Maritime Business: An Analysis of Market Developments and Trends

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Abstract According to contemporary market analysts and experts, maritime business is dying and it lacks the luster of the high flying business sectors such as information technology or biotech. Shipowners based in most developed nations have been gradually reducing their shipping investment and pursuing other more lucrative ventures. However, market developments during the recent few years appear to have raised the profile of the shipping sector once again, and skeptics are left pondering whether or not there has been a paradigm shift in the industry's financial fortunes. The paper provides a summary of recent market developments globally as well as in the U.S., the world's largest single-nation consumer market. It also analyzes the current market conditions and provides an outlook for the future.

Keywords maritime business; market trends; market analysis; shipping markets; shipbuilding; global issues in shipping

0 Introduction

A year ago, the maritime sector was euphoric with spectacular market conditions prevailing in every related sector. It was the best year in many decades with all three major shipping markets, viz., the tanker market, the liner market, and the bulk market reaching concurrent highs and every major shipyard in the world being fully booked for the next three years. Many observers and analysts predicted that such conditions would not last and that the cyclical conditions would return with a vengeance. While the cyclical nature of shipping markets was never in question, what was uncertain was how precipitous would the market decline be after the 2004 historic highs. Despite some extraordinarily calamitous events, the year 2005 has proved to be yet another glorious year for the maritime industry. One could even surmise that had it not been for its immediate predecessor, 2005 would have been referred to as one of the finest years in recent memory for the industry. Although the market has peaked in most sectors, the relative declines could not have been more comforting.

There were a number of major maritime developments during the year. Internationally, these include the ongoing dominance of the Chinese economy living up to its sheet anchor role for the shipping industry and the evolving true globalization of the maritime sector. Asian companies once again led the charge in the ongoing international maritime rejuvenation. Interestingly, the rising tide lifted all boats in the harbor with the ensuing enthusiasm and optimism spreading to the usually nonchalant U.S. domestic market, and American maritime interests making some truly stellar moves. Although the 2004 Boxing Day tsunami was unmatched in 2005 in terms of sheer number of people killed, the death and destruction caused by the most active hurricane season in North America, in particular the devastation of the port city of New Orleans, provided absorbing human drama. A political storm over the proposed Dubai Ports World acquisition of P&O Ports' assets in the U.S. gave unparalleled attention for the sector in February 2006. These and other major developments are discussed next.

1 Market developments

It is estimated that Asia is responsible for 50 percent of world GDP growth currently. The liberalization of global trade and China's entry into the World Trade Organization have released a flurry of trade activities that have been responsible for the prolonged exceptionally good market conditions in the shipping industry. One could argue that innovations in the shipping industry have greatly lowered the landed cost of goods in target markets thereby directly facilitating globalization. The interdependency between global commerce and the merchant marine sector has never been so transparent as today.

The ongoing Chinese economic growth and its increasing trade surplus were the most important drivers of another solid year of excellent shipping market performance. China posted a global trade surplus of $102 billion in 2005, and has now become the world's third largest trading nation. The U.S. trade deficit with China has increased from $28 billion in 2001 to $114.7 billion in 2005 according to Chinese statistics which most analysts believe is severely underreported. Interestingly, if trade with the U.S. is excluded from these statistics, China has a trade deficit with the rest of the world.

1.1 Dry bulk market

The supply of dry bulk tonnage grew at a faster rate in 2005 compared to its demand, resulting in a decrease in capacity utilization. The Norwegian shipbroker R.S. Platou estimated a 3% reduction in capacity utilization from 97% in 2004 to a very respectable 94 percent in 2005. Accordingly, the 2005 average freight rates have dropped by as much as a third compared to the 2004 rates. It is however noteworthy that the 2005 rates were still far higher than those in 2003, once again highlighting the anomalous 2004 rates.

1.2 Liquid bulk market

The market for oil tankers is considered highly volatile and difficult to predict because of the highly complex variables involved. This was very evident in 2005, sending mixed messages to investors and analysts alike. The market for crude tankers did not match the record highs set in 2004 and the capacity utilization level dropped to 88.5% in 2005. Although world oil production and trade increased, the demand for tanker tonnage was tempered by unanticipated conditions such as a significant decline in demand for oil imports in China, stagnation at the non-OPEC oil production sources, hurricane-related delays in the U.S. Gulf, and strikes and delays at various ports. Despite all these, the average 2005 rates were significantly better than those in 2003, with a modern VLCC averaging $55,000 per day, more than doubling their $27,000 per day level established in the 1990s. In November 2005, VLCCs reported their highest earnings for the year on the route from Persian Gulf to South Korea, earning $100,880 per day on the 39-day round trip. It has been reported that Frontline, the world's largest VLCC owner, requires less than $28,000 per day to break-even. Royal Dutch Shell PLC was the leading charterer of oil tankers in 2005, hiring 762 crude oil tankers, constituting 7.5% of the world total. BP PLC was the second largest with 4.9 percent of the world total. The present cost of delivering a barrel of oil to the U.S. from the Persian Gulf is about $4. The LNG market which received considerable attention last year was relatively dull with low demand growth (6%) and high supply of new tonnage (14%). This resulted in lower tonnage utilization and also low spot market rates for LNG tankers in 2005.

1.3 Liner market

This was a comforting year for the liner sector for many reasons although their operating costs continued to increase. Port congestion that plagued container operations in many European and North American ports in 2004 was not an issue in 2005. The world container trade grew at a slightly faster rate than the rate of capacity growth in the sector. This led to increasing capacity utilization as well as rising overall charter hires for container ships. Accordingly, the freight rates went up in all arterial trade routes except the trans-Pacific trade where they went down marginally.

