2010 U.S. Merchant Marine and World Maritime Review

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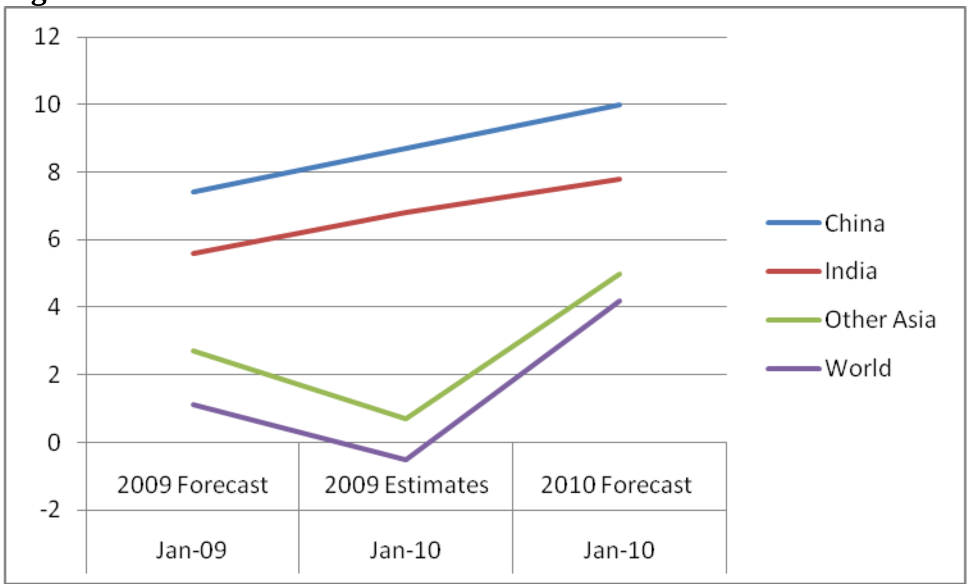
Introduction

The global maritime sector could have done without the year 2009! Such is the view of those associated with the business of shipping. I and many other analysts had forecast considerable chaos last year, and the markets did live up to that sad prediction especially in container shipping and car carriers, two sectors that cater primarily to the transportation of manufactured goods. Shipping journals were rife with several stories of bankruptcies and buyouts, some of which were true and some, wild speculation. The carriers in deepest trouble included revered names such as Hapag-Lloyd, CMA CGM, and Zim, and even DP World, the parent company of Dubai Ports, the global terminal operator that during the past decade grew meteorically.

Predictably, the major theme during the year was (and continues to be) financial stability. A number of carriers were in dire straits because of declining asset values and an unrelenting global credit crunch. Ship owners who had grown accustomed to strong annual tonnage demand increase (of 6.3 percent until 2008) continued their ordering spree, anticipating further global trade growth. Given overbooked shipyards' multi-year delay in delivering new ships, many owners who had only paid the initial 20percent down payment and hoped to raise the rest as the delivery date came nearer, found themselves in a tight corner. Indeed the combination of the first GDP reduction for developed economies since World War II, a 12percent drop in world trade and a gargantuan ship-building order-book created ideal conditions for a disastrous 2009. However, the maritime sector did eventually pull off a miraculous escape once again and the overall results in select markets showed signs of life by year end. Overall, confidence level in the maritime sector has stabilized although it remains inherently fragile (Moore Stephens 2009).

Many developed countries and even some developing countries initiated a variety of macroeconomic triggers that were successful in holding water and avoiding a prolonged contraction. Despite a steep drop in global commerce and economic activity in general, world markets are now emerging from the trough albeit at snail's pace. The robust developing market economies, China and India in particular, have played stellar roles in this outcome (See Figure 1). The Chinese economy came under increased scrutiny last year as most analysts debated whether the Middle Kingdom could prolong its role as the epicenter of global maritime commerce. The slowing down of its economic engine continued in 2009 yet the nation recovered to stabilize itself at around 8.5 percent GDP growth, spearheading an Asia-centric economic recovery and stemming confidence erosion in the maritime circles. The Chinese demand for raw materials increased substantially in the latter half of 2009; unsurprisingly, the dry bulk shipping market turned out to be the least affected last year. In contrast, a precipitous decline in Chinese exports caused by consumption downturn in developed countries impacted the fortunes of container operators who reported major losses and laid up close to 600 ships in addition to cancelling or delaying a number of new-building orders.

Figure 1: Growth in Real GDP



Source: Platou Report 2010

So, overall this has been a year meant for those with nerves of steel and a deep pocket; one that most aficionados would like to forget as quickly as possible! Most other stories in the industry were relatively lame, and lack the pizzazz of the high profile macroeconomic juggernaut mentioned above. They are nevertheless discussed here for the benefit of maritime connoisseurs.

