-type: none"> A system in which social security, etc., is deducted from the crew's wages and given to the shipowner 	Introduced for oceangoing ferryboat crews in July 2002 and, since July 2003, extended to crewmembers who have been on board
	Subsidy to employ Norwegian crewmembers	<ul style="list-style-type: none"> The equivalent of 12% of crewmembers' wages are given to shipowners to make up the difference between their wages and those of foreign crewmembers when Norwegian registry vessels or NIS ships have a certain percentage of Norwegian crewmembers. 	Budget for fiscal 1998: Nkr 415 million (approx. ¥6.6 billion)
	Tonnage tax (tonnage-based taxation) (since June 1996)	<ul style="list-style-type: none"> Income tax exemption for vessels under 1,000 N/T Differs from systems in other nations 	

. Management of the Shipping Industry

Country	Major Policies to Strengthen the Shipping Industry		Remarks
Germany	German International Ship Registry System(ISR/GIS) (since May 1989)	<ul style="list-style-type: none"> Allows the employment of a given number of foreign crewmembers who are below the rank of third officer and ratings at a pay scale equal to that in their home country. 	
	Roll-over relief system	<ul style="list-style-type: none"> Fifty percent tax on income from the sale of vessel(s) deferred Income from the sale of vessel(s) owned for more than six years may be deducted from the value of acquired assets or of the vessel(s) sold if replaced by new ones within four years. 	
	Relief in nationality restrictions for crewmembers	<ul style="list-style-type: none"> Amended to "captain (German) and 1 to 4 German or EU-national crewmember(s)." 	A further amendment (amended to "German captain and one officer/rating of EEA nationality") is under consideration
	Income tax relief for seafarers(since Jan. 1999)	<ul style="list-style-type: none"> A 40% cut in the income tax of seafarers who are at sea for 183 days or more a year, and reserves by shipowners allowed 	Income tax relief of Eur 20 million-Eur 25 million (approx. ¥2.5 billion-¥3.2 billion)
	Tonnage tax (corporate taxation based on tonnage) (since Jan. 1999)	<ul style="list-style-type: none"> Similar to Holland's system 	In March 1999, the KG system (a favorable tax system introduced in 1969 for shipbuilding investors) was abolished in line with a tax reform.
France	Cut in crew costs, etc., by Kerguelen Islands Registry, etc.	<ul style="list-style-type: none"> Only 35% of the crew have to be French (four of which are to be officers). 	The conditions are that the shipowner is to be of French registry and reside in France.
	Reduction in social security premiums	<ul style="list-style-type: none"> A 50% reduction in social security premiums borne by shipowners. 	Only crewmembers on board French flag ships are affected.
	Professional tax refund	<ul style="list-style-type: none"> Refund shipping business proportion of professional tax (tax professionnelle, municipal tax) 	Professional tax refund budget for fiscal 1999: Fr 90 million (approx. ¥1.6 billion)
	Oceangoing shipping modernization subsidy		
Denmark	Danish international ship registry system(DIS) (since July 1988)	<ul style="list-style-type: none"> Allows the employment of non-Danish crewmembers other than captains at a pay scale equal to that in their home country Income tax exemption for crewmembers on board DIS vessels 	DIS registry ships at the end of 1998: 473 vessels, 5.09 million G/T
	Income tax exemption for seafarers	<ul style="list-style-type: none"> Exemption of taxable income for crewmembers on board DIS vessels 	Seafarers deduction (up to DKr 24,800=approx. ¥430,000), oceangoing deduction (up to DKr 23,000=approx. ¥400,000)
	Seafarers repatriation aid	<ul style="list-style-type: none"> A fifty percent subsidy of the repatriation fee for seafarers on board for more than six months 	
	Tonnage tax (corporate tax based on tonnage) (since Jan. 2001)	<ul style="list-style-type: none"> Choice between ordinary corporate tax, based on profit, or tonnage tax, based on net operating tonnage 	
Holland	Tonnage tax (corporate tax based on tonnage) (since Jan. 1996)	<ul style="list-style-type: none"> Choice between ordinary corporate tax, based on profit, or tonnage tax, based on net operating tonnage (If choosing tonnage tax, it is not allowed to change for 10 years.) 	
	Measures to promote the employment of seafarers	<ul style="list-style-type: none"> Shipowners are given an income tax and social security premium refund equal to 40% of seafarers' wages Ten percent may be deducted for crewmembers on board Dutch flagships but who do not reside in Holland. 	Only crewmembers on Dutch flag ships are affected.
	Relief in nationality restrictions for crewmembers	<ul style="list-style-type: none"> Non-Dutch captains of EU or EEA nationality passing certain tests are allowed on board for a maximum of two years (since Aug. 1998). 	

Notes:

Source : JSA survey.

Exchange rates are as of September 2003. £=¥185.34, Nkr=¥15.89, Eur=¥129.19, DKr=¥17.40, US\$=¥111.25.

. Management of the Shipping Industry

Country	Major Policies to Strengthen the Shipping Industry	Remarks	
EU	Guidelines on state aids to the maritime transport (Executed July 5, 1997)	<ul style="list-style-type: none"> Financial aid and tonnage tax were expanded to all merchant fleets operated by shipping companies incorporated in EU member countries so long as connections to a member country registry can be proved. (Limiting such aid to member flag ships is not allowed.) A reduction in the social security premiums and income tax of EU seafarers employed by member country flagship to a maximum of zero is enabled. Repatriation aid for EU seafarers on board member country flag ships is possible. Aiding in training held on board member country flag ships (where trainees act as assistant crewmembers) is enabled. 	EU member countries shall decide on their own maritime policies following the guideline.
	Community guidelines on State aid to maritime transport (adopted October 30, 2003)	<ul style="list-style-type: none"> The Guideline introduced a new principal called " Flag Link " to the shipping industry's tax system. It requires shipping companies to operate EU flagships to be eligible for the tonnage tax scheme, and upon the enforcement of the new Guideline, EU flagships must account for more than 60% of each company's total running tonnage. (Formerly, the only requirement was the ratio of national flagships. The ratio was owned ships (including second ship registry and bareboat charter) : time charter = between 1:3 and 1:4.) If a company's figure is less than 60%, it may not apply for government aid. However, companies with an EU flagship running tonnage below 60% but satisfying the current requirement may be given a break on condition that they maintain their current EU flagship tonnage. Countries that introduced a tonnage tax are required to submit reports. Tax Exemption for Seafarers, etc., which has been restricted to EU seafarers, will basically be applicable to all seafarers regardless of nationality. However, seafarers on board passenger liners sailing within EU waters are restricted to EU seafarers only. 	
U.S.A.	New Maritime Security Program (MSP) (since fiscal 1997)	<ul style="list-style-type: none"> MSP is a newly introduced system based on the Maritime Security Act, which stipulates the maintaining of a national flagship merchant fleet deployable in emergencies. A total of \$100 million (¥11.1 billion)/year is subsidized for up to 47 U.S. flagships for 10 years, starting from fiscal year 1997. (The annual amount is \$2.13 million (¥240 million)/vessel.) As of September 30, 2003, 47 vessels from 10 shipping companies have received the subsidy. 	The program replaces the Operating Differential Subsidy (ODS). New ODS contracts were no longer recruited by fiscal 1996. Continuous takeovers of U.S. shipping companies, resulting in a decrease in the number of U.S. flag ships and doubt over the efficacy of MSP, led to a search for new measures to secure U.S. flag ships.
South Korea	Chejudo Special Ship Registry System (since April 2002)	<ul style="list-style-type: none"> Exemption from almost all vessel-related taxes for South Korean registry international ships and non-South Korean flag ships called Bare Boat Charter Hire Purchase ships. 	Considering the introduction of tonnage tax