Liner operators are faced with increasing operating costs resulting from the high bunker prices as well as the increased costs of vessel chartering and cargo security. Voyage cost per TEU has reportedly gone up by as much as 25%. It costs $900 million a year to operate a fleet of five 8,200 TEU ships in a weekly trans-Pacific service today. A large number of new container ships are to be delivered in 2006 which will lower the tonnage utilization as well as the average freight rates. In general, with the anticipated drop in freight rates, carriers are positioning themselves to lower their costs and also aggressively pursue more remunerative cargoes.

1.4 Cruise shipping market

This is one market that continued its upward trend in 2005 unlike the others. Increased earnings through higher ticket prices, onboard activities and higher occupancy rates have more than exceeded the rise in cruise operating costs. 11.2 million North American passengers cruised in 2005, a 4.5% increase from the previous year. Carnival Cruise Lines (CCL), the market leader, increased its 2005 profits by 21% to $2.3 billion on revenues of $11.1 billion. This is despite the increase in fuel costs and a particularly bad North Atlantic hurricane season. Recent statistics from the International Council of Cruise Lines indicate that the cruise sector contributed more than $30 billion into the U.S. economy in 2004, supporting 316,000 jobs and $12.4 billion in wages and salaries.

Royal Caribbean International (RCI), the second largest cruise operator has placed an order for the world's biggest cruise ship with a Norwegian shipbuilder. The ship, capable of carrying 6,400 passengers, is expected to cost $1.24 billion and be ready by late 2009. Meanwhile, RCI will soon start operating *Freedom of the Seas* which will temporarily take over the title as the world's biggest passenger ship from Cunard Line's *Queen Mary 2*. *Freedom of the Seas* will accommodate 3,634 passengers and will have a crew of 1,400. As of now, there are 28 large cruise vessels under construction, averaging half a billion dollar in construction cost. At current exchange rates, the total cruise ship orders are valued at around $16 billion. Thus we are entering a new era in this segment, with increasing ship sizes and an unbelievable array of on board conveniences and spectacular attractions. What is not clear is whether the market is ready for such ships. There are not many ports which can accommodate such big ships and handle the large volume passenger logistics. Passengers may end up spending considerable vacation time to embark or disembark these huge ships, especially given the current security concerns.

One issue of great concern to the cruise operators was the proposed new U.S. requirement with effect from January 2006 that its citizens should possess a passport while returning back from the Caribbean, Bermuda, and Central/South America. Only one in five Americans has a valid passport. The government has revised its plans after serious lobbying by cruise interests and will introduce a new ID card for this purpose which will cost far less than getting a new passport. Another area of concern for the industry is the media attention paid to unsolved deaths aboard cruise ships. A recent study estimated that more than 50 people have gone overboard from cruise ships during the last decade.

There is a completely new offshoot of the cruise sector that is now mushrooming. Cala Corporation, a Houston-based company has begun marketing shipboard condominiums located above and below sea level. Ships with 320 condominiums priced between $2.5-8 million will be placed in key ports such as Miami-Dade and Cancun, Mexico. Each ship will have 250 residences above sea level, 20 at sea level and 50 undersea with aquarium views. At least three ships are being planned and additional sites in the U.S. and abroad are under consideration. Other players in this market include Four Seasons, the Residential Cruise Line, and the World of ResidenSea.

1.5 Shipbuilding market

The fast growing world economy and increasing trade volumes created unprecedented demand for new tonnage as discussed in the 2004 Annual Review. With all major yards being fully booked for the next three years, an escalation of costs was only to be expected. The price for new tonnage peaked in mid 2005 and is now on a gradual downward trend. Shipyards responded to the buoyant market conditions in different ways such as through reactivation of idle capacity and building new yards as well as through outsourcing part of the construction to lower cost building locations. The South Korean shipyards continue to be most aggressive, increasing their market share to 38% in 2005. China is making strong gains on the second placed Japan and is expected to surpass even the Korean builders within the next 10 years. The country has close to 600 shipyards most of which are state-owned. They typically price their new ships at about 10% less than their competitors' and are building a reputation for flexibility in accommodating customer needs. Japanese ship owners have more orders for new ships than any other nationality. Despite seemingly excellent market conditions, the shipyards' financial returns have not improved significantly from 2004. The ships being delivered now are those contracted in 2002 or 2003 whereas the current market price of steel and other inputs have escalated significantly in addition to adverse exchange rate fluctuations. The Korean and Japanese yards are becoming more selective with their new contracts.

1.6 Ship demolition market

Ship demolition prices are dictated by the market price for steel. The current high price of steel has increased the price for scrap iron globally. However, given the exceptionally good prevailing market conditions, there is very little tonnage being scraped today. Only one-half of the tonnage scrapped in 2004 was scrapped in 2005. Bangladesh was the most active market for ship demolition in 2005 followed by India. Clemenceau, a decommissioned French aircraft carrier, gained international attention in 2005 for all the wrong reasons. The ship was sold to a breaker in Alang, India without decontaminating its high asbestos content. This resulted in worldwide condemnation led by the Greenpeace. The ship which had been towed all the way to India through the Suez Canal was ultimately ordered to be brought back by President Chirac at a cost of Euro 3.5 million to the French taxpayers.

2 The U.S. Merchant marine

2005 will go down as a remarkably good year in the history of the U.S. Merchant Marine. Even though the year's major developments are unlikely to reverse the decline of the nation's merchant marine let alone restore the preeminence of a bygone era, they did bring an iota of optimism in American shipping and shipbuilding sectors that had been missing for a number of years. Nonetheless, Wall Street's new found enthusiasm for shipping IPOs waned significantly in 2005 that led to some companies cutting their price and scaling back their offer. There was also the usual mix of intrigue, controversies, and a few indictments to add flavor to the mix of events.