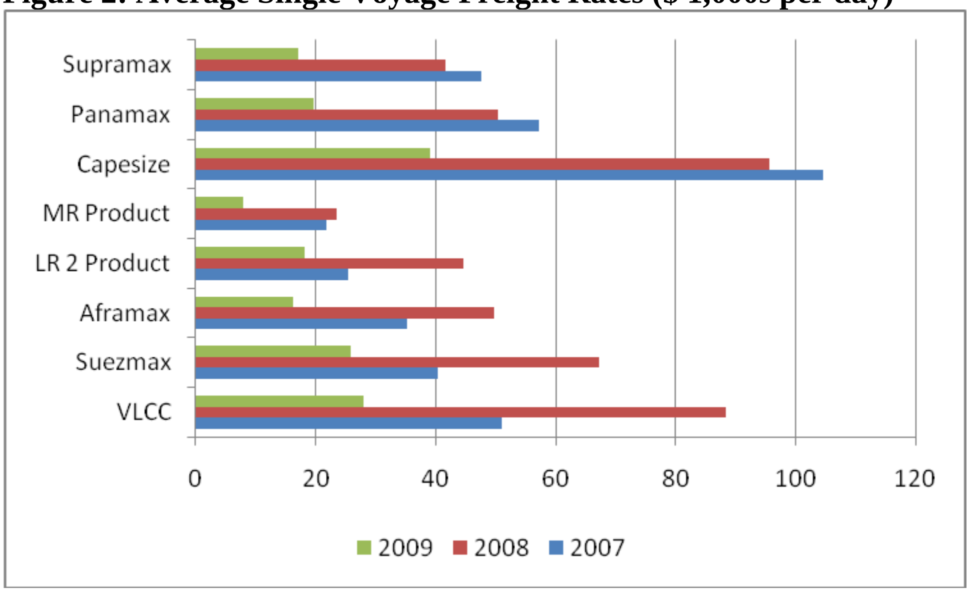
Market Developments

Although I typically use this segment to review annual market changes, as we begin the second decade of the new millennium, a brief look at the 1st ten years and acknowledging outstanding developments in shipping during that period is appropriate. The market ascent that began in late 2003 continued unabated for solid five years, making some of us wonder whether globalization and the maritime nexus have forged a paradigm shift in maritime economics and fostered a new environment defying traditional market undulations. It was during this decade that we witnessed unprecedented market highs with cape-size bulkers earning $300,000 per day. We also saw the ship sizes doubling from their 1990s' maximum size to the super post-panamax sizes that we speak of so nonchalantly today. There were so many spectacular mergers and acquisitions, and new shipyard ventures emerged in China at a pace never witnessed before. Every sector of the industry including tankers, LNGs, and most certainly the cruise sector witnessed dramatic growth during the decade, easily making this the golden era of merchant shipping and ship construction in recent memory. Alas, while some may see the latter half of 2008 and 2009 as correction years, some others may equate the market outcomes as poetic justice. Overall, this has indeed been the finest decade in recent maritime history and perhaps, the best "since the days of the Vikings" (Plato Report 2006).

Dry Bulk Market

The dry bulk market began 2009 as the most distressed shipping market with capesize bulkers earning barely $5,000 per day, a precipitous 95 percent drop from mid 2008 rate levels. By mid 2009, the rates recovered from its doldrums primarily because of strong Chinese raw material imports and ended the year with capesizes earning $39,000 per day on average and an increase in average sailing distances. Figure 2 compares single voyage freight rates in thousand dollars per day for supramax, panamax and capesize bulkers (as well as for major tanker ship categories) from 2007 to 2009. The supply imbalance is expected to worsen from now until 2013 as there will be a significant infusion of new dry bulk tonnage at an annual growth rate of 9.5 percent (Lloyd's Register-Fairplay Research). Increased momentum in recycling older tonnage and a major boost in the world demand for dry bulk commodities is required to offset the projected increase in supply.

Figure 2: Average Single Voyage Freight Rates ($ 1,000s per day)



Source: Platou Report 2010

Tanker Market

The tanker market entered 2009 after peaking in 2008 and faced the first decline in oil demand in recent times. Although the 5 percent drop in oil trades impacted vessel utilization levels, the tanker market also fared respectably in 2009. While the lifeline for dry bulk carriers came from China, what saved the tanker market was the employment of several large tankers for storage purposes. Reportedly, one-twentieth of the world tanker capacity was used for storage in 2009. However, the market conditions show worsening conditions in early 2010. A new VLCC bought in 2008 for $153 million must earn $65,700 per day for 25 years to make the expected "10 percent normal profit" to keep the investment committed. Because of prolonged oversupply in this market, the time charter rates are expected to be half that level for the immediate future. A McQuilling Services report on tanker markets projects tanker owners losing $2 million per vessel over the next five years (2010-2014). A key factor in how the market shapes up is the fate of single hull tankers which presently constitute 17 percent of the current VLCC fleet. Many of these ships are relatively young. The current push for accelerated phase-out of these tankers from the European Union and South Korea and also the recent Chinese and Indian ban on their use for foreign commerce will eliminate some of the market imbalance. But the fact that close to 900 tankers above 27,500 DWT are presently on order offers little room for comfort.

Liner Market

There was a 10 percent decline from 2008 levels in container movements in general although in the Far East-U.S. route, it was down 15.3 percent. Furthermore, the container freight rates in major east-west trade routes dropped 26.2 percent in 2009. Compared to 2007, the peak year for these movements, containerized U.S. imports went down by 55,000 TEUs according to Alphaliner. There was an 8 percent decline in tonnage demand for container ships even after the intentional slowing down of ships and also diverting ships to avoid piracy-prone waters. 41percent of the new containership deliveries were either delayed or postponed in 2009, yet more than a million new TEU capacity ships entered service. With operators returning back chartered tonnage, average charter rates dropped 60 percent from their 2008 level. Close to 600 container ships (about 10 percent of the total capacity) were laid up at one point. 70 percent of these ships are owned by German investors. Overall, the container lines total revenue dropped from $243 billion in 2008 to $188 billion in 2009 of which at least $30 billion was primarily through falling freight rates. It is estimated that the collective loss of container operators was over $20 billion in 2009.

Cruise Market

Recession or not, the U.S. cruise sector continued to grow, with about 13.5 million passengers going on a cruise in 2009. A quarter of these guests were from outside U.S. and Canada. Also, fanciful new cruise ships like the *Oasis of the Seas* (passenger capacity of 6,360) were christened. As per statistics from the 25 member lines of Cruise Line International Association (CLIA), the market remains balanced with average occupancy rate of 104.4 percent. Cruise lines and their passengers reportedly spent $19.07 billion directly and $40.2 billion indirectly in 2008, and generated 357,710 jobs paying $16.2 billion in wages and salaries nationwide. Cruise lines are investing $6.5 billion in 12 new ships in 2010 over and above the $4.5 billion invested in 2009.

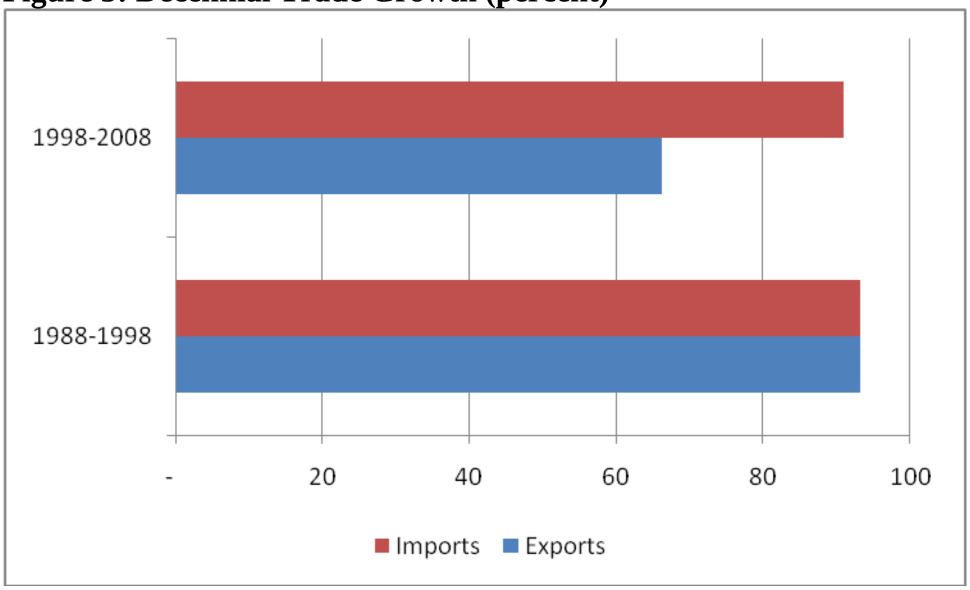
The U.S. Merchant Marine

There were no spectacular U.S. maritime industrial developments to boast in 2009 or significant private sector milestones to chronicle. The message that reverberated throughout the year was one of concern and negativity originating from the much broader macroeconomic complications discussed earlier. However, there were several new container and ro-ro vessels flagged into the U.S. registry due to preference cargoes generated by the military engagements in Afghanistan and Iraq, increase in direct loans by the Export-Import Bank to ease the global credit crunch, and government stimulus money to refurbish domestic infrastructure.

