

Twenty years of decapitalization sinks world shipping capacity

by Anthony K. Wikrent

The first of a two-part analysis of the state of the maritime trade.

Five bulk cargo vessels have sunk during the first five months of this year. In 1990, twelve ships sank, another 11 were seriously damaged, and more than 200 seamen lost their lives. This is no ordinary loss and casualty rate. These ships went down as a result of the last 20 years of decapitalization and "free trade" competition.

At the beginning of 1990, there were 22,983 merchant ships in the world, the average age being 16 years. With most merchant ships designed and built to last 20 years, almost the entirety of the world's fleet should be replaced over the next few years. But this is not happening. For most of the past two decades, shipowners (carriers) have barely been able to recover their operating costs, to say nothing about funds for new ship construction. The United States Lines went bankrupt, and saw some of its pride-of-the-line vessels sold for scrap. Only the commodity cartel companies—Cargill, Continental, and others—have successfully maintained their own shipping capacities with ease, while succeeding in imposing low freight rates on independent shippers.

It is a wonder that as many new ships have been commissioned as there are. The reason is that the largest shipbuilding countries—Japan, South Korea, and Germany—offer various types of direct and indirect subsidies that can cover up to half the cost of a new ship, and many other countries offer various kinds of alternative, non-market sources of capital for ship construction. In contrast, the United States has moved to terminate all government support for its maritime industries. The result has been, that while shipbuilding capacity in most countries is presently strained to the limit, U.S. shipbuilders have only three commercial vessels under construction, and are now facing extinction. Almost the sole customer in most U.S. shipyards for the last decade has been the U.S. Navy, now cutting its shipbuilding program by half in response to the bankruptcy of the national government.

The British grip on maritime finance

The London institutions that still dominate world shipping remain committed to the "free market" policies on which

the British Empire was built, and competitors subjugated. Noting that there are very few shipping companies in the world with a market capitalization of more than \$1 billion, Anglo-American interests are insisting that what remains of the world maritime industry be consolidated, on British terms, if it is to receive bank financing. The financiers want to be sure there are sizable assets that can be seized in the event of default.

And to make debt-for-asset grabs easier, shipowners are also being told to make their assets more liquid for short-term loans. Finally, to make sure there will be plenty of such grabs, bankers are demanding a "better return" on long-term ship financing; in effect, demanding that already-strained shipowners pay more in debt service. "Banks can't tolerate a 1% yield on the upside with all that risk on the downside," the managing director of Manufacturers Hanover Trust's global shipping group, D'Arcy H. LeClair, lectured a Shipbuilders Council of America conference on finance in April.

Dan White, a director of the British bank County National Westminster, places the cost of replacing all the tankers, bulk and combination carriers, general cargo ships, and container-ships that will be 20 years old or more by the year 2000, at \$250-350 billion. White estimates that shipping companies themselves will only be able to divert \$80 billion from cash flow; only \$15 billion will be recovered through scrapping; and banks will probably be unwilling to lend more than \$125 billion.

Shippers (those who own the cargo transported by the carriers), however, are reluctant or unwilling to provide carriers a high enough rate of return to be able to finance new ship construction, as the \$20-120 billion shortfall projected by White demonstrates. In fact, shippers are presently contesting every dollar, mark, guilder, kroner, and yen they are charged by carriers, and are militantly supporting each new proposal for "increasing competition"—the free market panacea designed to force carriers to underbid each other, but which all too often leads to bidding under costs as well.

For example, earlier this year a group of U.S. cartel-dominated agricultural commodities shippers filed a petition against the widespread use of shipping surcharges with the U.S. Federal Maritime Commission. They argued that sur-

charges make it nearly impossible to effectively plan shipping costs. However, the true cause of their dissatisfaction is revealed in shippers' arguments that surcharges are nothing but a means of unjustifiably increasing carriers' revenues, and should be used only to recoup sudden increases in cost due to temporary exigencies, such as steep rises in fuel costs, unanticipated port congestion, or war-risk insurance. According to shippers, carriers (who join together in rate conferences to establish standard rates for particular types of freight on specific trade routes) are slapping on surcharges to make up for their inability to raise rates in the supposed free market.