The contributions of the maritime sector to the local and national economy were strongly documented in an independent economic impact study of port operations in New York and New Jersey. The study found that the bi-port activities supported 232,910 full-time jobs in the region and $12.6 billion in salaries in 2004. The port activities generated $5.8 billion in local, state, and federal tax revenues of which $2 billion remained in the region. The most significant direct job growth occurred in container, cruise passenger, and auto handling operations.

3 The Jones Act scenario

The Jones Act requirements of U.S.-built, owned, and staffed ships for domestic cargo movements gained considerable attention in 2005. President Bush temporarily relaxed those restrictions in the wake of the devastation caused by hurricane Katrina, allowing foreign-flag tankers to distribute oil and gasoline where needed. This benefited European tanker owners primarily. However, their (and other trading partners') antagonism toward the Jones Act picked up further steam in 2005 with many of them referring the issue to the WTO for its scrutiny. There is also a demand in Guam political circles to end the Jones Act because of its impact on their freight costs.

The high cost of commercial shipbuilding in the U.S. has resulted in most Jones Act ship owners opting to prolong the life of their ships rather than replacing them with new ones. About a hundred of the Jones Act tankers will soon reach the end of their operating life because of the single hull phase out provisions of OPA 1990. Unlike the international tanker market which is highly volatile and difficult, the Jones Act tanker trade is relatively stable. The Jones Act product tanker market is estimated to be worth about $550 million and growing at 2% per annum. Overseas Shipholding

Group (OSG), a U.S. based tanker operator with significant international presence, has made this the cornerstone of their strategy in the U.S. tanker market. They placed orders with the Aker shipyard in Philadelphia, a decommissioned Navy shipyard transferred for commercial operations in 1997, to build ten 46,000dwt product tankers by 2010, with options for two more. The shipyard established a separate company, Aker American Shipping ASA that will own the yard as well as the ships. The parent company's equity issue of $120 million in Norway to secure the start up finance was oversubscribed four times. The rest of the financing will be provided by Norwegian banks. OSG will bareboat charter the ships from Aker American Shipping ASA. The overall project is priced at more than $1 billion, and each ship priced at the $80-85 million range. The yard will build roughly three ships a year, and also benefit from the learning curve thereby bringing down their cost and making a profit when the project is completed. OSG expects all 10 ships to be under charter agreement by end 2006 and are likely to order even more ships from Aker. With this masterful strategy, OSG will double its Jones Act fleet capacity which now includes two Panamax tankers, four handysize tankers, two dry bulk carriers and a car carrier. OSG was involved in about $3.5 billion worth major financial transactions in its worldwide operations in 2005.

Horizon Lines, the largest Jones Act carrier, successfully completed its IPO in September 2005. The company is planning to pay down its debts and grow through acquisitions in the near future. The carrier is planning to update its fleet and increase business in Alaska, Guam, Hawaii, and Puerto Rico. Horizon is also exploring short sea shipping options along the east coast. Matson, another traditional Jones Act carrier, has launched a China-U.S. service. Their proposed business model is to carry Chinese exports to the West coast, followed by westbound cargo to Hawaii and then empties from there to China. The likely success of this cross subsidization move is yet to be proven.

4 Title XI loan guarantee program

The Title XI Loan Guarantee program gives U.S. shipowners and builders longer term loans at interest rates lower than the commercial lending rate. The program was more than $300 million in default since 2000, bulk of that coming from the bankruptcy of cruise ship operator American Classic Voyages in 2001. This has led to the program being characterized as corporate welfare and subject to severe GAO scrutiny. In 2003, the GAO recommended that no new funds be allocated to the program until the U.S. Maritime Administration (Marad) had tightened its oversight of the loan portfolio. Thus a departmental credit committee was established in 2004 to review Title XI and other DoT lending programs. There is a perception in the industry that the committee is blatantly hostile to Title XI as evidenced by its proposed 2007 rule changes and that the proposed 2007 budget will effectively terminate the program.

5 The katrina controversy

FEMA's $236 million six month contract with Carnival Cruise Lines (CCL) to provide three of their ships (the Ecstasy, Sensation, and Holiday) in the Mississippi River and Mobile Bay elicited controversial comments from both sides of the political aisle. It was alleged that CCL was charging the government $1,275 per week assuming full occupation compared to $599 a passenger would pay in the commercial market. Antagonists view this as a grossly overpriced sweetheart deal whereas CCL argues that it would barely break even monetarily. The deal has come under special scrutiny, especially the company's tax status which is being investigated by congressional investigators. CCL, headquartered in Miami, is incorporated in Panama which gave them a tax liability of $3 million for the $1.9 billion in pre-tax income made in 2004 rather than the $475 million they would have had to pay had they been incorporated in the U.S..

6 Legal problems

The legal problems of ILA and its alleged mob connections worsened in 2005. A one time heir apparent to the ILA President and a long time president of ILA Local 1235 in Newark, NJ pleaded guilty to steering contracts of the ILA-Management benefit program to companies controlled by the Genovese crime family. As per the consent decree, he resigned from his union responsibilities. Others involved in the case include ILA's assistant general organizer and president of the union's NY-NJ maintenance local, international vice president for Miami, and an alleged Genovese crime family capo on bail. The latter three were acquitted of the alleged wire and mail fraud conspiracy. The crime family capo disappeared during the middle of the federal trial in early October and his dead body was later discovered in the trunk of a car parked behind a NJ diner in late November. Apart from these, in mid 2005, federal prosecutors filed a civil racketeering lawsuit accusing the ILA of being a mob-controlled organization under RICO (Racketeer Influenced and Corrupt Organizations) Act. The lawsuit would impose trusteeship on the ILA and its benefits programs, and require new elections under the supervision of a court appointed officer. All six top officials of ILA were named as defendants under the charge. The ILA denied all charges vehemently.