Notes:

Source : JSA survey.

Exchange rates :(as of September 2003) £=¥185.34, Nkr=¥15.89, Eur=¥129.19, DKr=¥17.40, US\$=¥111.25.

11. Tonnage Tax(Tax Based on Tonnage)in European Countries

Country	Holland	Germany	U.K.
Commencement Date	January 1, 1996	January 1, 1999	January 1, 2000
Background	<ul style="list-style-type: none"> The policy is expected to halt the trend of flagging out to FOC, to keep a country attractive for the shipping business, and to have the shipping industry contribute more to the Dutch economy. Implications on acquiring foreign currency and increasing the number of seafarers are minor 	<ul style="list-style-type: none"> Preventing an outflow of shipping companies to neighboring Holland (Avoiding becoming at a disadvantage over Holland) Another implication is the making up of increased cost that resulted from safety regulations being imposed on German flag ships Attracting foreign investment 	<ul style="list-style-type: none"> Decrease in the number of direct ownership vessels (The decrease was about 4% per year, and in 1998 the number plunged to about 9.7 million dwt, less than one-fifth its peak in 1997.) Decrease in the number of seafarers (In 1980-1997, the number of officers decreased 78% and that of ratings by 65%.)
Applicable range	<ul style="list-style-type: none"> Applies to profits gained from all vessels engaging in international transport (owned/co-owned ships and time charter/bareboat charter vessels). Also applies to time charter vessels and vessels managed for other companies if the net tonnage of the vessels are within three times the sum of the net operating tonnage of the owned/co-owned ships and that of bareboat charter vessels. If not, all time charter vessels and ships managed for other companies are excluded from tonnage tax.) Profits not applicable to tonnage tax is subject to ordinary corporate tax 	<ul style="list-style-type: none"> Applies to profit gained from German flag ships (owned and co-owned ships) engaging in international transport Also applicable to non-German flag ships as bareboat charter vessels if the shipping company proves that their business and corporate management are performed in Germany Profits not applicable to tonnage tax is subject to ordinary corporate tax The Three Times Rule explained in the left column is applicable. 	<ul style="list-style-type: none"> The Dutch method adopted However, application is limited to seagoing vessels of 100 G/T or more. Net tonnage of time charter vessels must be within 75% of the sum of the net tonnage of owned ships and chartered vessels. (Policy on exceeding portion undecided.) The Three Times Rule explained on the far left is applicable. If the company decides to choose the tonnage tax, the system will be applied to all group companies.
Coefficient according to tax rate (Norway) Coefficient according to tonnage (Holland and others)	<ul style="list-style-type: none"> Coefficient per 1,000 N/T Up to 1,000 N/T Eur 9.02 (approx. ¥1,165) Over 1,000 N/T and up to 10,000 N/T Eur 6.81 (approx. ¥880) Over 10,000 N/T and up to 25,000 N/T Eur 4.54 (approx. ¥587) Over 25,000 N/T Eur 2.27 (approx. ¥283) Exchange rate: Eur 1.00 = ¥129.19 	<ul style="list-style-type: none"> Coefficient per 100 N/T Up to 1,000 N/T Eur 0.92 (approx. ¥118) Over 1,000 N/T and up to 10,000 N/T Eur 0.69 (approx. ¥89) Over 10,000 N/T and up to 25,000 N/T Eur 0.46 (approx. ¥59) Over 25,000 N/T Eur 0.23 (approx. ¥29) Exchange rate: Eur 1.00 = ¥129.19 	<ul style="list-style-type: none"> Coefficient per 100 N/T Up to 1,000 N/T £ 0.60 (approx. ¥111) Over 1,000 N/T and up to 10,000 N/T £ 0.45 (approx. ¥83) Over 10,000 N/T and up to 25,000 N/T £ 0.30 (approx. ¥55) Over 25,000 N/T £ 0.15 (approx. ¥27) Exchange rate: £ 1.00 = ¥185.34
Selection of tonnage taxation	<ul style="list-style-type: none"> Noncompulsory; chosen by the taxpayer Choice cannot be changed for 10 years (10 years is one unit.) Not retroactively applied. However, as a special exception, it will be applied retroactively if applied for within two years of introduction (before 1998). 	<ul style="list-style-type: none"> Noncompulsory; chosen by the taxpayer Choice cannot be changed for 10 years (10 years is one unit.) Not retroactively applied. However, as a special exception, it will be applied retroactively if applied for within three years of introduction (before 2001). 	<ul style="list-style-type: none"> Noncompulsory; chosen by the taxpayer (a group under a consolidated tax payment system) Choice cannot be change for 10 years (10 years is one unit.) Since January 1, 2000, applicable from the fiscal year in which tonnage tax was chosen
Effects	<ul style="list-style-type: none"> More than 100 shipping companies moved their business footholds back to Holland because of the tonnage tax. More than 90% of the shipping companies are expected to choose tonnage tax in 2006. <p>Holland Registry Vessels 1995: 557 vessels 2003: 810 vessels</p> <p>Number of Seafarers (Holland registry vessels) 1995: 11,095 2001: 17,106</p>	<ul style="list-style-type: none"> According to the German Shipowners' Association, German shipowners have chosen tonnage tax for 500 out of 1,600 oceangoing vessels. There is also an increase in foreign investments. 	<ul style="list-style-type: none"> After introducing tonnage tax, 47 companies, or 600 vessels, are under tonnage tax, and an additional 20 companies are now in negotiations with tax authorities. In the past two years, there was a 50% increase in U.K. flag ships.
Conditions	<ul style="list-style-type: none"> Applies to companies incorporated in Holland, controlled mainly from Holland, or managed through a branch, etc., located in Holland. 	<ul style="list-style-type: none"> Shipping companies must be doing business and corporate management in Germany. Foreign shipowners must register their vessels in Germany and manage them from Germany. 	<ul style="list-style-type: none"> Shipping companies that choose tonnage tax must provide training to seafarers. They are obligated to train one crewmember for each 15 officers employed or to provide funds every year.
Advantages /Disadvantages	<ul style="list-style-type: none"> Easier fund management because of fixed tax income Because taxable income is calculated from assumed profit, tax is levied even in cases of loss. 		
Reasons for returning back to flagship	<ul style="list-style-type: none"> Because all chartered vessels as well as excessive tonnage fall out of application if net tonnage of time charter exceeds three times the total net tonnage of owned/co-owned ships and bareboat charter vessels, the shipping company must increase the number of owned ships in order to apply tonnage tax to all vessels. 	<ul style="list-style-type: none"> As applicable vessels are limited to owned/co-owned ships of German registry, shipping companies have to increase the number of ships in these categories so that more vessels will be affected by tonnage tax. 	<ul style="list-style-type: none"> Because the net tonnage of time chartered vessels is restricted to within 75% of the total tonnage of owned ships and chartered vessels, shipping companies have to increase the number of owned ships to apply tonnage tax to all vessels.