Export Initiative

In the 2010 State of the Union address, President Obama stated his goal to double the nation's exports over the next five years thereby creating 2 million new jobs. This is perhaps the most significant development for the U.S. maritime community in several years as the positive externality associated with the export initiative could be tremendous and go way beyond job creation. Figure 3 shows decennial trade growth in U.S. exports and imports. The rate of growth of U.S. exports has lagged the growth in imports during the last decade, significantly impacting supply chain planning and execution strategies of every carrier. Any effort to boost the export growth will be a major help for carriers and their supply chain partners. The President plans a 21 percent increase for export promotion programs aimed at small and medium sized enterprises, and also to review the export controls currently in place.

Figure 3: Decennial Trade Growth (percent)



Source: Journal of Commerce/PIERS

The Recovery Act

As part of the President's American Recovery and Reinvestment Act (ARRA), Transportation Secretary LaHood released $98 million in economic stimulus grants to be distributed among 70 U.S. shipyards for the purpose of creating jobs. The larger grant recipients include Aker Philadelphia shipyard ($2.3 million for training), Washburn & Doughty in Maine ($2.6 million for a new drydock), LEEVAC Shipyards in Louisiana ($3.7 million) for two cranes and equipment, and Lyon Shipyard in Virginia ($4.5 million for drydock enhancement).

Secretary LaHood's $1.5 billion Transportation Investment Generating Economic Recovery (TIGER) grant program generated 1,381 competitive requests collectively estimated at $56.9 billion. 7 percent of all requests came from seaports who asked for a total of $3.38 billion grant. The names of successful grant recipients were released in February 2010. $120 million (8 percent of the allotted total) will go to seven ports and port-related projects, and the Maritime Administration (MARAD) will administer these grants.

According to the House Transportation and Infrastructure Committee, 3,148 projects supported by stimulus funds have been completed and 9,000 are still underway. ARRA set aside $64.1 billion for expenditures under the Committee's jurisdiction. A total of 17,000 projects totaling $56 billion have been identified. The stimulus funds are doing what they were supposed to do. Laid off employees are being hired back or new jobs are being created at some yards. The pace of the economic recovery and hence, job creation is expected to pick up during the 2nd half of 2010.

Haiti Relief Operations
MARAD activated six ships to assist earth quake relief operations in Haiti, three of which eventually participated. This included the former Hawaiian Superferry Huakai, the SS Cape May and the MV Cornhusker State. These Ready Reserve ships, crewed by civilian mariners, provided crucial support during relief operations at the request of the US Department of Defense and have returned back while 25 other U.S. commercial vessels continue with the operations.

Maritime Initiatives
Horizon Lines, the largest domestic carrier, has announced plans to begin a premium liner service from China to the US, using five of its 2,824 TEU ships. The ships are presently on time charter to Maersk Line. They are part of the westbound Guam Jones Act service. The China run will begin on 10 December 2010 when the space charter agreement with Maersk Line will terminate. Horizon appears well poised to benefit from its niche service. Their entry into the Chinese market as a non vessel operating common carrier in 2007 helped build the foundation for this venture.

Maersk Line invested $400 million to recapitalize and reflag nine ships into the U.S. registry. The ships replaced were older and smaller; the new 4,000 TEU ships are 10 years old and enrolled in the Maritime Security Program. Maersk has also decided to stay put in Charleston and extended its contract to 2014. The new operating arrangement at the port will not adversely impact the carrier's competitive stance vis-a-vis its competitors unlike the current agreement.

Farrell Lines added two U.S. flag ro-ro ships into its fleet, complementing the two added in early 2008. The Alliance Beaumont was reflagged while in Dubai and the 2nd ship, Alliance Charleston in New York.

Jones Act Developments
There was a proposal in Congress to amend the Jones Act which was eventually withdrawn. The amendment would have made Jones Act inapplicable to ships that undergo addition of more than 1.5 percent steel in a foreign yard. Presently, Jones Act ships may undergo foreign repairs that involve less than 7.5 percent of the ship's steel weight; the upper limit may go up to 10 percent subject to Coast Guard approval. The amendment was not pursued presumably because any attempt to change the current

criteria may have impacted the special consideration given to Jones Act under the agreement that preceded the establishment of the World Trade Organization.

Shippers filed 57 lawsuits against Jones Act carriers claiming antitrust violations and seeking treble damages. The lawsuits have been consolidated into class actions in federal courts in San Juan and Seattle, with a separate lawsuit filed in Alaska against TOTE and Horizon. Horizon Lines and Crowley Liner Services, two of the carriers in the U.S.–Puerto Rico trade, have settled class action lawsuits whereas Sea Star and Trailer Bridge have not. Horizon paid $20 million as settlement in addition to the $21.2 million legal fees. Crowley's settlement amount with the shippers remains unknown.

A separate criminal investigation into alleged execution or attempted cover-up of a wide-ranging conspiracy to rig bids, fix prices, and allocate market shares in the U.S.-Puerto Rico trade that began in early 2008 resulted in four convictions—two former carrier executives from Horizon Lines and two from Sea star Line were convicted for collusion on pricing or tampering with evidence.

Bankruptcies

Hawaiian superferry and its parent company HSF Holding, Inc. filed for bankruptcy protection on 30 May 2009 and shut down its operations. MARAD and Austal USA have 1st and 2nd mortgages on the two catamarans, and the State of Hawaii holds the 3rd mortgage. MARAD guaranteed construction loans for the superferries on which $135.7 million of the principal remains outstanding. Several other secured and unsecured creditors are also on the list.