Another union leader that ran afoul of the law was the president of the American Maritime Officers (AMO) Union which represents merchant marine officers aboard U.S.-flag ships. The 13 count federal indictment against the AMO president, his brother, and two other union officials include charges of racketeering, embezzlement, fraud, and witness tampering. Two former executives of Stelmar, a tanker operator acquired by OSG in 2005 violated the Sarbanes Oxley Act provisions. They gave each other interest-free loan from Stelmar funds prior to its sale which they claimed were perfectly legal.

7 Pollution penalties

The crackdown on those violating the pollution rules in U.S. waters was particularly strong in 2005. Seven criminal cases were successfully prosecuted in 2005 compared to 23 of them between 1995 and 2004. It is reported that a new investigation is being launched every 2-3 weeks with more than a quarter of those being initiated by whistleblowers. In extreme cases such as repeat violation, the operator would be banned from U.S. waters. In an incident in Massachusetts, MSC Ship Management (Hong Kong) Limited pleaded guilty to charges that it engaged in conspiracy, obstruction of justice, destruction of evidence, false statements, and violated the Act to Prevent Pollution from Ships, and was fined $10.5 million. They will also be on probation for five years and must operate under the terms of a government approved Environmental Compliance Plan during this period. The ship's two senior engineers also pleaded guilty and will be sentenced in 2006. In an almost identical case in New Jersey, a chief engineer was sentenced to imprisonment for one year and one day, and three years of probation. The Operations Manager of the Fishers Island Ferry in Connecticut was sentenced to spend 30 days in jail and pay a fine of $10,000 for dumping untreated sludge into the Connecticut’s Thames River and Long Island Sound. Meanwhile, 17 years after the Exxon Valdez incident, the $5 billion judgment against Exxon went to the federal court of appeals in early February 2006.

8 Port congestion problems

Port congestion, a major problem last year was not an issue at all in 2005. PierPASS, a non-profit company that began operations in 2005 summer, appears to have assisted in relieving Southern California’s congestion problems. The program aims to reduce trucking movements during normal daylight hours by imposing a penalty of $40 per container, paid by the beneficial cargo owner. Off-peak container movements are thus encouraged from 6 p.m. to 3 a.m. on Mondays through Thursdays, and 8 a.m. to 6 p.m. on Saturdays. Its success is however dependent on truck drivers’ willingness to work at night and has not been implemented in any other port region to date.

9 Global issues

9.1 Seafarers

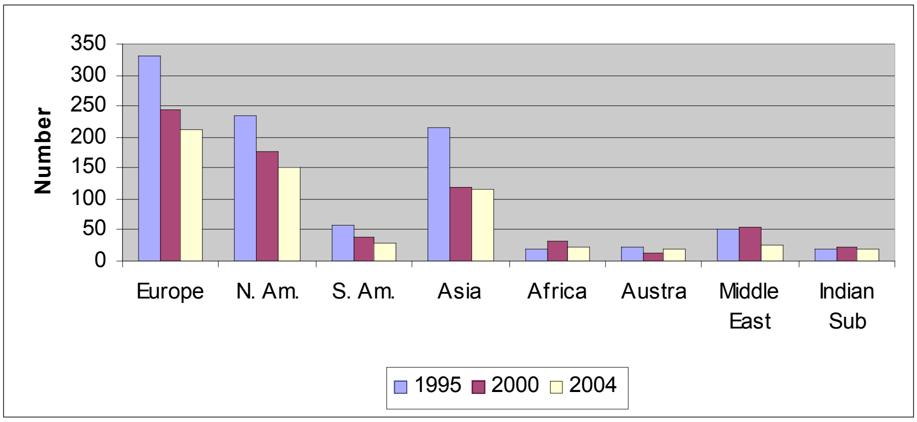
The 4th BIMCO/ISF manpower study found a shortage of 10,000 qualified merchant marine officers and a surplus of 135,000 ratings. Although the officer shortage is less than what it was in 2000, it is expected to worsen in coming years for a number of reasons. Some ship managers are already finding it difficult to comply with the provisions of the ISM Code because of the current shortage. There is also poaching of officers to the more lucrative sectors such as LNG and LPG operations.

One contributing factor for the increasing wastage of officers is the increasing security regulations at sea. A recent ITF survey of 17,000 seafarers found that 86 percent of them believe that the ISPS Code has resulted in extra work and adversely impacted their performance and well being. They perceive a lack of trust and discrimination against seafarers. 70% of the respondents pointed out that they had been denied shore leave in the U.S. They find the U.S visa process to be costly, inconvenient, and impractical. Seafarers from Vietnam, China, and the Middle East have the greatest difficult in getting U.S. entry visas. Australia is also following the U.S. model which is likely to lead toward more seafarer shore-leave denials.

The U.S. Coast Guard began issuing documents with new security provisions to prevent forgery and fraud. Most commercial vessels operating in U.S. waters are now required to carry alcohol testing kits on board so that ship’s personnel can be tested within two hours of a serious marine incident. Trade associations and vessel operators are opposed to the new requirement because of the additional costs involved.