Management of the Shipping Industry

Country	Norway	Denmark	Outline
Commencement Date	June 1996	Applied retroactively from Jan. 1, 2001	<ul style="list-style-type: none"> In order of introduction: Holland, Norway, Germany, U.K., and Denmark
Background	<ul style="list-style-type: none"> The aim is to promote Norway's shipping industry and maintain employment levels. It is a national policy with a view to acquire foreign currency. In Norway, where 20% of its people are involved in the marine industry, there is no opposition from other industries to push for government policies favorable to the shipping industry. 	<ul style="list-style-type: none"> To achieve equal footing with major neighboring shipping countries To enable more flexible investments 	<ul style="list-style-type: none"> Main targets are to prevent a decrease in the number of flag ships, to strengthen international competitiveness, and to promote the industry together with its surrounding industries. Countries approved for introduction by the European Committee. Spain (February 2002), Belgium (March 2003) and France (May 2003)
Applicable range	<ul style="list-style-type: none"> International shipping income (mostly cross-trades) Regardless of port or place of registry (the system is not limited to NOR/NIS ships.) Application is limited to maritime income. Interest income or capital gains from the sale of vessels are excluded. Dividends, if any, are taxable according to corporate tax rates. Tax relief for environment-friendly vessels (a 25% cut in tonnage tax for specific vessels) 	<ul style="list-style-type: none"> Applies to cargo/passenger transport and related businesses Applies to vessels 20 G/T and over Tonnage of time charter vessels should not exceed four times the sum of tonnage of owned ships and bareboat charter vessels. 	<ul style="list-style-type: none"> Despite slight differences, all governments are trying to motivate shipowners to increase the number of ships owned by setting volume restrictions on time charter vessels.
Coefficient according to tax rate (Norway) Coefficient according to tonnage (Holland and others)	<p>Tax Rate per 1,000 N/T</p> <ul style="list-style-type: none"> Up to 1,000 N/T: no tax Over 1,000 N/T and up to 10,000 N/T: Nkr 50 (approx. ¥794) Over 10,000 N/T and up to 25,000 N/T: Nkr 33 (approx. ¥524) Over 25,000 N/T: Nkr 16 (approx. ¥254) Revised 2002. Exchange rate: Nkr 1.00 = ¥15.89 	<p>Coefficient per 100 N/T</p> <ul style="list-style-type: none"> Up to 1,000 N/T: DKK 7 (approx. ¥112) Over 1,000 N/T and up to 10,000 N/T: DKK 5 (approx. ¥80) Over 10,000 N/T and up to 25,000 N/T: DKK 3 (approx. ¥48) Over 25,000 N/T: DKK 2 (approx. ¥32) Exchange rate: DKK 1.00 = ¥15.99 	<ul style="list-style-type: none"> Dutch Method: Obtain assumed profit per vessel (Coefficient x 365 days x N/T), add income from vessels excluded from tonnage tax, then multiply it with the corporate tax rate. Norwegian Method: Calculate by using the fixed tax rate according to net tonnage. (It has nothing to do with the ordinary corporate tax rate.) Exchange rate: as of Sept. 2003.
Selection of tonnage taxation	<ul style="list-style-type: none"> Application noncompulsory, chosen by the taxpayer To be applied from Jan. 1 of the year following the year application was accepted Application may be cancelled at any time. (Application becomes void from Jan. 1 of the year of cancellation.) 	<ul style="list-style-type: none"> Application noncompulsory; chosen by the taxpayer Regardless if tonnage tax or ordinary corporate tax was chosen, changing to the other method is not allowed for 10 years. Choice basically made according to company group 	<ul style="list-style-type: none"> Application is noncompulsory. The taxpayer chooses between ordinary corporate tax and tonnage tax. In Holland and in other countries, changing taxation methods for a certain time is not allowed. In Norway, changes are allowed once a decision is made.
Effects	<ul style="list-style-type: none"> In 1996, 331 shipping companies benefited from the system. In 2001, 714 shipping companies benefited from the system. <p>Ships under Norwegian Control</p> <p>1996: 1,393 vessels (47.0 million dwt) 1998: 1,622 vessels (52.5 million dwt) 2001: 1,049 vessels</p>	<ul style="list-style-type: none"> Evaluation of the system is too early because of the limited time it was in operation. 	<ul style="list-style-type: none"> The number of owned ships, flagship registries, employees, and vessels built increased in Holland and Norway. In other countries, it is too early to evaluate because of the limited time it was in operation.
Conditions	<ul style="list-style-type: none"> Shipping companies applying for tonnage tax are not allowed to engage in businesses other than ship operation and ship rental. They must satisfy several other conditions, such as limiting possessed assets. 	<ul style="list-style-type: none"> Applicable to Danish companies, EU companies with permanent facilities in Denmark, or companies managed or paying taxes in Denmark. 	<ul style="list-style-type: none"> In the U.K., shipping companies that choose tonnage tax must provide training for seafarers.
Advantages/Disadvantages	<ul style="list-style-type: none"> Easier fund management because of fixed tax income Because taxable income is calculated from assumed profit, tax is levied even in cases of loss. 		
Reasons for returning back to flagship	<ul style="list-style-type: none"> There are advantages to applying this with a system that gives employers an income tax refund equal to 12% of the wages paid to seafarers. 	<ul style="list-style-type: none"> Because time charter vessel tonnage is restricted to 80% or less of the sum of tonnage of owned ships and charter vessels, shipowners have to increase owned ships to apply tonnage tax to all vessels. 	<ul style="list-style-type: none"> Countries using the Dutch Method (a system requiring an increase in owned ships to apply tonnage tax to all vessels): Holland, U.K., Denmark Countries using the German Method (application limited to owned/co-owned flag ships): Germany