Symptomatic is the widespread anger amongst shippers at the TransPacific Westbound Rate Agreement (which sets rates for moving cargo from Asia to North America), which has flatly refused to accept discount deals for high-volume commitments from shippers, known as service contracts, which were authorized for U.S. trade routes by the U.S. Shipping Act of 1984. The Shipping Act of 1984 also made it possible for carriers to offer special contracts at rates lower than those agreed to by the conferences. This has driven rates down to abysmal levels on the major U.S. trade lanes.

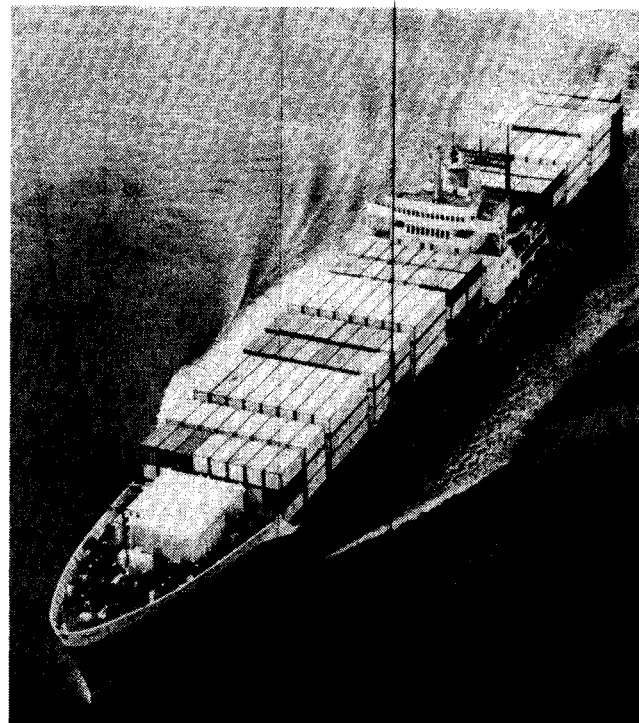
Aging vessels

There are three major types of merchant vessels: container-ships, bulk carriers, and oil tankers, and, for each category, revenues are insufficient to meet replacement costs. The data below present the age profile of the world fleet, carriers' plans for new shipbuilding, and the inadequacy of carriers' revenues to finance new ship construction. The declining and decrepit world shipping capacity is a prime example of the strategic, systemic weakness of Anglo-American "free market" economics: Contrary to the appearance of success, free market economics has been a miserable failure, able to pass itself off as successful only by ignoring *replacement costs*. With "buy cheap, sell dear" as its basis, "free market" economics has chronically failed to fund the level of capital expenditures required to maintain the physical basis of production and transportation.

The container trade

Most of the world's trade in manufactured goods is now carried in intermodal containers, allowing the transfer of the cargo from one mode of conveyance to another without having to unload the container. Specialized vessels, known as container-ships, have been developed for the marine conveyance of this cargo. Since these finished goods are usually the highest value cargoes, the shipping of containers has been amongst the most lucrative of trades. However, not all container traffic is high-value finished goods: Among the leading U.S. exports of containerized cargo is wastepaper.

The world's fleet of container-ships at the beginning of 1990 totaled 1,387 vessels of 29.7 million deadweight tons (dwt), able to carry 1,684,955 TEUs (20-foot container equivalents). Some 918 of these ships, able to carry



U.S. Department of Commerce, Maritime Administration

A container-ship, pioneered by American steamship lines, which has helped to trim the time and cost of ocean transportation. Today, even container-ships cannot survive in the "free market."

1,442,424 TEUs, or an average of 1,571 TEUs per vessel, were deployed on deep-sea trade routes, with the remaining 469 ships, carrying only 242,531 TEUs, or an average of 517 TEUs per vessel, deployed on intra-trade routes, such as the fast-growing intra-Asian routes. Another 596 container-ships, carrying 513,843 TEUs, were built before 1976. That is, 42.97% of the world's container-ships, accounting for 30.50% of world capacity, are 15 or more years old.

This is one of the better age profiles of major maritime sectors, reflecting the relatively greater attraction containerized shipping has had for investors. However, it must be recognized that the trade in high-value finished goods has been almost completely driven by the need of the U.S. to import up to one-half of its apparent "standard of living" (i.e., 30% of its automobiles, over 50% of its clothing, over 80% of its footwear, and almost all of its consumer electronics)—the direct result of the "post-industrial" and radical ecology policies which have dominated the United States and debilitated the U.S. manufacturing base.