9.2 Shipping casualties

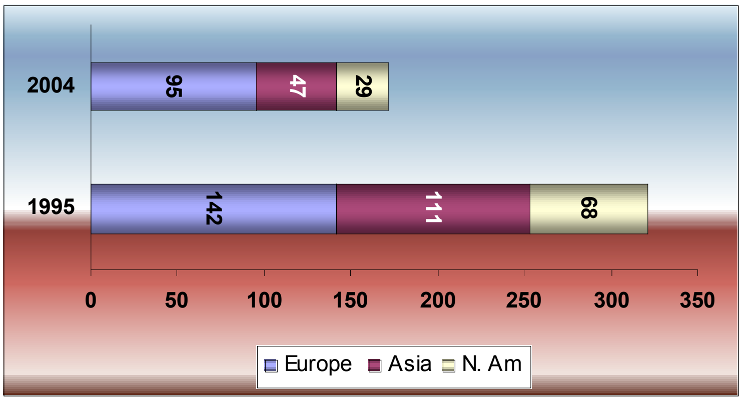
The various safety and pollution prevention rules and regulations implemented over the years are having a very tangible impact on the industry. Furthermore, ships today have better machinery and communication and navigational capabilities. Unfortunately, such improvements do not receive much attention from the public at large. Fig. 1 shows the decreasing number of casualties among bulk, roll-on roll-off, and tanker vessels in various parts of the world.



Source: Lloyd’s MIU/LSE

Fig. 1 Bulk, Ro-Ro, and Tanker Casualties by Area

The oil tanker sector in particular, responsible for many massive operational and accidental pollution cases at sea in the past, has made dramatic progress and cut down such incidents drastically. In 1979, there were 34 oil tanker incidents that resulted in spilling 650,000 tonnes of oil whereas in 2004, there were only five incidents and over the last five years, less than 40,000 tonnes of oil have been spilled. In the last 10 years, tanker incidents have dropped by 47% (see Fig. 2). More than two out of every three VLCC in the world is now double hulled. Despite increasing number of tanker inspections, their detention ratio today is at an all time low of 3.6%. Panama and Liberia, the top two open registries, have an enviable safety record of 1.44% and 1.5% of their fleet respectively compared to the top ten flags’ average safety record of 2.19% and the world average of 2.48%. With the safety regulations getting even tougher, maritime casualty statistics are expected to improve further.

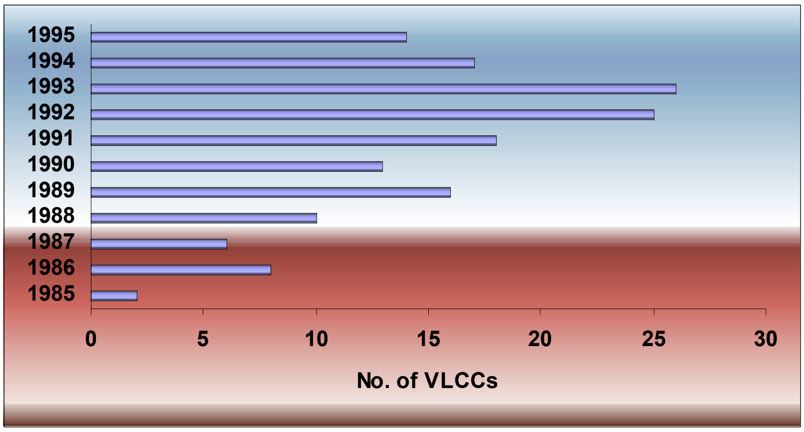


Source: Lloyd’s Shipping Economist

Fig. 2 Oil Tanker Casualty Incidents, 1995 Vs. 2004

9.3 End of the single hull tanker era

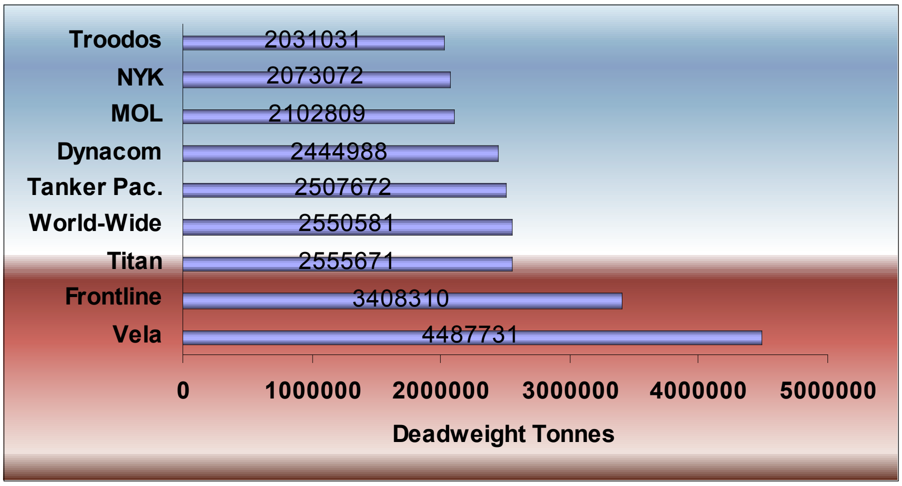
IMO Regulation 13G amended the MARPOL rules following the sinking of the single hull tanker Prestige off the Spanish coast in 2003. The new regulation mandates that all single hull tankers be phased out by 2010 or by their 25th anniversary if earlier and came into force in April 2005. An accompanying Regulation 13H prohibits the carriage of heavy crude oil and fuel oil cargoes from April 2005 in single hull tankers. With this, the EU has effectively shut out large single hull tankers from carrying crude and heavy grades in its waters from April 2005. In the U.S., the OPA 1990 mandates 2010 as the deadline for single hull tankers with the exception of the LOOP and other designated lightering areas.