Notes:

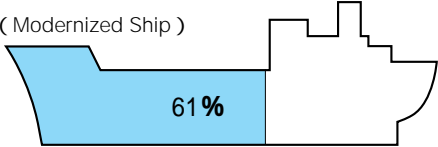
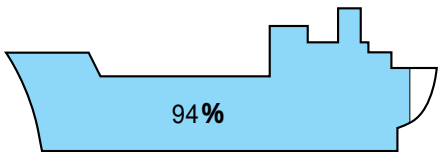
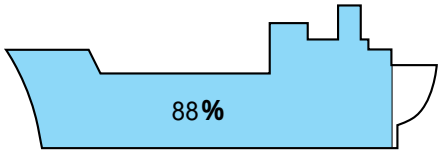
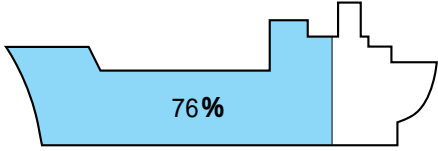
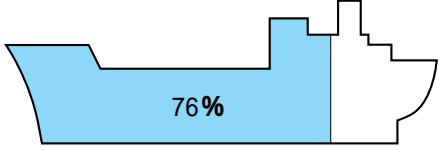
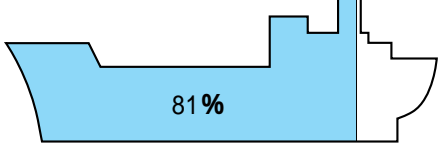
Source: JSA survey (as of Sept. 2003)

12. Ship Depreciation Methods

Advantageous tax policies such as ship depreciation systems are formulated by major shipping countries, because shipping industry is considered to be seriously affected by market volatility.

The Japanese depreciation method including special depreciation is less beneficial to its shipping companies than those of the Countries. Nevertheless, the special depreciation method still plays a pivotal role to maintain Japanese merchant fleets which support our economy and secure the international competitiveness of Japanese shipping companies.

Maximum depreciation ratio over the period of 5 years after an acquisition of new vessels

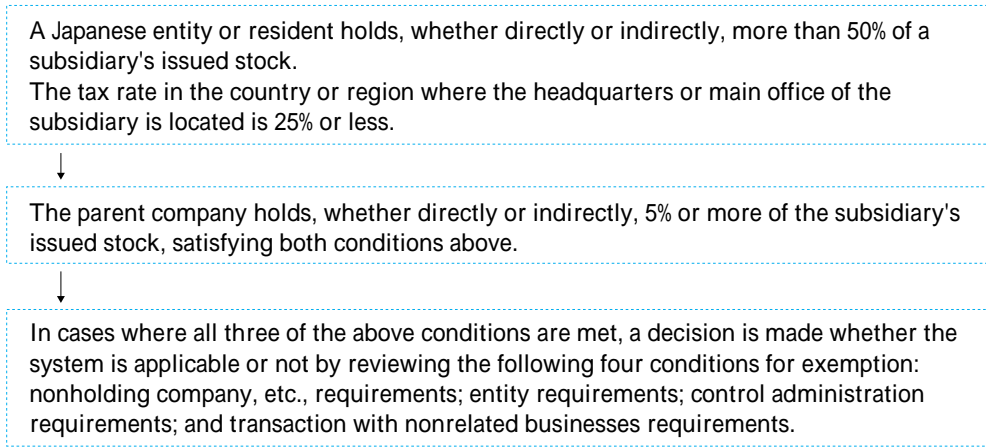
JAPAN	<p>(Modernized Ship)</p>  <p>61%</p> <p>(Tanker : 66% • Double hull Tanker : 67%)</p>	Accelerated Depreciation 18%, and normal depreciation of the declining balance method over the useful life of 13 to 15 years.
FRANCE	 <p>94%</p>	Depreciation 31.25% of the declining balance method.
DENMARK	 <p>88%</p>	Depreciation 30% of the declining balance method.
U.K.	 <p>76%</p>	Depreciation 25% on the Reducing Balance basis.
GERMANY	 <p>76%</p>	Depreciation 25% on the Reducing Balance basis.
U.S.A	 <p>81%</p>	<p>A 200% depreciation under the fixed rate method (depreciation term: 10 years) (switched to fixed installments from the seventh year.)</p> <p>Limit allowed for depreciation: 100%</p> <p>Accelerated depreciation for the first year: 50% (until December 31, 2004)</p>

Notes:
Source : JSA survey

13. Counter-Tax Haven Taxation System

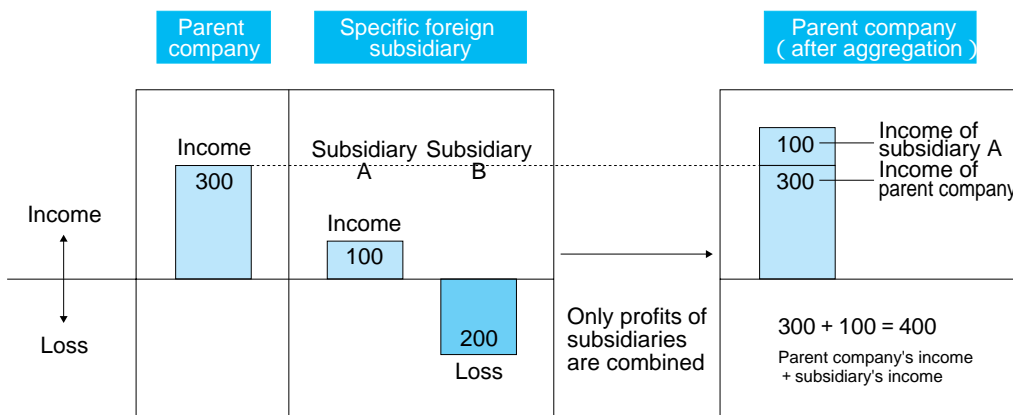
The current counter-tax haven taxation system(enacted 1978)goes beyond its original aim of preventing tax fugitives. Only the profits of specific foreign subsidiaries(foreign subsidiaries eligible under this taxation system)are added to the income of their parent company, while combining any loss of the subsidiaries is not allowed. Unfair tax burdens are imposed on parent companies, and there is an urgent need for reform.

Cases Applicable to the Counter-Tax Haven Taxation System



How to Calculate Joint Income

If the parent company earns 300, specific foreign subsidiary A earns 100, and another specific foreign subsidiary B losses 200, the loss(deficiency)of subsidiary B is not allowed to combine with the parent company's income under the current system.