Jones Act tanker operator US Shipping Partners (USSP) filed for Chapter 11 bankruptcy protection in 2009. The 1st three Jones Act tankers that began construction in the U.S. under the revised 2006 shipbuilding criteria ran into problems in 2009 and the three unfinished medium range product tanker hulls are up for sale. The ships were ordered based on a long-term charter from Shell to Texas-based AHL Shipping. The plan was to build them in modules at different locations and then assemble at the Atlantic Marine Alabama (AMA) shipyard. The ships are 90 percent, 55 percent and 30 percent complete respectively, and presently lie at AMA. The dispute between the yard and the one-ship entities that ordered the ships is ongoing.

Other Legal Developments

On 7 November 2007, the 900 foot long containership MV *Cosco Busan* collided with the San Francisco Bay Bridge, discharging 53,000 gallons of oil into the Bay in thick morning fog. The pilot involved in the incident was sent to jail for 10 months. This is the 1st time that a U.S. ship pilot has been jailed for an accident.

There was another "magic pipe" (bypassing of pollution regulations) conviction, a recurring issue in my annual reviews. The Panamanian operator of Georgios M, a 40,000 ton tanker, pleaded guilty to three felony violations of the Act to Prevent Pollution from Ships for failing to properly maintain an oil record book. The company will pay $1 million criminal fine and make a $250,000 community service payment.

The American Bureau of Shipping (ABS) has decided to oppose the new EU requirement that any classification society should accept marine equipment certificates issued by another society. This could result in ABS being prohibited from operating in the 27 EU nations. The current practice is for classification societies to issue their own certificates for equipments installed on ships undergoing construction under their scrutiny. The question as to whether port authorities should have regulatory authority over harbor trucking remains controversial. There is presently an effort to amend the Federal Aviation Administration Authorization Act (F4A) to give the federal government preemption authority over state and local entities in regulating interstate commerce. The port of Los Angeles strongly favors such an act of Congress while the shipper community remains opposed.

The Federal Maritime Commission, the agency that regulates liner shipping services, has eliminated tariff filing requirements for non vessel operating carriers, a controversial provision of the U.S. Shipping Act of 1984. This change, although enacted before the President's export initiative was announced, will help small exporters in particular.

Stevedoring Contract Negotiations

The east and gulf coast stevedoring contract between International Longshoremen's Association (ILA) and US Maritime Alliance (USMX) received rank and file approval for two year extension to 30 September 2012. Although there was a strong push from some members for contract renegotiation, the current economic conditions did not help their bargaining position. USMX's goal was to freeze wages at current levels and introduce other cost saving measures.

The two year extension will provide wage increase for tiered wage members and a minimum of $20 per hour for all members. Senior members will receive a $1 per hour wage increase beginning on 1 October 2011. Container royalty cap will be eliminated and member benefits strengthened including protection from new technology and work jurisdiction. By late 2012, 90 percent of the union membership will be earning $32 per hour.

Container Ports and Terminals

As per recent statistics from PIERS/Journal of Commerce, 49.3 percent of U.S. exports and imports in 2008 were shipped through the West Coast, the first time it has dipped below 50 percent. 43.7 percent was handled by East coast ports and the remaining 7percent by Gulf Coast ports. In general, East Coast ports are doing better than West Coast ports in handling the recession. East Coast ports handled more exports than west coast ports (49.3 percent vs. 41 percent in 2008) in 2009 whereas West Coast ports handled more imports (55 percent vs. 39.8 percent in 2008). In the trans-Pacific container trade with Asian countries, the most voluminous liner trade route in the world, close to 70 percent is now handled by West Coast ports with the remaining 30 percent through all-water services. There has been a significant erosion of West Coast ports' market share from the 1980s level. Rail executives believe that the trade has stabilized and that even after the Panama Canal is widened, the current distribution will hold.

Environmental Issues

President Obama has set a goal to reduce greenhouse gas (GHG) emissions by 83 percent by the year 2050. According to the US Environmental Protection Agency (EPA), transportation sources were responsible for 29 percent of the total GHG emissions in the nation in 2006. In 2009, US ports received $30 million in stimulus funds from EPA for projects related to reducing diesel emissions, the biggest recipient being the Port of New York and New Jersey, at $11 million.

Ports are introducing a variety of measures to cut down emissions. These include using clean trucks that comply with EPA standards, operating cargo handling equipments with biodiesel fuel, using low sulfur fuel in coastal waters, and restricting coastal steaming to low speed. A reduction in speed from 24 to 18 knots lowers consumption of marine bunker fuel by 60 percent besides cutting down emissions. But the California Air Resources Board's mandate to use cleaner fuel when within 24 miles off the coast caused unanticipated engine problems while switching fuel. The rule has also resulted in some level of unorthodox voyage planning by ship operators who now focus on limiting their transit through low sulfur zones.

The clean trucks program initiated by the ports of Los Angeles and Long Beach, although still mired in legal controversy, has been an outstanding success in cutting down nitrogen oxide and particulate matter emission. The plan, introduced on 1 October 2008, banned pre-1989 trucks and has cut back pollution by 80 percent, two years ahead of schedule. On 1 January 2010, the two ports as well as the port of Oakland banned pre-1994 model year trucks. Operators must either use new clean diesel trucks for drayage, costing $100,000 apiece or retrofit 1994-2003 model year trucks at a cost of around $20,000 per truck. Port and government subsidies are available up to a maximum of 50 percent of the cost of a new truck. The Port Authority of New York and New Jersey will join the Californian ports with its own clean-air program on 1 January 2011 when it will ban trucks built before 1995. As of 1 January 2017, trucks with engines that do not meet federal emission standards for 2007 models will likewise be banned. Unlike in Los Angeles, the East Coast program will not require owner-operators to become trucking company employees.

The Environmental Protection Agency (EPA) announced a comprehensive set of new regulations under the Clean Air Act in December 2009. There are now stringent standards for large marine diesel engines used on bigger ships, the near term standards coming in to force in 2011 and the long term standards (requiring 80 percent reduction in nitrogen oxides emissions) in 2016. The EPA also issued a proposed rule regarding international standards for marine engines and fuels. The most impressive component of the new regulations is the proposed North American Sulfur Emission Control Area (ECA), destined to become the world's largest ECA. The ECA would set aside 200 nautical miles off the Atlantic and the Pacific joint coasts of the US and Canada where the permitted sulfur content in fuel would drop to 0.1 percent by 2015. The provision was formally adopted by the International Maritime Organization's (IMO) Marine Environmental Protection Committee (MEPC) in March 2010. The Great Lakes region and the ships that operate there and the Saint Lawrence Seaway have been exempted from the ECA-level fuel sulfur standard for reasons of safety and economic hardship. The EPA will evaluate the economic impact of the final rule on Great Lakes carriers.