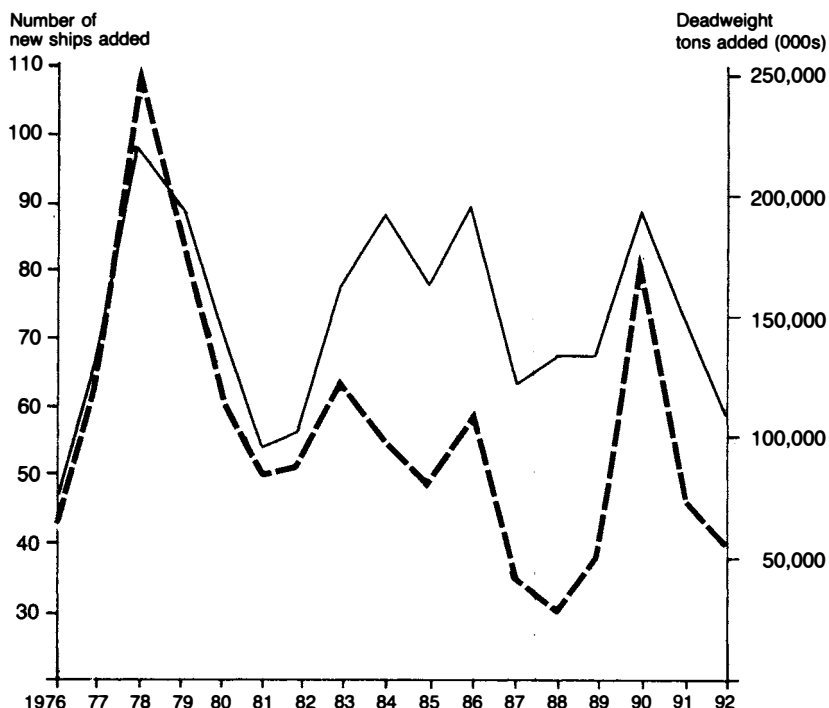
Though the latest phase of the U.S. depression, which began in 1990, caused U.S. imports to stagnate, and in some cases decline, the Asia to North America trade route remains the largest maritime container route in the world, accounting for 24.6% of container trade in 1989. But the fastest growing area of container trade worldwide is intra-Asia. Michael Cohen, an analyst for the World Sea Trade Service of Temple Barker & Sloane, forecasts a 9.8% growth rate in intra-Asia

FIGURE 1

New containership construction is not enough to maintain the world fleet

Source: Nippon Yusen Kaisha Research Division, *World Containership Fleet and Its Operations*, 1990 Edition.

Despite a brief peaking in 1990, new construction of container capacity will not quite replace capacity lost through ships ending their useful lives.



trade this year, compared to a 4.3% growth rate in containerized shipments worldwide.

New completions drop

Following the period of 1977 to 1980, when 325 new containerships, averaging about 1,000 TEUs each, were completed, new completions fell rapidly, with about 50 new vessels a year delivered through 1986. The average number of TEUs per vessel climbed markedly, to 1,454 in 1983 and 2,054 in 1984. Deliveries then fell off, to 35 in 1987, 30 in 1988, and 38 in 1989, while average size increased to 3,019 TEUs in 1988 before falling to 2,268 TEUs in 1989 (Figure 1). The 1990 edition of Nippon Yusen Kaisha's *World's Containership Fleet and Its Operations*, from which these figures are taken, notes that 119 new containerships with capacity to carry 161,652 TEUs, are scheduled for delivery to world fleets in 1989-90, with another 86 new containerships, able to carry 170,872 TEUs, scheduled for delivery in 1991-92.

While this pace of new construction will just barely keep up with the aging of capacity, the abrupt stagnation of the North American trade routes has led maritime executives to fear an impending chronic surplus of containerships. This would create unbearable downward pressure on freight rates, leading to the ruin of many carriers, especially those that have committed themselves to new ship construction programs.