- Notes:
- Retained Income(Taxable Retained Amount)
Combine a subsidiaries' profit with that of its parent company as follows:
 Applicable Retained Amount =(Unappropriated income + Corporate income tax refunded within current term)
 -(Exemption for loss carried forward for current period(5 years)+ Corporate income tax payable within current term + Dividend for current term)
 Taxable Retained Amount = Applicable Retained Amount × Shareholding Ratio(Ratio of equity, stock holding, etc., by parent company)
 - "Corporate(s)directly owned/controlled by the parent company" refers to subsidiaries, and "corporate(s)indirectly owned/controlled by the parent company" refers to a subsidiary's subsidiary(or a subsidiary's subsidiary's subsidiary, ad infinitum).
 Example of calculating the shareholding ratio of indirectly held/controlled companies:
 For a 50% subsidiary of a 50% subsidiary(subsidiary's subsidiary) 50% × 50% = 25%.

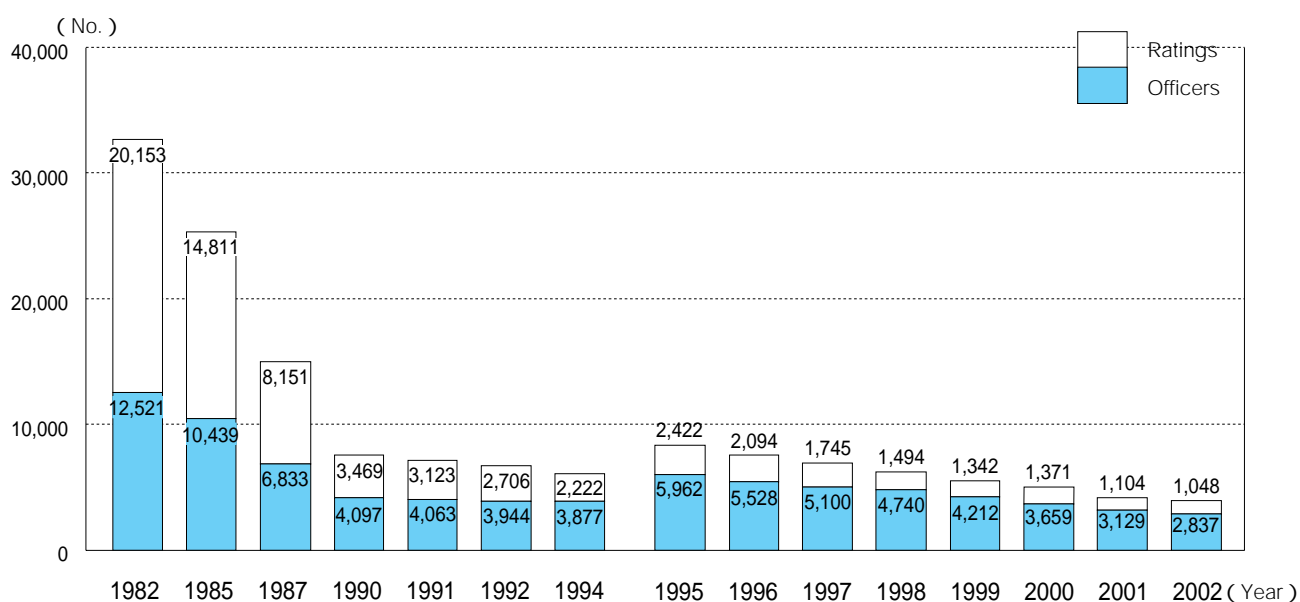
1. Number of Seafarers

3,880 seafarers are on board oceangoing vessels as of October 1, 2002.

This number is approximately 40% of the number of seafarers ten years ago.

Japanese seafarers are now required to educate and supervise foreign seafarers in addition to their operational duty. They are also hoped to obtain skills in corporate management on shore as well as in ship management field.

Number of Seafarers Employed



Year	No. of Manning vessels	No. of Seafares Employed		
		Officers	Ratings	Total
1982	731	12,521	20,153	32,674
1985	621	10,439	14,811	25,250
1987	401	6,833	8,151	14,984
1990	203	4,097	3,469	7,566
1991	195	4,063	3,123	7,186
1992	181	3,944	2,706	6,650
1994	172	3,877	2,222	6,099
1995	269	5,962	2,422	8,384
1996	251	5,528	2,094	7,622
1997	230	5,100	1,745	6,845
1998	215	4,740	1,494	6,234
1999	192	4,212	1,342	5,554
2000	159	3,659	1,371	5,030
2001	139	3,129	1,104	4,233
2002	141	2,837	1,048	3,880

Notes:

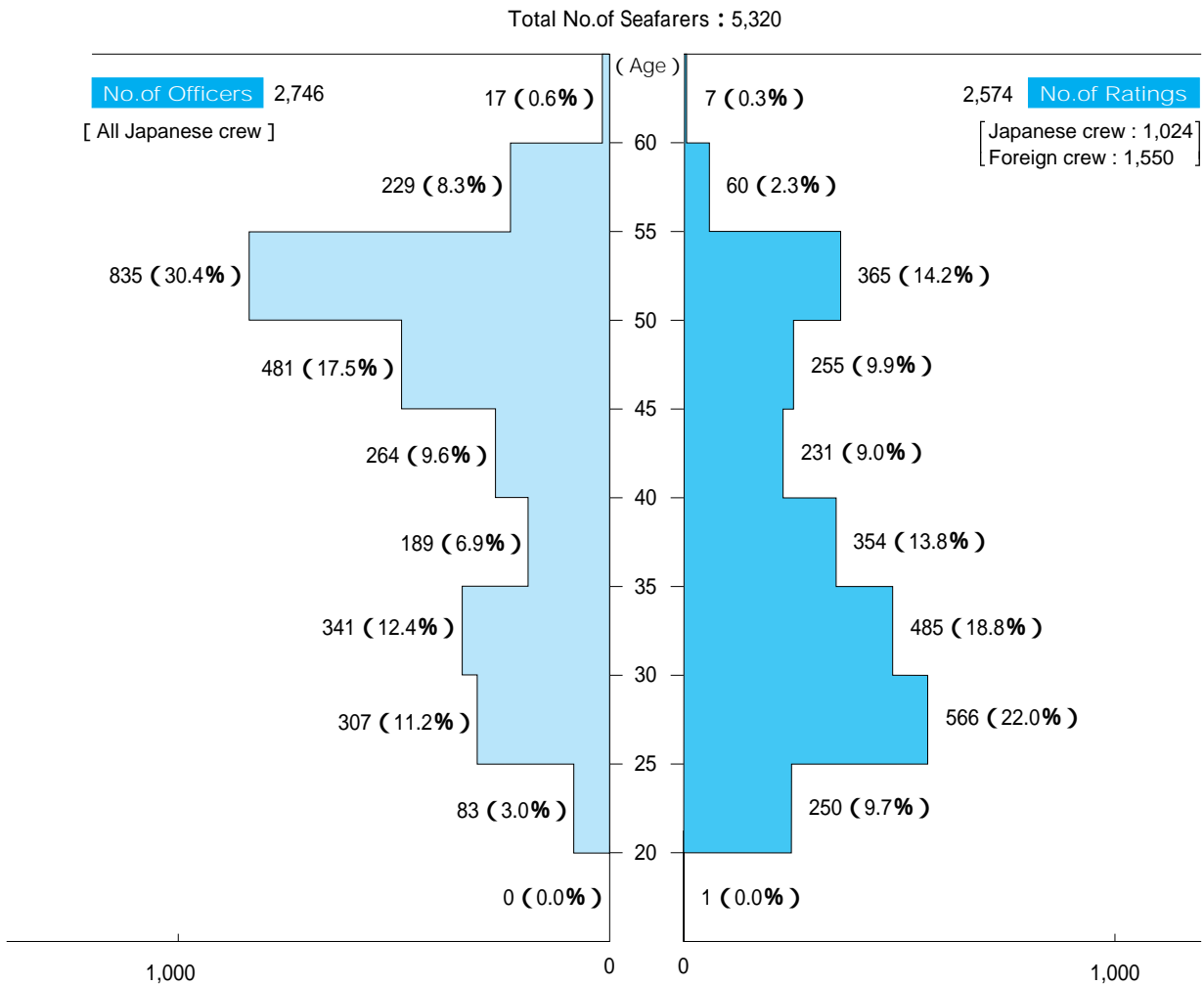
Sources (~ 1994) : Oceangoing Labor Association(the current JSA Oceangoing Labor Department)and Small and Medium-Sized Oceangoing Shipowners' Labor Association(dissolved end of Jan. 1992)data.