International Issues

Many of us are guilty of the oft-quoted statement that 90 percent of world trade is seaborne. But an analysis by Lloyd's Maritime Intelligence Unit of 2006 UN trade data for over 1,000 commodities found that 75 percent of global merchandise trade by volume and 59 percent by value are transported on ships. By value, land transport carries 28 percent and air freight, 10 percent.

The Global Climate Change Convention

Transportation produces 28 percent of world carbon-dioxide emissions; 21 percent being from trucks and cars, 2.6 percent from aviation, 2.7 percent from international shipping and the rest from rail, domestic shipping and fishing. Shipping and aviation are the only sectors not regulated under the Kyoto protocol. As per an IMO study, international shipping was responsible for 3 percent of all man-made carbon emissions in 2007. Only 6 nations in the world produced more emissions in 2006—China, US, Russia, India, Japan and Germany in descending order. In July 2009, the IMO adopted Energy Efficiency Design Index (EEDI) for new ships and also a Ship Energy Efficiency Management Plan (SEEMP). These indices show potential emissions reduction attainable from individual ships.

The much anticipated December 2009 UN climate change conference held in Copenhagen did not provide definitive guidance on reducing CO_2 emissions from ships. The industry anxiously looked toward the IMO's MEPC to come to a resolution. Two proposals were on the forefront at its March 2010 meeting, one being an emissions trading scheme (also known as cap-and-trade system) and the other, a bunker tax levy.

Many shipping interests believe that a cap and trade system will be highly disruptive for shipping and will result in widely fluctuating fuel prices. The argument for bunker tax levy is that it may simply become absorbed into the cost of doing business and may not result in true emissions reduction. Trade associations appear to be in favor of bunker tax for reducing emissions which they believe is the right way to incentivize efficient fleet growth. Absence of a unified response is not in the best interest of shipping as it would result in regulatory freelancing by littoral states.

Major shipping companies are taking the lead in providing environmentally conscious shipping services. A.P. Moller-Maersk reduced the amount of CO2 emissions by 9 percent in 2008 compared with 2007. The company saved $500 million in costs through slow steaming, slippery hull coating, and use of better propellers and other efficiency measures. Maersk has also reduced emissions per container by 15 percent and expects to drop it another 20 percent in the next 10 years. The group is presently teaming with Lloyd's Register in a 2 year program to run marine engines with biodiesel fuel. Samsung Heavy Industries has announced that they will only build eco-friendly ships from 2015 which will lower emissions by 30 percent from current levels. The goal is to progressively lower emissions to 50 percent by 2020 and 70 percent by 2030, but the cost of building new ships will go up by 10 percent.

Shipbuilding Crossroads

Shipyards delivered 77.6 million gross tons (gt) of new capacity in 2009, an increase of 14.1 percent from last year. Compared to 2008, there was 25 percent growth in the delivery of dry bulk carrier tonnage and 30 percent growth in crude tanker tonnage (SSY Consultancy and Research). South Korean yards led the construction (29.2m gt) followed by the Chinese (22 m gt).

Many ship owners placed orders for new tonnage anticipating the boom years' in trade growth to continue. The slump in global trade left many owners strapped for cash who then requested either a delay in ship delivery or in some case, outright cancellation of the order. Ship owners are yet to raise more than $300 billion to finance outstanding new ships orders. Delivery of one in every six new ships is being delayed now.

While tanker deliveries are being delayed seven months on average and bulk carriers eight months, the delay in delivering containerships runs into multiple years. There are 20 containerships (180,000 TEUs) in various Korean and Japanese shipyards awaiting owners to make financing arrangements prior to taking delivery. It has been reported that 340,000 TEUs of containerships due for delivery in 2009 have been subject to deferrals, slippage or cancellations.

Shipyards would rather delay delivery by 6 to 12 months than cancel a new-building order. Zim, the Israeli carrier paid $38.6 million to a Taiwanese shipyard for *not* going ahead with a $289 million order for building six 1,700TEU ships. CMA CGM, the French container operator lost its $60 million deposit for a 6,500 TEU containership on order with Hanjin Heavy Industries. Hanjin then sold off the finished ship to Cardiff Marine for $41 million, and Cardiff, then time-chartered it to Mediterranean Shipping Company (MSC)--one of CMA CGM's key competitors--adding insult to the injury.

The financially troubled CMA CGM has sought delay or cancellation of 30 new ship orders due for delivery in 2012/13. The German government is reportedly exerting pressure on Korean shipyards on behalf of German owners. Maersk has decided to shut down its in-house Odense Steel Shipyard and sell off the facility. Last ship under construction there will be delivered in February 2012 and employees terminated gradually.

Ship Recycling

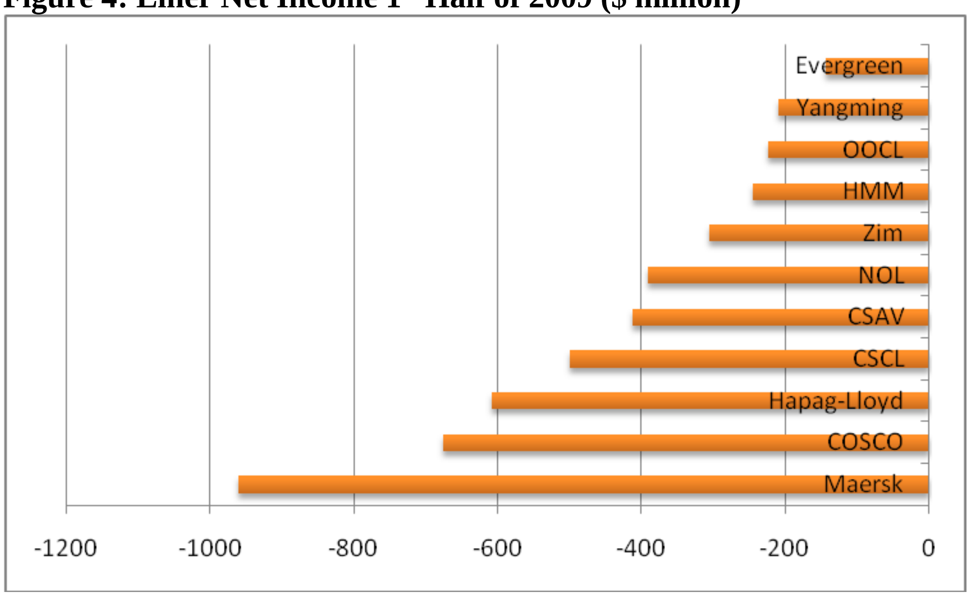
2009 was a record year for scrapping container ships. The demolition rate of dry bulk ships, although high initially, subsided as the freight market recovered. Bangladesh, India and now China are all key buyers for recycling tonnage. The big bounty that the recyclers are awaiting is the huge fleet of single hull tankers reaching their accelerated mandatory phase-out stage. IMO adopted a new international convention on Ship Recycling (referred to as the 2009 Hong Kong Convention) that aims at facilitating "safe and environmentally sound" recycling of ships. It strikes a balance between the responsibilities and obligations of ship owners, ship recycling facilities, ship registries and recycling states. Once the new convention comes into force, ships will be required to carry an inventory of hazardous materials unique to each ship, and recycling yards will be required to provide a Ship Recycling Plan. The convention is not looked upon favorably by ship recyclers in nations like India.