For example, the Port Import Export Reporting Service (Piers) of the *Journal of Commerce* reported in mid-July that U.S. ocean-borne imports nationwide fell 7%, while imports

on the North Atlantic trade routes fell 13%. Particularly hard hit was the Port of Boston, where total movement in and out fell 35% in April, leaving a year-to-date decline of 12%. Container volume at the Hampton Roads ports of Virginia was down 1%, while volume at the Port of Baltimore was up 13% from 1991, but still remains 20% below the level of 1989. Hampton Roads and Baltimore serve as entrepôts for the Midwest, with containers moving to and from the ports by rail. As Juerg Bandle, vice president of Kuehne and Nagel, Inc., a freight forwarding firm in Jersey City, New Jersey, told the *Journal of Commerce* on May 28, "If [consumers] aren't buying, then Sears, Montgomery Ward, Reebok and the rest of them aren't going to be bringing in any cargo."

Rate increases unsustainable

As a result of the decline in cargo, carriers have been unable to sustain badly needed rate increases. In November 1990, the 13 ocean carriers in the Asia-North America East-bound Rate Agreement (Anera) proposed a general rate increase (GRI) of \$325 to the base rate of \$2,000 for moving a container of cargo. By January, the volume of traffic to the depression-wracked United States had fallen so dramatically, that Anera reduced the GRI to only \$200.

In late May, Maersk Lines unilaterally offered nearly \$400 discounts to its customers, setting off a discounting scramble to preserve market share, effectively reducing the GRI to only \$25-50 a container. Wayne Schmidt, president of Votainer Consolidation Service (U.S.A.), Inc. and a 20-year veteran of maritime shipping, told the *Journal of Com-*

merce in March, "Disaster. Underline that word five times and you've got the idea what Atlantic rates are like."

For example, the Anera rate for moving a 40-foot container of kitchenware from Asia to Los Angeles was \$2,075, but some carriers were offering to do it for only \$1,005 to \$1,155 in May. The rate for moving a 40-foot container of toys to Cincinnati was \$3,495, but six of eight Anera members were offering their services for only \$2,200.

Ship lines have attempted to force up freight rates by withholding capacity and forming agreements to share vessels while maintaining independent sales and shore handling facilities. In 1989, Anera, which controls about 90% of the import container traffic to the U.S. West Coast, agreed to reduce cargo space by 10%. By early July, some carriers began reporting an increase in eastbound traffic to the U.S., with American President Lines bringing in some 4,300 TEU ships at over 100% of capacity. However, the increase was not enough to provide a firm basis for raising rates, with Sea-Land reporting only 85% vessel utilization, and Kawasaki Kisen Kaisha ("K" Line) reporting under 70%.

Ken Johnson, director of corporate sales and marketing for Maersk Lines, told the *Journal of Commerce* in March, "If we had capacity coming out of our ears, we'd be on our own. [Vessel-sharing agreements] are a compromise, a second-best alternative." But with ocean-borne traffic in decline, carriers have little choice. An executive of Sea-Land told the International Intermodal Expo in late May that Sea-Land's vessel-sharing agreement with two other lines (P&O Containers and Nedlloyd) had slashed operational costs from 27% to 12%.

Carriers have also striven to minimize the time their ships must sit idle. U.S. railroads, for example, have enjoyed an explosion in shipments of containers over the past few years, as carriers chose to completely unload their ships at one port and distribute the containers by rail, rather than having their ships slowly work their way from one port to another. However, land and terminal costs now account for about 60% of the cost of moving cargo. The first attempt to deal with these costs was made in early June, when Sea-Land, P&O Containers, and Nedlloyd announced they were pooling their 50,000 truck chassis used to carry containers in the U.S.

The world's second-largest container trade route is Asia to Europe, where any profit is lost by having to carry five empty containers for every full one on the return voyage. The Far Eastern Freight Conference, whose member carriers account for about half the trade, has struggled to bring rates back up to agreed levels following a full-fledged rate war last year. In April, and again in July, FEFC raised Europe-bound rates by \$200. Another "rate restoration" is scheduled to be implemented in October. Cargo volumes to Europe are up about 10% over last year, but carriers attribute the rise to demand generated by the rebuilding of East Europe.