Sources (1995 ~ 2002) : Ministry of Land, Infrastructure and Transport, Seafarers Statistics.

. *Current Status of Oceangoing Seafarers*

2. Number of Seafarers by Age

As of October 1, 2002, middle-aged and elderly seafarers occupy a large portion of all seafarers employed by oceangoing shipping companies. Officers over 40 years old account for 66.5% of all officers.

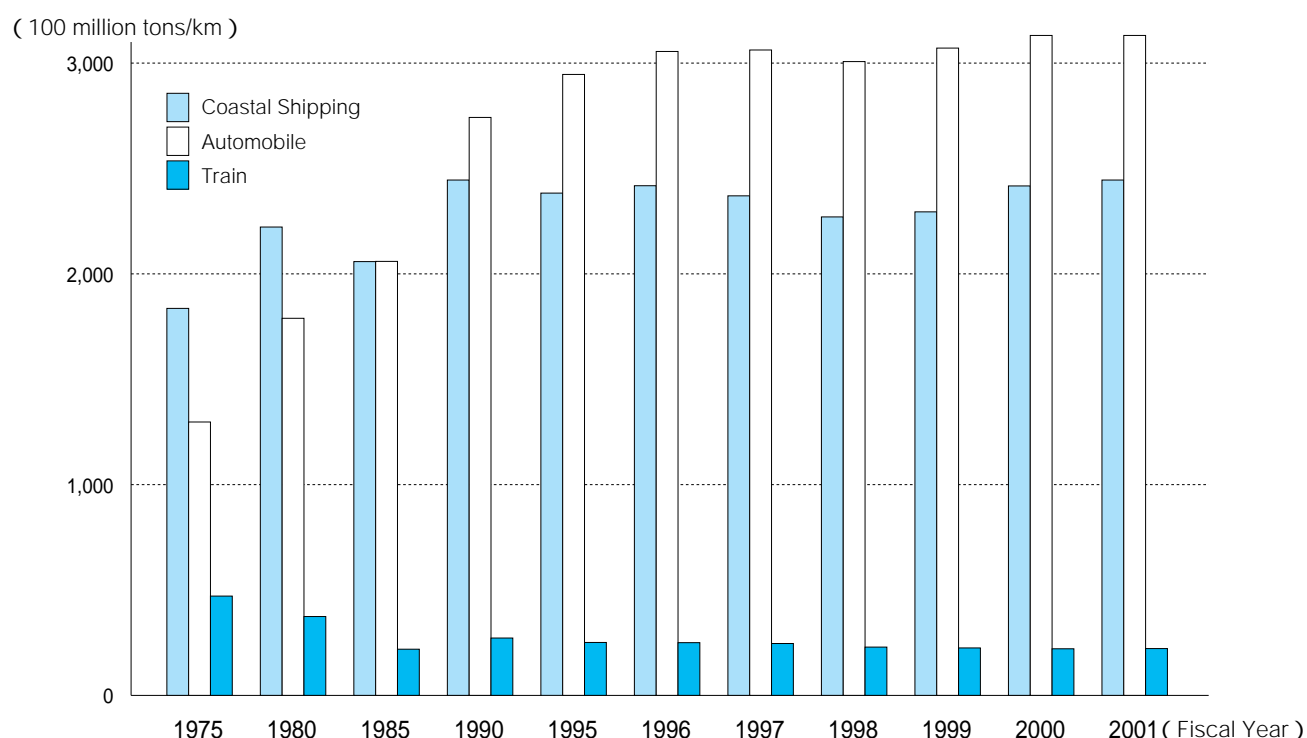


Notes:

Sources : Ministry of Land, Infrastructure and Transport, Seafarers Statistics.
 (Figures according to the Form No.2 : Seafarers employed by shipowners with a total owned vessel tonnage of over 1,000 G/T.)
 Sum of on-board and reserved crews
 The 2,574 ratings include 1,550 non-Japanese crewmembers.

1. Performance by Mode of Transport in Japan

Coastal cargo transport volume in fiscal 2001 was 520 million tons, accounting for 8.4% of the total transport volume. However, when viewing the same figures on a transport activity volume (tons/kilometer basis) by multiplying the transport volume with transport distance, coastal cargo transport amounts to 244.7 billion tons/kilometers, accounting for 42.2% of the total. This indicates that coastal shipping is suitable for the long-distance, bulk transportation of infrastructure materials, such as iron and steel, oil, and cement. When looking at the amount of energy needed to transport 1 ton of cargo one kilometer, coastal shipping consumes only 1/18 that of private automobiles, and 1/5 that of business automobiles. Coastal shipping is an environment-friendly means of transportation.