Liner Woes and Escape Hatches

2009 will go down in liner shipping history as its most catastrophic worst year. Everything that could go wrong went wrong for these operators, and unfortunately, all at the same time. Maersk Line, the market leader lost $2.1 billion in 2009 compared to its $583 million profit in 2008. This is after saving $1.6 billion through restructuring, reducing fuel consumption, optimizing networks, and renegotiating supplier contracts. Figure 4 shows the net income of selected carriers for the 1st half of the year. The reported collective loss of over $20 billion in 2009 easily makes it the worst year in liner shipping since the birth of containerization.

What precipitated these dire market conditions? Mesmerized by the role of containers in facilitating globalization and anticipating similar momentum to perpetuate, carriers continued their ordering spree at unprecedented levels till the market bottom literally fell off in late 2008. The conditions worsened in 2009 and shippers' appetite for fast-paced just-in-time shipments evaporated. Cargo volumes dropped precipitously and correspondingly, the base rates eroded in many trades. The EU's elimination of anti-trust immunity for liner conferences in 2008 took away one element of stability in European trades that might have been a big help in the 2009 market turmoil. Many carriers, including those in the top tier, experienced credit crunch and cash-flow difficulties. They sought government support and leniency from financiers and shipyards alike with limited success. Some yards were lenient and adjusted delivery terms whereas some remained adamant and carriers who defaulted lost their initial deposit.

Figure 4: Liner Net Income 1st Half of 2009 ($ million)

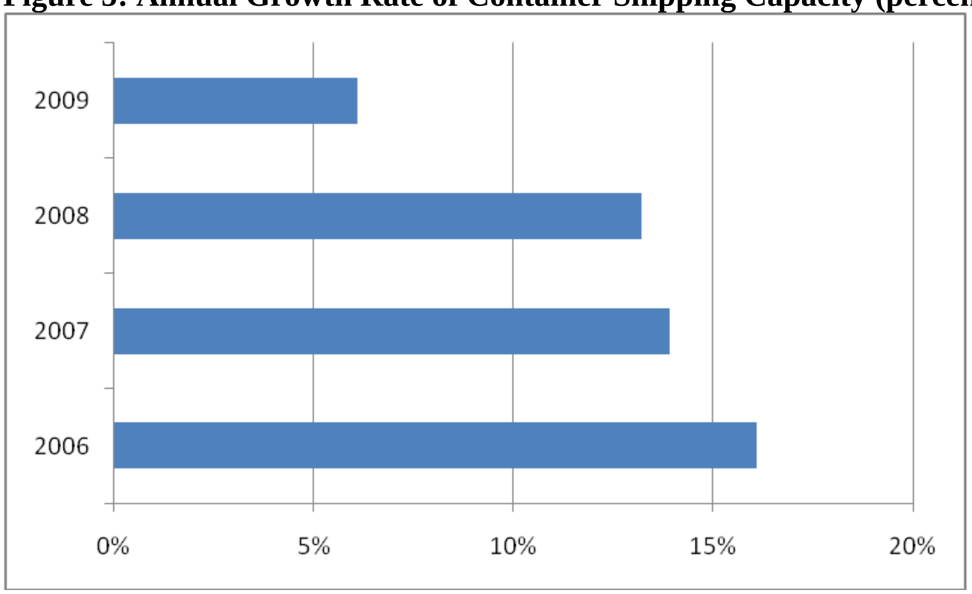


Source: Lloyd's Shipping Economist, 2009

The case of CMA CGM and its inability to make loan payments is typical. The company took delivery of Christophe Colomb, a 13,300 TEU leviathan in 11/2009 but also fell into $5.6 billion debt primarily because of its ambitious new-building program of half million TEU growth. They lost $1 billion solely from trading oil derivatives. The carrier received a $500 million credit line in January 2010 but only after allowing for a management shakeup. Hapag-Lloyd, the German carrier received a $1.8 billion loan guarantee from the German coffers which may have violated the EU conditions on state aid. Zim, the Israeli carrier received a $450 million cash infusion from its parent company and rescheduled debte repayments with bondholders, creditor banks and shipyards. APL (Bermuda) Ltd., a division of the American President Lines, took a term loan of $300 million from a banking syndicate.

What are carriers' options to withstand the unprecedented market downturn? It is a good time to get rid of older tonnage which many are doing. Some carriers such as NYK have announced plans to cut its container fleet to half of the 2008 size by 2015. New-building orders are being delayed or canceled and efforts being made to rationalize services and reduce speed. The annual growth rate of container ships has already less than halved (see Figure 5). Maersk Line saved $500 million in 2009 solely from slowing down their ships' speed. It is quite likely that we will soon see carriers segmenting their market and charging premium freight rates for faster service in the near future. Estimates show that slowing down ships will engage an additional 1.2 million TEUs in 2010. The benefits of slow steaming include not only reducing the excess supply but also reducing harmful ship emissions. Mediterranean Shipping Company (MSC), the only carrier that maintained its growth pattern in 2009 focused aggressively on two niche markets—large volume retailers and the non vessel operating common carrier community.

Figure 5: Annual Growth Rate of Container Shipping Capacity (percent)



Source: Alphaliner, 2010

Sensing the dire market conditions, independent minded carriers such as Maersk and CMA CGM are returning back to the approved carrier discussion agreement in the

Pacific along with new converts like MSC. The Federal Maritime Commission recently allowed members of the trans-Pacific Stabilization Agreement to exchange ideas on slow steaming. Similarly, in 2009, the EU block exemption for liner consortia from their competition rules was extended until April 2015.

Rotterdam Rules 2009

Shipping stakeholders will readily agree that rules governing ocean carrier liability for cargo damages are antiquated and long overdue for a complete overhaul. Ocean shipping constitutes just one leg of a carefully designed global supply chain today in which most movements are door-to-door on a through bill of lading. Attempts to craft a liability regime that reflects the realities of contemporary supply chains had remained futile until recently. Rotterdam Rules, the new set of rules intended to supersede the existing Hague-Visby Rules and Hamburg Rules were adopted by UN General Assembly after seven years of negotiations and will be enacted one year after ratification by 20 nations. If ratified by U.S. Senate, the Rotterdam Rules will replace the venerable 1936 Carriage of Goods by Sea Act (COGSA).