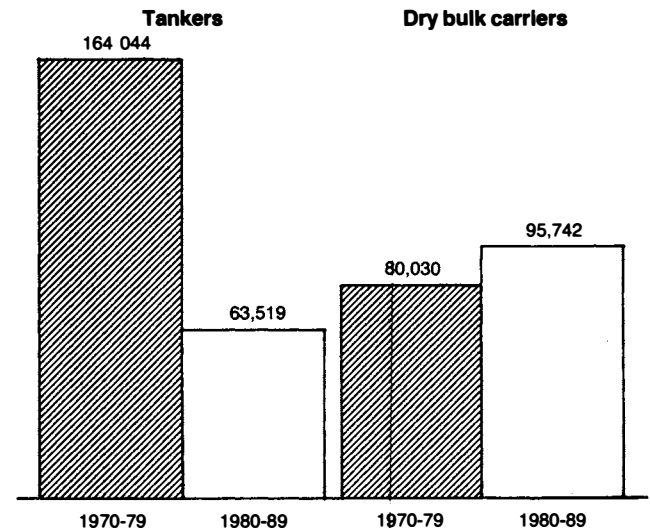
Bulk cargo capacity not replaced

Bulk carriers transport basic commodities, such as iron

FIGURE 2

Tonnages constructed for world tanker and dry bulk carriers lag behind replacement needs

Deadweight tons (000s)



Source: Nippon Yusen Kaisha Research Division, *Review and Outlook of Shipping Market*, December 1990.

ore, scrap, coal, pulp, paper, grain, fertilizer, and chemicals. Of the 188.288 million dwt of dry bulk carrier capacity at the beginning of 1990, some 51.41% had been built before 1981. Unlike tankers, there was not a very dramatic increase in new additions in the mid-1970s. From 1990 to 1992, some 15.5 million dwt are scheduled to be completed, equivalent to 8.2% of the world's fleet of dry bulk carriers. That is not enough to replace the 17.36 million dwt that were completed before 1971 (see Figure 2).

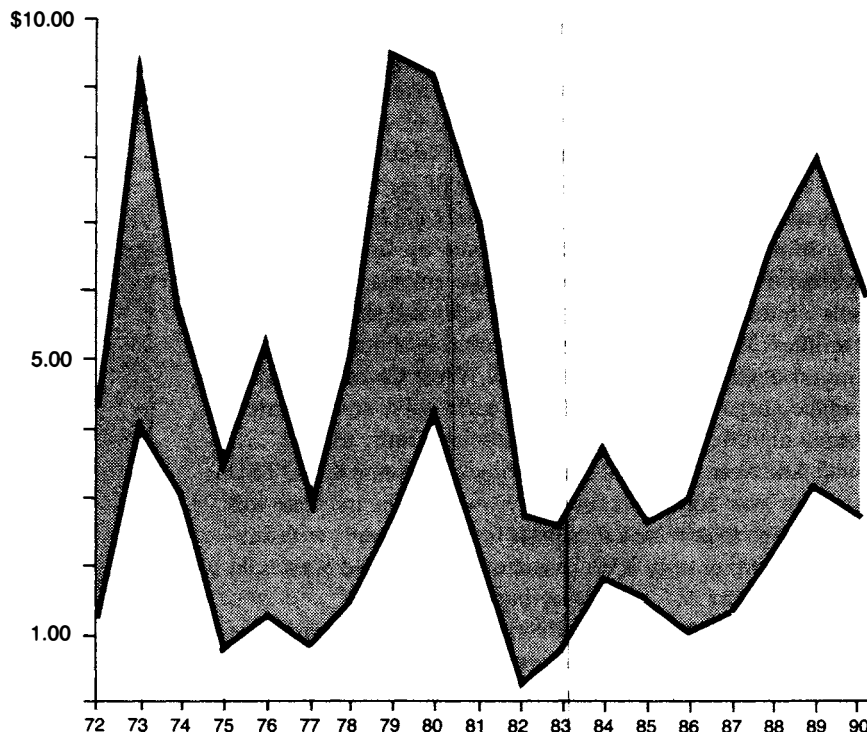
Following Paul Volcker's high interest rate shock of 1979, which depressed U.S. industrial output by 20-30%, and even more in some sectors, the cost of a year-long charter for a bulk carrier fell by over half, to only \$5,000 a day. By 1989, charter rates had struggled back up to \$13,000 a day—still well below ship replacement costs. The rapidly deteriorating economy in the U.S. caused the rate to fall back to under \$10,000 by the end of last year. However, in mid-July, sometime charter rates of \$15,500 a day were being made, but most charters were being set around the range of \$12,000 a day. Jim Cleary, vice president of Rodriguez Sons Co., told a conference in June that a new open-hatch vessel with shipboard cranes today costs over \$36 million, and would require daily revenue of \$21,000 to operate. "The lumber movement to the East Coast and Gulf will not support this type of cost," Cleary said. "The cost of innovations today cannot meet with market and competitive facts."