Fiscal Year	Transportation in tons/km (100 million tons/km)				Average Transportation Distance (km)		
	Coastal Shipping	Automobile	Train	Total	Coastal Shipping	Automobile	Train
1975	1,836 50.9%	1,297 36.0%	471 13.1%	3,604 100%	406	30	261
1980	2,222 50.6%	1,789 40.8%	374 8.5%	4,385 100%	444	34	230
1985	2,058 47.4%	2,059 47.5%	219 5.1%	4,336 100%	455	41	227
1990	2,445 44.8%	2,742 50.2%	272 5.0%	5,459 100%	425	45	314
1995	2,383 42.7%	2,946 52.8%	251 4.5%	5,580 100%	434	49	326
1996	2,418 42.2%	3,055 53.4%	250 4.4%	5,723 100%	442	50	339
1997	2,370 41.7%	3,062 53.9%	246 4.3%	5,678 100%	438	50	356
1998	2,270 41.2%	3,007 54.6%	229 4.2%	5,506 100%	439	52	380
1999	2,294 41.0%	3,071 54.9%	225 4.0%	5,590 100%	439	52	384
2000	2,417 41.9%	3,131 54.3%	221 3.8%	5,769 100%	450	54	373
2001	2,445 42.2%	3,131 54.0%	222 3.8%	5,798 100%	470	56	373

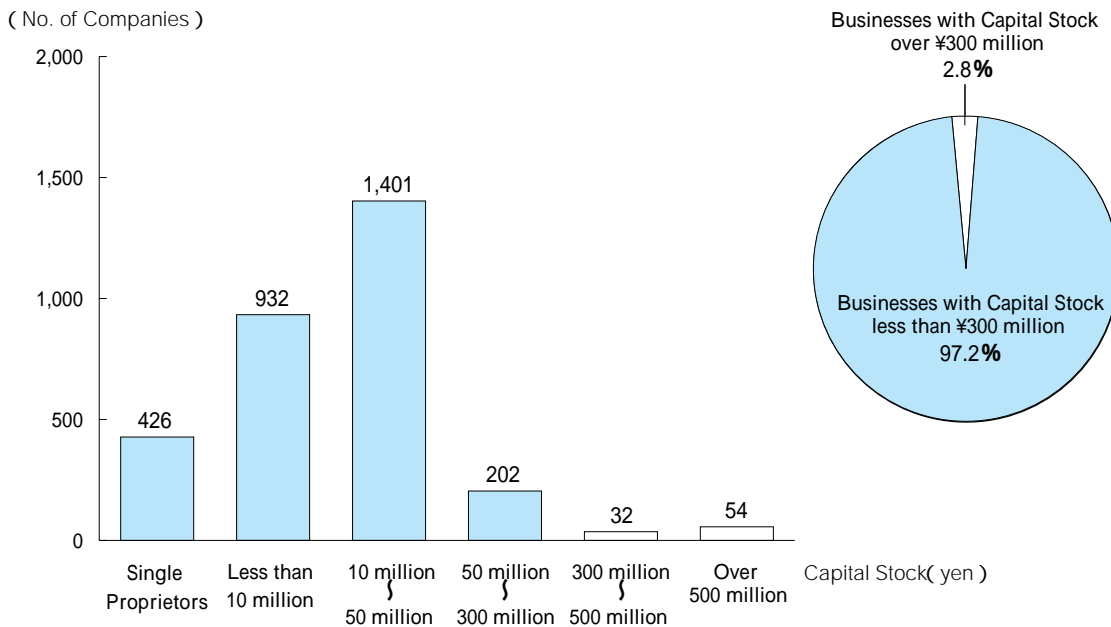
Notes:

Source : Japan Federation of Coastal Shipping Associations, *The Current Situation of Coastal Shipping* (Fiscal 2003)

The percentages below the transportation tons/km figures in each fiscal year show the portion of all transportation means.

2. Size of Coastal Shipping Companies

Many coastal shipping businesses are small enterprises. Businesses with less than ¥300 million in capital stock and single proprietors account for 97.2% of coastal shipping businesses. It is necessary to promote structural reform to strengthen the business infrastructure to accommodate changes of economic and social situations in Japan.



Number of Licensed Businesses by Capital Stock

(As of March 31, 2003)

Classification		Single Proprietors	Less than ¥10 million	¥10 million } ¥50 million	¥50 million } ¥300 million	¥300 million } ¥500 million	Over ¥500 million	Total
Transportation Business	No. of Businesses	12	84	347	136	24	43	646
	Share (%)	2.0	13.0	54.0	21.0	4.0	7.0	100.0
Vessel Rental Business	No. of Businesses	414	848	1,054	66	8	11	2,401
	Share (%)	17.0	35.0	44.0	3.0	0.0	0.0	100.0
Total	No. of Businesses	426	932	1,401	202	32	54	3,047
	Share (%)	14.0	31.0	46.0	7.0	1.0	2.0	100.0

Notes:

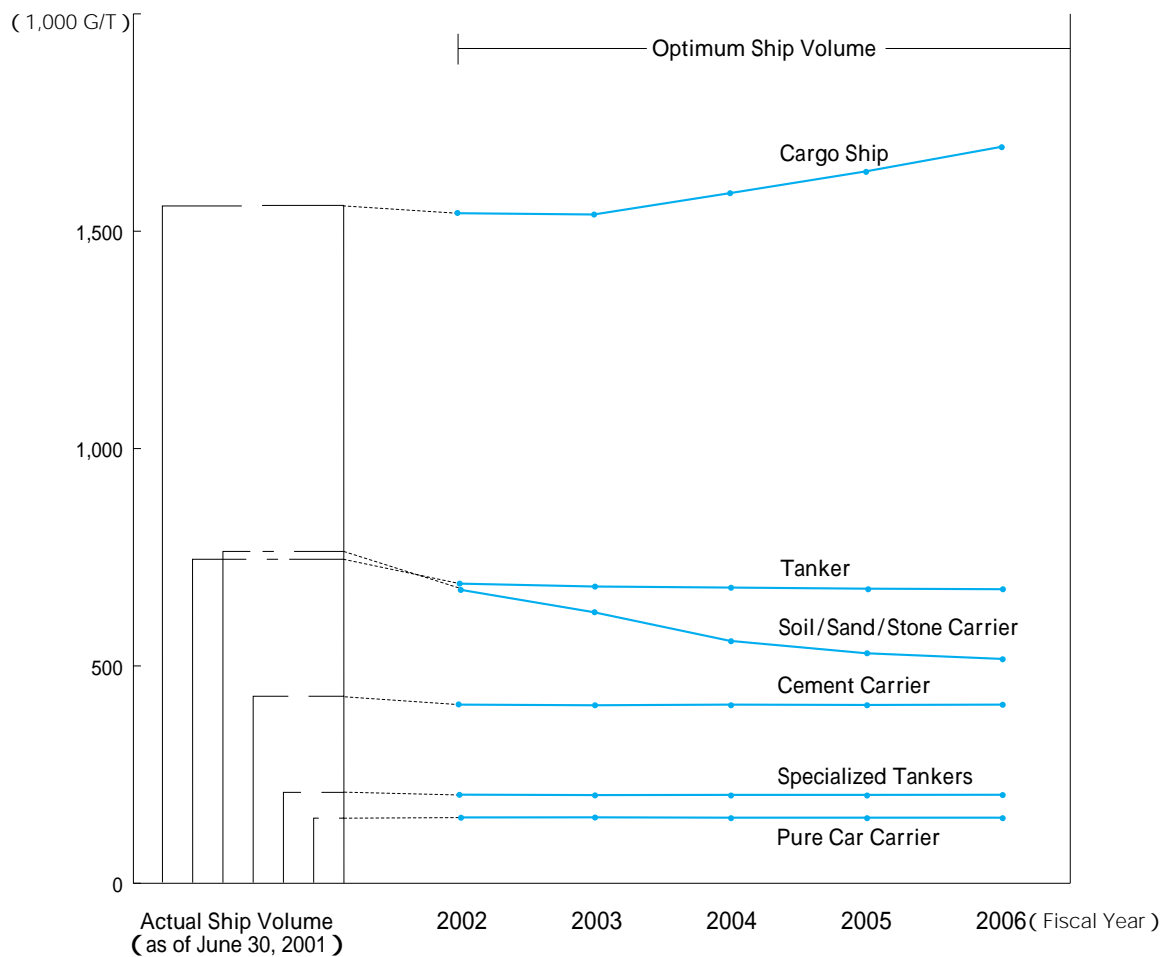
Source : Japan Federation of Coastal Shipping Associations, *The Current Situation of Coastal Shipping* (Fiscal 2003)