Although Rotterdam Rules will retain the revered fault-based liability principle, it goes way beyond the current regulations by recognizing multimodal legs of a door-to-door movement before and after the ocean transit. Carriers will now have to exercise due diligence throughout the voyage and many traditional carrier defenses, often ridiculed by shippers, will not be available. Furthermore, liability will extend to port and terminal operators. Shippers may still opt for only port-to-port coverage. Similarly, volume contracts and service contracts may be exempted by agreement. Although carriers, many shippers and their trade associations are in favor of the new Rules, it has met with stiff resistance from the European shipper community and hence, the EU. National Industrial Transportation League (NITL), the powerful US-based trade association of big shippers does not agree with its European counterparts. The American Bar Association has also endorsed the Rotterdam rules.

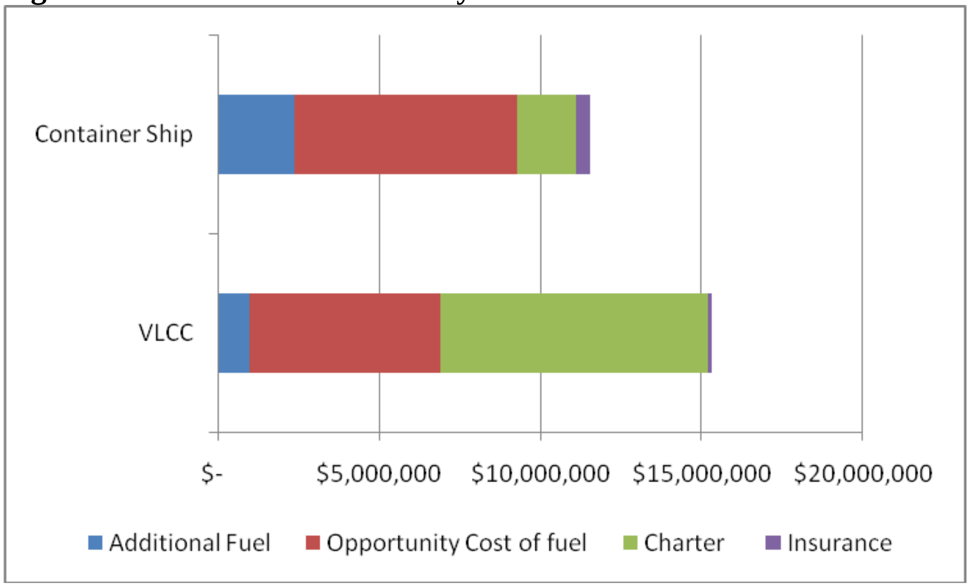
Piracy

The International Maritime Bureau’s Piracy Reporting Center documented 406 incidents of piracy and robbery in 2009. Worldwide, there were 153 incidents of ship boarding, 49 hijackings, 84 attempted attacks, and 120 cases of vessels being fired upon. Crew members taken hostage numbered 1,052, with 68 injured and 8 killed. Somalia accounted for more than half of these figures. Some attacks have occurred more than 1,000 miles off the Somali coast.

The economic cost of piracy is escalating in addition to the human cost. When a laden tanker from Kuwait bound for Rotterdam goes around South Africa to avoid potential attacks, it adds 74 percent to the length of a voyage. For a containership bound for Rotterdam from Singapore, the voyage length increase by 44 percent. The direct and indirect costs associated with the longer voyages constitute the true economic cost of piracy and are presented in Figure 6. The International Transport Workers Federation stated in November 2009 that the Indian Ocean is unsafe for seafarers. Many ship owners have resorted to using private armed security while transiting around the Horn of

Africa. A.P. Moller-Maersk has hired former soldiers and an armed escort ship from Tanzania to protect its fleet off Somalia.

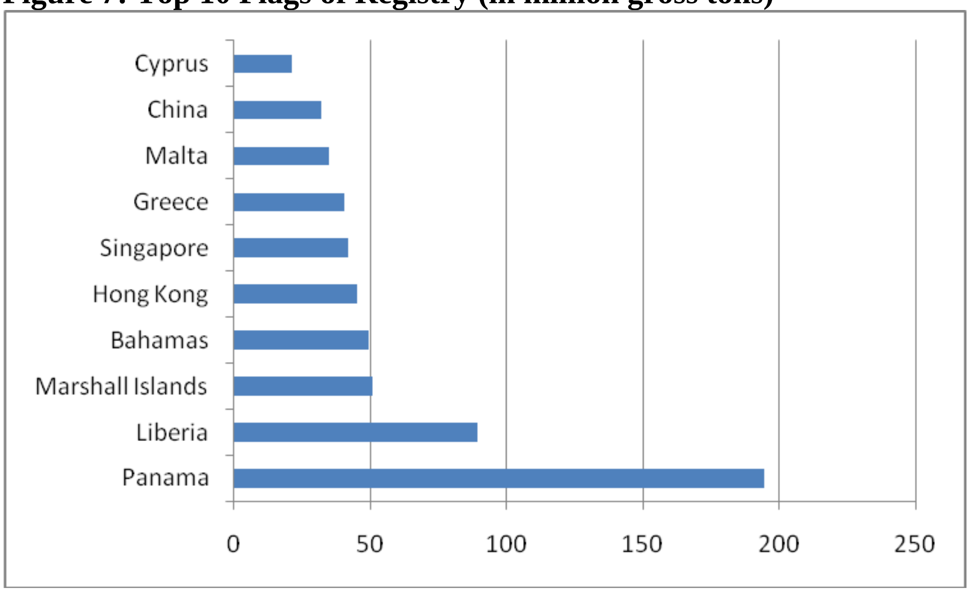
Figure 6: Economic Cost of Piracy



Source: Prof. Bendall, 2009

Flags of Registry

Figure 7: Top 10 Flags of Registry (in million gross tons)