Source: Lloyd's Shipping Economist

Fig. 3 Number of Single Hull VLCCs and Year Built

A large number of single hull vessels are expected to reach the end of their operational life from 2010 onwards (see Fig. 3). A strict application of the phase out rule will create significant shortfall in capacity, especially in the VLCC tonnage. There is however an opt-out provision in the law whereby flag states may allow vessels to sail beyond 2010 until a final 2015 deadline provided ships have not reached 25 years. They may be allowed to continue to be in operation even beyond 2015 by flag states if they have double bottoms or double sides but these exceptions can be overridden by foreign port states through entry denial. Big oil importing nations such as Japan and India have clarified that they will allow single hull tankers approved by the flag administration to trade into their ports. Major single hull tanker owners with one million or more deadweight tons in capacity are shown in Fig. 4. Each of these owners have at least eight such ships under their control.



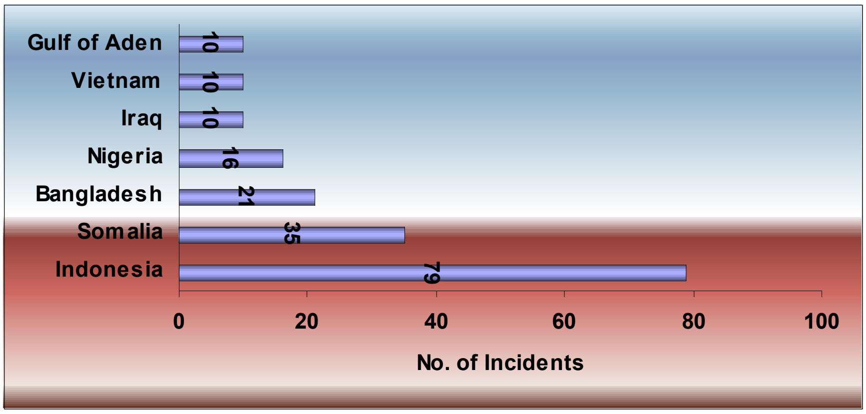
Source: Lloyd Shipping Economist

Fig. 4 Major Owners and Operators of Single Hull VLCCs

9.4 Piracy

Piracy at sea continues to haunt the merchant marine. There were marginal improvements in some traditional piracy-prone areas in 2005 only to be more than offset by new trouble-torn areas. 440 crew members were captured as hostages in 2005, the highest number ever in a year. Attacks in Indonesian waters dropped by 16% and those in the Malacca Strait dropped to 12 from 38 in 2004. This is believed to be an outcome of active joint air patrols in the region by Malaysian, Indonesian, Thai, and Singaporean authorities and also the peace agreement reached between the Aceh rebels and the Indonesian government. The U.S. Pacific fleet has also been playing a very visible background role in the area. An Indonesian soldier was arrested for kidnapping two ship's crewmen, proving the alleged complicity of military personnel in some of these activities. Piracy attacks using guns, knives, and hand-propelled grenade launchers have increased significantly in other regions such as off Somalia, the country with the longest coastline in Africa. Another surprisingly new troublesome area is off Basra in Iraq, in the close proximity of coalition forces.

Pirate attacks off Somalia received global attention when the cruise liner Seabourne Spirit was attacked by two 25 foot inflatable pirate boats 100 miles off the coast with RPGs and machine guns. The activation of LRAD (Long Range Acoustic Device) which releases earsplitting 150 decibel bangs combined with ship maneuvers is believed to have repelled the attackers. The device is used in some commercial and many naval vessels after the attack on USS Cole off Yemen in 2000.