In the December 1990 *Review and Outlook of Shipping Market* by the Research Division of Nippon Yusen Kaisha, the largest Japanese shipping line, an analysis of time charter

FIGURE 3

Panamax vessels no longer receive the rates they did 18 years ago, on Far East-Europe trade routes

U.S. \$/deadweight ton
Yearly rate, high and low, Far East to Europe



Source: Nippon Yusen Kaisha Research Division, *Review and Outlook of Shipping Market*, December 1990.

rates for Panamax vessels clearly shows that from 1975 to 1979 and again from 1982 to 1986, shipowners were barely able to cover the direct expenses (crews' and stores expenses, insurance premiums, taxes, and other duties) of their vessels, to say nothing of operating costs (fuel, port charges, and office expenses), and capital costs (interest payments and recovery of invested capital). According to the NYK analysis, the annual average rates for the period of 1982-86, in dollars per dwt (the carrying capacity of a vessel, in tons of 2,240 pounds), were:

- approx. \$4.50: Handy size (around 25,000 dwt)
- approx. \$3.00: 40,000 dwt class
- approx. \$2.00: Panamax type (50,000-79,999 dwt)
- approx. \$1.00: Cape size (100,000-149,999 dwt)

The NYK *Review* noted that these rates "are all barely sufficient to pay the ship's direct expenses, and if these rates continue for a long time, shipowners will become unable to pay the interest and refund the principal on their debts, run into financial crisis, and go bankrupt one after another" (see Figure 3).

According to the NYK *Review*, "direct ship's expenses have always stayed and still stay in a narrow range around \$2." While noting that charter rates have sunk below \$2 for only brief periods, NYK's analysts explain that rates have been forced back up because, "at such low charterage, the owner can no longer afford to pay the direct ship's expenses necessary to keep the ship operable, resulting in the progressive disposal of superfluous vessels either by laying up or scrapping and, consequently, in the adjustment of active

tonnage."

Still, NYK's analysts found, "Panamax trip time charter rates were around \$2 even in time of structural recession." Carriers were able to stay in business because "the crew's expenses were suppressed by increasing the proportion of seafarers from developing countries in the crew complement, and the repair costs were also kept low by the protracted shipbuilding recession." Reviewing the trend in charter rates from summer 1990 on, the NYK analysts wrote, "it seems that the 'amber' light, if not quite the 'red' signal, has begun to go on and off."

As a result of this, ships are going down. As of May this year, five bulk carriers had sunk. Speakers at a special seminar of the International Association of Dry Cargo Owners held in early June attributed the unusually high rate of losses to corrosion; improper loading procedures which caused cargoes to shift, placing twice as much stress on a vessel's structure than it would endure in a storm at sea; and the lack of qualified crews. Maritime executives placed the blame on faulty ship design, while insurers blamed charterers for hiring the cheapest vessel available, while completely ignoring its condition and the qualifications of its crew.

A major trend is the increasing specialization of ship designs. For example, Gearbulk Holding, Ltd., a major Norwegian dry bulk carrier that was 25% bought out by Mitsui OSK Lines in May, has ordered three 41,000 dwt "Totally Enclosed Bulk Carriers," which reportedly resemble aircraft carriers. These ships are solely designed to carry forest products from Vancouver, Canada to Japan, and will make their

eastward voyages empty. These vessels are "Totally Enclosed" to prevent their cargoes from becoming wet while loading.

Oil tankers carry one-third of the total tonnage of world maritime trade. Of the 244.334 million dwt of tankers in the world's fleets as of the beginning of 1990, statistics from Lloyd's Maritime Data Network, used by Nippon Yusen Kaisha's Research Division, show that 76.74% was built before 1981. Some 131.799 million dwt, or 53.94%, were built in the years 1973 to 1977. Scheduled completions of tankers during 1990-92 will replace only 29.1 million dwt, or 11.9% of world capacity. Looked at another way, the 29.1 million dwt of new tankers scheduled to be completed by 1992 is not even enough to replace the 32.216 million dwt of tankers that were built in the years before 1972.