Unmatched total numbers are due to the existence of businesses engaged simultaneously in the transportation and vessel rental business.

3. Optimum Ship Volumes for Coastal Shipping (Government's Guideline on Tonnage for Coastal Shipping)

Optimum Ship Volume for coastal shipping is decided based on the Coastal Shipping Project Law and taking the supply and demand of major coastal shipping cargoes and other economic factors into consideration. It gives long- and medium-term guidelines on coastal shipbuilding and serves as a basis for decisions made by the Minister of Land, Infrastructure and Transport on the maximum tonnage and on halting the issuance of new shipbuilding permits or the diversion of private ships to coastal shipping services.

Current Actual Ship Volume and Optimum Ship Volume of the Coastal Shipping Business



(1,000 G/T)

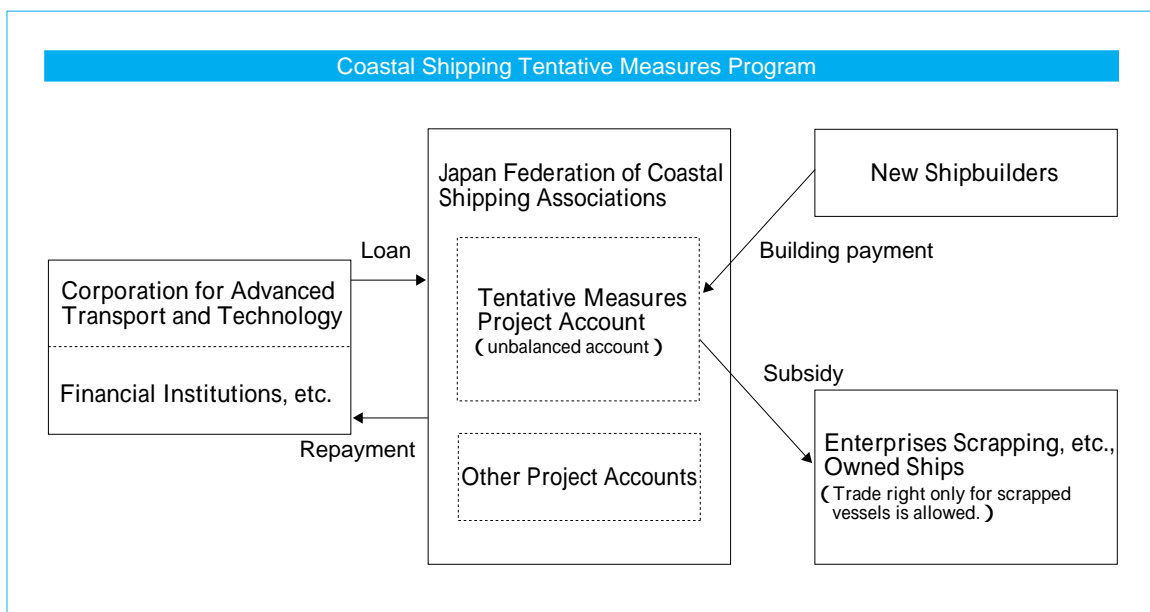
	Actual Ship Volume (as of June 30, 2001)	Optimum Ship Volume				
		fiscal 2002	fiscal 2003	fiscal 2004	fiscal 2005	fiscal 2006
Cargo Ship	1,559	1,544	1,539	1,583	1,635	1,694
Tanker	746	693	682	679	678	677
Soil/Sand/Stone Carrier	759	684	631	563	530	517
Cement Carrier	427	410	410	410	410	410
Specialized Tankers	209	204	204	204	204	204
Pure Car Carrier	150	151	151	251	151	151

Notes:

Source : Ministry of Land, Infrastructure and Transport

4. Coastal Shipping Tentative Measures Program (Abolition of Scrap and Built System)

Tonnage adjustments for the coastal shipping business have been going on since 1966 by the Tonnage Adjustment Project through a "scrap and build" plan that pushes for scrapping a certain number of ships in ratio to the building of new ones. To further activate the coastal shipping business, the Tonnage Adjustment Project was abolished and replaced by the Coastal Shipping Tentative Measures Program in May 1998. In fiscal 2002, there was a subsidy of ¥17.2 billion for the scrapping of 310 vessels. As for shipbuilding, permission was given for the building of 38 cargo ships and 15 tankers in fiscal 2002.



Coastal Shipping Tentative Measures Program

The Japan Federation of Coastal Shipping Associations will pay a subsidy when its member scraps, etc., owned vessels that are eligible for subsidy payment. Since fiscal 2002, the federation makes decisions on subsidy authorization and payment based on the Financial Management Plan for each half of the fiscal year, taking the financial balance of the previous fiscal year and prospects for the current fiscal year into consideration.

Funds for subsidy payments are procured from financial institutions, etc., by the Japan Federation of Coastal Shipping Associations.

The Japan Federation of Coastal Shipping Associations will repay loans from financial institutions, etc., using building payment from shipbuilders, etc.

Members planning to build, etc., ship(s) must pay building payment to the Japan Federation of Coastal Shipping Associations according to the tonnage of the new ship. (Members may elect to scrap one of its own ships to compensate for part of their building payment.)

The project ends when the financial balance is met.

March 2004

*The Current State of
Japanese Shipping*

The Japanese Shipowners' Association

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