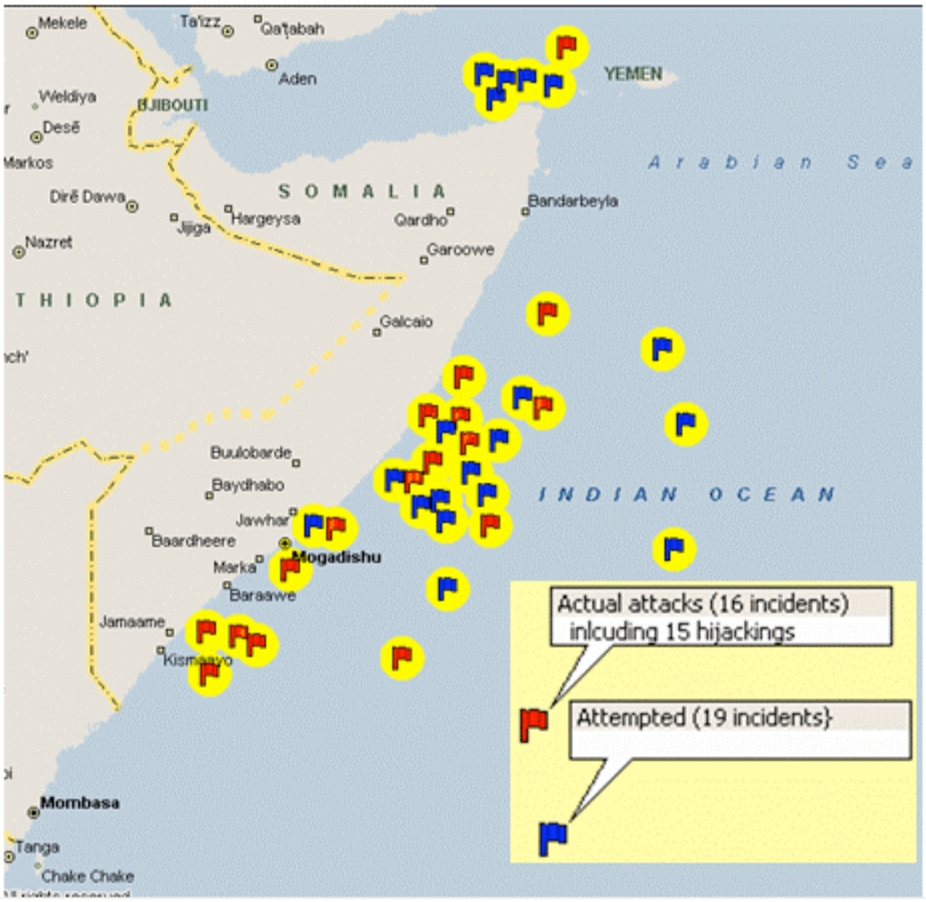
Source: IMB Statistics

Fig. 5 Major Areas of Maritime Piracy and Incidents in 2005

Pirates have become creative, luring vessels closer to the shore by firing distress signals. Somali pirates even hijacked three ships carrying U.S. humanitarian aid for that nation's starving citizens. Ships are now advised to stay 200 miles off the Somali coast. In early 2006, the USS Winston S. Churchill intercepted a pirate dhow upon notification from the International Maritime Bureau. The Churchill is part of a multinational taskforce patrolling the western Indian Ocean and Horn of Africa region. This particular action resulted in capturing 10 Somali pirates and rescuing 16 Indian hostages. The suspects were handed over to Kenyan authorities for hijacking a ship, threatening the lives of crew members, and demanding a $450,000 ransom. The pirates allegedly attempted to hijack three more ships while holding the 16 hostages on board.

The U.S. Navy and Coast Guard are determined to protect U.S. maritime interests in piracy prone areas. While the Coast Guard stands ready to protect the domestic waters, the Navy conducts maritime security operations in various parts of the world now. This is a new role for the U.S. Navy which has historically stayed away from law enforcement at littoral states. However, given the consequence of pirates collaborating with terrorists and causing a major disaster involving a loaded oil tanker or other hazardous cargo, this role is eminently justifiable. There was a grim reminder of this during the year when Indonesian pirates took control of a Malaysian registered oil tanker in June although no major damage resulted from this particular event.

The 24th Assembly of the International Maritime Organization passed a resolution to bring the issue of maritime piracy and robbery in waters off Somalia to the attention of the U.N. Security Council. Accordingly, the Security Council has urged Member States to use naval vessels and military aircraft in the fight against piracy and armed robbery off Somalia. Meanwhile, Somalia has outsourced its maritime security operations to TopCat, a private American security firm. The $55 million two-year contract calls for guarding the coastline from sea pirates. TopCat will conduct boat and air patrol to foil piracy attempts and capture the pirates, and supply equipment and training to help Somalian authorities.



Source: International Maritime Bureau

Fig. 6 ICC International Maritime Bureau(IMB)

Piracy Armed robbery-1 Jan. to 31 Dec. 2005 attachs off Somalia

9.5 Maritime security

An important trend in maritime security is the implementation of user fees. As an example, an association of 13 deepwater ports in the U.S. Pacific North West has implemented a fee of $250-600 per vessel per day to fund these expenses. Some perceive shipping containers as potential Trojan Horses. With about 14 containers coming to a U.S. port every minute of the day and increasing concerns about terrorism, the attention paid to maritime security went up a few notches again this year. The implementation of the MTSA and the ISPS Code in 2004 was discussed last year. The crux of the U.S. strategy is to stop potentially harmful containers from leaving its foreign port of origin for which multiple efforts are undertaken. These include the C-TPAT (Customs-Trade Partnership Against Terrorism), CSI (Container Security Initiative) as well as the 24 hour notification rule, and the use of technology. A C-TPAT company has an approved supply chain security program and their imports are inspected once every 306 times rather than once every 47 times, the usual standard. Although there was about 5,000 C-TPAT participants in early 2005, only about 10% of them had their compliance verified by the U.S. Customs and Border Protection (CBP). In April 2005, the privileges given to 4,000 of these companies were withdrawn until CBP could hire more auditors.

ll major ports that export containers to the U.S. are now part of the CSI network. The shipper or agent is required to provide extensive information about the cargo 24 hours before loading it on board a ship. CBP works in collaboration with the foreign Customs Service authorities at the CSI ports to screen containers; high risk containers are physically examined. Areas of concern here include whether or not all high risk containers are identified, the adequacy of training given to foreign customs officers, and the speed with which radiation detection equipments are placed in some of those ports.

The C-TPAT criteria for carriers introduced in 2002 are being upgraded presently. It will make the best practices in the industry a minimum standard. A carrier is expected to benefit if it exceeds those standards. Other nations are also following a similar trend. Canada introduced its mandatory 24 hour notification rule in 2004, Mexico will introduce the same in 2006 and the E.U. by 2008.