Cutting costs on maintenance

While the average merchant ship is constructed to provide about 20 years of service if adequately maintained, the squeeze on carriers' profits has led to severe cutbacks in proper maintenance. All the world's merchant ships are required to undergo thorough inspections every five years. (Japanese-flagged vessels are required to undergo inspections every four years. to 19) Nippon Yusen Kaisha's *Review of World Shipping* noted, "Trends which became notable since about 1988 are the increase in tankers undergoing their third regular inspections (at the age of 15) and the great differences in repair cost from vessel to vessel. . . . The wide differences in repair cost mean that they were repaired with different degrees of thoroughness when they went through their last regular inspections (in 1983 or 1984). At the time of their last regular inspections, the tanker market was at its low, plagued by a vast overtonnage. Tanker owners who could not afford to pay for thorough repairs tried to reduce the repair costs to the [lowest] possible minimum, resulting in the deterioration of the average quality of this age cohort of tankers. Even some of the tanker owners who could afford to, also cut down on their repair budgets. It was only recently that the tanker supply-demand balance improved and, at the time of the second regular inspection, these owners could not foresee their tankers going through the third check-up for life elongation, and instead expected the vessels to go to scrap yards by the time they were up for the next inspection. The maintenance standards were lowered to make the tankers only barely workable until just before the third regular inspection, which eventually turned out very expensive on that account."

And the five-year inspections become more rigorous for older ships.

At the beginning of the summer, Eric Sawyer, chairman of E. A. Gibson Shipbrokers, Ltd., estimated that a shipowner would need a 5-7 year charter, paying at least \$60,000 a day, to recover the current price of \$140 million for building a double-bottom supertanker in Japan. However, the highest

rates seen so far this year have been about \$40,000 a day. In mid-July, the *Journal of Commerce* reported that Chris Horrocks, secretary general of the International Chamber of Shipping, estimates that shipowners are earning only about half of the repayment costs of a new, double-hull super-tanker.

Tighter regulation inevitable

In the wake of the *Exxon Valdez* spill in Alaska's Prince William Sound three years ago, shipping executives discerned that new, tighter regulations were inevitable, but are warning that the specifications ought to apply only to newly built tankers. If the new specifications being discussed by the International Maritime Organization (IMO) are applied retroactively to existing tankers, many companies would be driven out of business, and wholesale scrapping of older vessels would occur. The result would be that "the American public will have to wear more clothes in winter and walk to work," one shipowner told the *Journal of Commerce* in mid-July.

Under the provisions of the U.S. Oil Pollution Act of 1990, which the IMO is considering adopting as an international standard, only older tankers built before the 1990s will be exempt from the requirement for double hulls, and even they must be replaced by 2015. Brent Dibner, of Temple, Barker and Sloane, points out that these requirements will not be a factor for "many, many years," and notes that there is a difference of opinion over the serviceability of very large crude carriers (VLCC), with one major oil company having just bought several VLCCs built in the 1970s or early 1980s. "They obviously believe that they can rehabilitate them and continue to use them," Dibner said. As Dibner pointed out, "In today's world, \$100,000 to insure a voyage is nothing compared to capital costs of \$50,000 a day" for amortizing the cost of a newly constructed VLCC.

Further clouding the picture for oil tankers is the decline in world oil consumption in 1990. According to the annual *Statistical Review of World Energy* put out by British Petroleum and released in June, world demand declined from 64.8 million barrels per day in 1989 to 64.7 million barrels in 1990.

The historical record of shipping shows that the adoption of "free market" policies leads to decline. But this lesson seems not to have sunk in. The shipboleths of the "free market" are accepted without question, and its ill effects finds many apologists, such as Dibner, who explained that consolidation of world shipping is "inevitable." According to Dibner: "What you're going to see is a trend to larger companies with older ships that can cross-subsidize new vessels. That means that they have old ships that are already paid off, that are generating revenues which are now pure profit, that can be used to build new ships. *I don't think anyone would expect new ships to pay their own way. That's not the way the free market works*" (emphasis added).