Source: Clarkson World Fleet Monitor, 2010

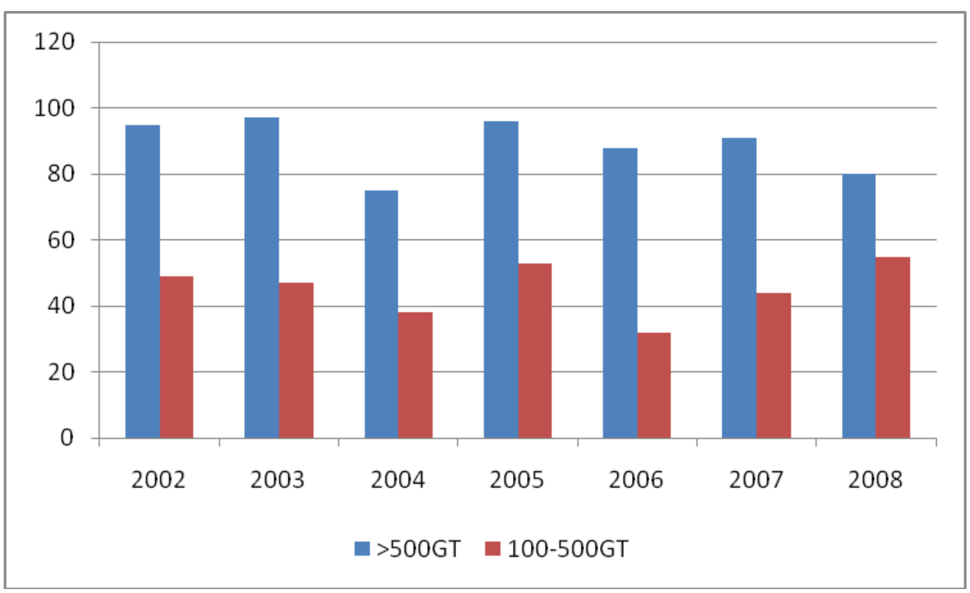
Recession or not, open registry flags have maintained a steady growth pattern, the fastest growth in 2009 being at Marshall Islands, Hong Kong and Malta. Marshall Islands, the small Micronesian Island is now the 3rd largest registry for ships, measured in gross tons, and has 20 offices worldwide. The average age of their ships is 11.1 years. Figure 7 shows the top ten ship registries as of 1 January 2010. Presently, four out of every five merchant ships are registered either under an open registry flag or in a developing country, and owners from developed countries are more likely to choose a foreign flag than those from countries with a lower GDP per capita (Hoffmann et al 2005).

Seafarers and Maritime Safety

IMO has designated 2010 as the year of the seafarer and launched a major recruiting campaign to attract youngsters for a career at sea. Currently there are close to 1.5 million seafarers worldwide. Among officers, the current global demand is 498,000 with a supply shortage of 33,000 which is projected to reach 56,000 by 2013 (Drewry 2009). Crew wages increased 21.4 percent in 2008, more than twice as fast as the previous year (Moore Stephens 2009) despite the economic slump. Overall, ship operating costs are now increasing at a rate of 16 percent, crew cost being the fastest growing component. Maersk Line decided to replace its Danish officers in 2009 with foreign officers and save about $6 million annually. The Equality Act of 2010 enacted in the UK is of great concern to British ship owners because it mandates paying same salary to resident as well as non-resident seafarers employed on British-flag ships. It is believed that if the act is not amended, 43 percent of the 360 UK registered ships may decide to flag out.

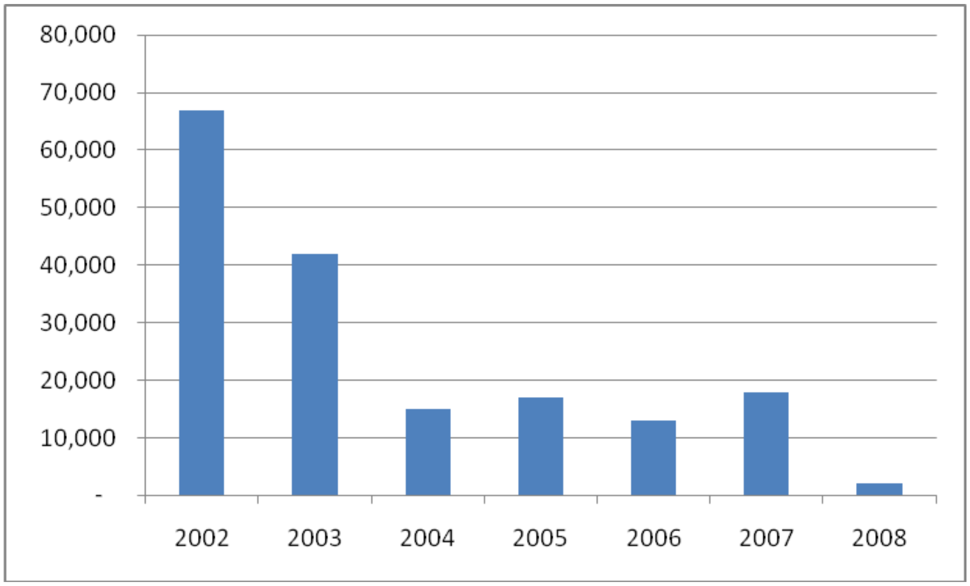
Given our usual propensity to highlight the negatives, it is important to recognize the remarkable positive strides in maritime safety accomplished during the last few decades. This is evidenced by the declining number of ships lost and quantity of oil spilled at sea (see Figures 8 and 9) despite the huge increase in seaborne cargo movements worldwide. Although this accomplishment can be traced to multiple initiatives enacted at various levels by governmental and non-governmental agencies during the last 40 years, the year of the seafarer is the most propitious time to recognize the selfless devotion and dedication of 1.5 million merchant mariners toward safer ships and cleaner oceans.

Figure 8: Number of Ships Lost



Source: Lloyd's Register Fairplay, 2009

Figure 9: Oil spilled by Ships, 2002-2008 (Metric Tons per year)



Source: ITOPF Annual Statistics and Clarksons, 2009

Outlook

There are strong indications that the worst is behind us in macroeconomic terms. Predictably, the recovery will begin with the dry bulk sector followed by the tanker sector limping along. Even the deeply wounded liner sector is presently showing good signs of resurgence. There are reported shortages in liner capacity in key sub-markets because of improving trade flows and carriers' belt-tightening measures.

Carriers have been so successful in pushing through their rate restoration measures in early 2010 that shippers may soon call into question some aspects of their anti-trust immunity. The oft-discussed commoditization of liner shipping will become a reality in April 2010 when The Containership Company, a no-frills low cost carrier using five small chartered ships and a total administrative staff of 19, sets sail to Los Angeles from China.

Global supply chains will never be the same with the acceptance of slow and super-slow ships, and near-shoring will slowly gain on global sourcing. After somewhat of a moribund 2009, shipyards will recover comfortably with China taking the lead from South Korea. The Korean builders, in turn, will seek newer niche and start building high profile passenger ships, a hitherto uncharted territory for them. Overall, 2010 should turn out to be the year that stemmed the decline not only in pecuniary terms but also in terms of environmental degradation. After all, this is the year of the tiger and more importantly for me (a former seafarer), the year of the seafarer!

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