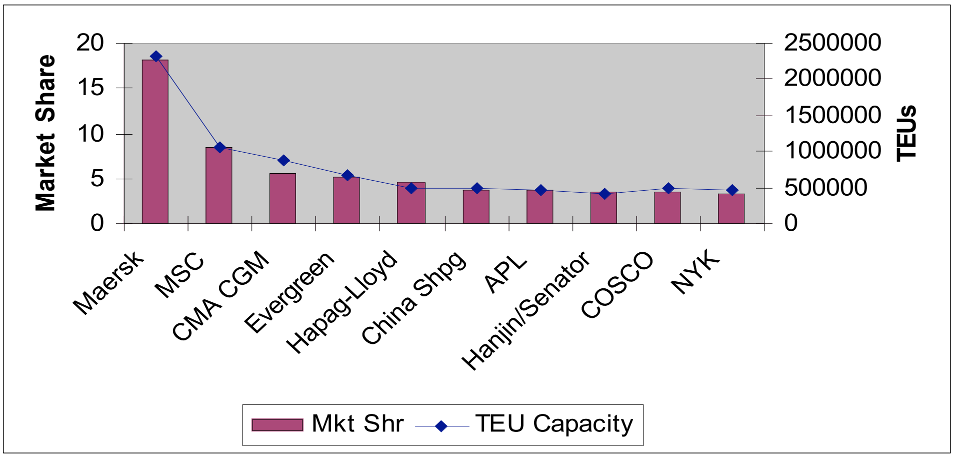
In addition to C-TPAT validated companies using C-TPAT validated carriers, exporting from CSI ports, and inspecting 100 percent of all suspect containers, a further expectation is to use smart containers. In this regard, e-seals and container security devices reached an important stage in 2005 with an ISO standard for e-seals expected by end 2006. DHS requires that channel members verify the integrity of container seals. The carriers and terminal operators are likely to opt for RFID technology which would go a step beyond and track the electronic seals. However, e-seals are only a tracking device and not a security device which would detect unauthorized entry. Containers with electronic sensors that detect entry are expected to receive a green lane treatment from CBP. GE Security, a subsidiary of GE, has begun marketing such a device which will be placed inside the container. There are less chances of it being damaged or broken accidentally unlike an e-seal. However, whereas as a disposable e-seal will cost only $10-20, the reusable GE security device will cost $1000-1,200 per piece restricting their use to certain niche markets, Starbucks being one of its early adopters.

9.6 Liner consolidation

While some carriers like the Chinese container operators grow organically through massive investment in new capacity, some are seeking growth through acquisition and some others through formation of strategic alliances. Consolidation in the liner shipping business reached a crescendo in 2005 driven by three big acquisitions. These include $2.9 billion acquisition of PONL by the AP Moller group, $2.3 billion purchase of CP Ships by the TUI Group (Hapag-Lloyd's parent company), and CMA CGM's acquisition of the shipping activities of the Bollore group for $600 million. The market share and the total container carrying capacity (owned and ordered) of the top 10 operators are shown in Fig. 6. Those who cannot afford the acquisition strategy are pursuing the alliance option. The top two alliances, the New World Alliance and the Grand World Alliance combined their operations in early 2006 and created a new alliance to respond to the Mearsk Line's ascent to supremacy. However, the consolidation trend is expected to continue in future years.

Shippers are justifiably concerned about increasing concentration of economic power among the top liner operators and are demanding changes in longstanding trade practices. In the U.S. liner trades alone, the top 50 carriers' market share during the 1st nine months of 2005 increased by 9.1% compared to the same period in 2004 as per PIERS/JoC statistics. The EU adopted a proposal to end the block exemption given to liner conferences under Regulation 4056/86.

Although it will be another couple of years before it becomes effective, the conference system has already lost its clout, particularly in the U.S. trades.



Source: BRS-Alphaliner/JoC PIERS

Fig. 7 Market Share and TEU Capacity of Top 10 Container Operators

9.7 The Dubai ports world controversy

The recent controversy about DP World's aborted acquisition of P&O Ports' U.S. assets should be evaluated in the context of the ongoing worldwide consolidation in liner shipping and container terminal operations. As the controversy gained extraordinary media attention and coverage, only a brief commentary is included here. The entire episode will be remembered in future years hopefully as a sad case of election year political spin and manipulation. The incredible success of the well-intentioned but misinformed politicians and the media in convincing the average American that an Arab controlled company was buying out six major American ports is troubling and even frightening. If a container terminal in an American port is run by a terminal operating company from any part of the world under U.S. rules and regulations, it does not alter our security standard even by an iota either way. What is most important is where those containers are being loaded and who has access to them before they reach here. The masterful way in which the spin doctors and the popular media converted this strategic business move by an efficient, fast growing global container terminal operator into a case of outsourcing and the epicenter of public anger defies rationale besides hurting America's standing as a champion of the free market. It was American consultants, engineers, and banks that went around the world advocating the efficiency of privatized ports and terminals. It is a fact that our supply chain security is lacking and needs careful scrutiny but should it be at the cost of rationality and commonsense to the point where even the nomination of a potential Maritime Administrator is being jeopardized solely because of his prior affiliation with a foreign employer?

10 Outlook

It has been a good year for the merchant marine by all accounts, operationally as well as financially. Major improvements were made in areas such as safety and security including maritime piracy and prevention of oil pollution. U.S.-based operators made incisive moves during the year, in particular OSG's impressive product tanker series building commitment, a rarity in the recent annals of merchant ship construction in this country. None of these negate the fact that the market cycles are definitely on a downward trend. However, other than the liner market where significant new tonnage is expected to enter during the next two years, any deterioration in market conditions will be far more tolerable than what the industry has typically witnessed in prior boom and bust cycles. There are however areas of major concern that one hopes policymakers will pay particular attention. Although the U.S. logistics infrastructure is envied by the rest of the world, its marine terminals and road and rail capability will be incapable of handling the nation's international trade volumes within the next 15 years. International container movements alone are expected to quadruple in the next 20 years, chocking gateway ports and hurting their efficiency. If no major improvements are made, congestion will become routine at the major ports within five years. There are of course other uncertainties in the marketplace such as a global outbreak of avian flu which could also cripple the merchant marine sector.

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