

2013 World Maritime Review

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Abstract:

Many maritime economists and forecasters including this author had predicted 2012 to be a lacklustre year. There was no shortage of government inducements to turn the lacklustre tide around in 2012—stimulus spending in China and Japan, quantitative easing by the U.S. Federal Reserve, and multiple actions by the European Central Bank to strengthen the Euro zone. But as the year evolved, weak macro-economic fundamentals decisively trumped monetary policy initiatives and continued their chocking grip on global commerce and hence, the maritime sector. If at all one were to characterize 2012 as marginally better for shipping than the previous year, it would only be because the bar was set far too low. I will make a case in this annual review that 2012 and even 2013 will go down in maritime business annals as two bleak, monotonous and particularly long years of endless volatility that began in 2009. It has been yet another excruciatingly painful year for the global maritime community.

Keywords: Maritime economics, shipping markets, shipping trends

1. Introduction

Initial estimates from the International Monetary Fund show a 3.2 percent growth in the 2012 world gross domestic product, one of the slowest growth rates in recent years. Remarkably, even the Chinese and the Indian economies cooled off in 2012 and did not reach their anticipated targets. Rampant wage inflation is holding back the Chinese manufacturing prowess and their containerized exports to the U.S. dropped for the second year in a row. India too is experiencing its slowest rate of economic growth in a decade. Russia's entry into the World Trade Organization in September 2012 did not have any perceptible effect on global commerce, unlike the Chinese entry a decade ago that unleashed an unprecedented shipping boom in 2003.

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Overall, worldwide sluggish economic growth along with prolonged excess capacity and escalating operating costs, worsened the market stagnation. The much-awaited resurgence in world commerce and maritime trade is still on hold, and instability continues to plague major trade regions and shipping routes.

The 2013 Price Waterhouse Coopers' annual Global Shipping Benchmarking Survey provides very revealing insights on the sector's current plight. They report one percent average return on net operating assets for the shipping industry in 2011, well below the 18 percent that existed in 2007 when the shipping boom was at its peak. For the dry bulk sector in particular, the return was 35 percent in 2007. The shipping companies included in this survey posted negative two percent average return on equity in 2011, versus 21 percent in 2007. The ratios for 2012 are currently not available but estimated to be worse. Not surprisingly, a recent Moore Stephens report rated one out of every ten British shipping companies to be a Zombie, a colourful addition to the shipping finance vernacular. These are companies with low asset base, barely covering their variable costs and in close proximity to bankruptcy. Trade journals report that the value of publicly traded shipping companies has declined on average 75 percent and in some cases, up to 90 percent. The general feeling among investment gurus is that few public shipping companies today have any equity value let alone goodwill value. The current risk exposure of banks engaged in shipping finance is \$475 billion as per an estimate from Petrofin, a shipping consultancy. This explains the recent Lloyd's List finding that barely 15 banks are now actively engaged in new shipping finance initiatives.

Drewry Shipping Consultants espouse the school of thought that the unprecedented shipping business peaks experienced from 2004 to 2008 were "once in a lifetime" rarity, and unlikely to repeat. Readers of my annual review from those years may recall the debate among maritime economists about a paradigm shift in shipping markets. We know now with certainty that the "invisible hand" remains as potent as ever in shipping. As suggested by Drewry Shipping, we may indeed be back to the "old normal" market cycles with the last couple of years being extraordinarily humbling. My 2013 annual review and analysis of market conditions and other domestic and international maritime developments of significance follow next.

2. Market Developments

All major shipping markets experienced tough conditions in 2012 and the year ended somewhat similar to 2011. There is however a wider acknowledgment that but for some extra-ordinarily unpredictable happenstance, we have indeed reached the nadir and there is nowhere to go but up. The liquefied natural gas (LNG) market was one odd exception in 2012 and registered strong performance. Overall, worldwide shipping capacity utilization dropped yet another notch to 84% in 2012 as per recent RS Platou statistics; this is the second lowest it has ever been during the last decade. Increasing labour and fuel costs and new environmental regulations are escalating operating costs while the freight revenue is declining or at best, remaining stagnant.

On the positive side, there has been a sharp decline in orders for building new ships although the cost of construction today is the lowest it has been in a decade. This is not because the owners have suddenly become more rational in their investment decisions. On the contrary, most of them are experiencing a tough cash-flow situation and as discussed, new bank loans are hard to get. Furthermore, shipping asset values are still declining although the rate of decline stabilized somewhat in 2012. Thirty-nine percent of the companies reported lowering the value of their ships, including two out of every three container shipping companies.

The recent Moore Stephens Shipping Confidence Survey has registered a slight uptick, indicating signs of optimism in the market. Other positive developments include improving Chinese domestic consumption and anticipated good economic recovery by leading non-OECD nations in 2013. The U.S. export of shale gas is another major positive change although there are indications that this may run afoul of domestic politics and seriously impact those making huge investments in LNG transportation. I will now analyze the major shipping markets.

2.1 Dry Bulk Market

The Baltic Dry Bulk Index (BDI), a barometer of dry bulk carrier earnings, averaged 920 points in 2012. This is the second lowest it has ever been, the worst being 715 in 1986, shortly after the introduction of BDI in 1985. The main reason for this is the ship owners' indiscretion and their persistent overbuilding of the last four years. As example, Clarkson Research Services statistics show a 36 percent increase in the number of bulk carriers from 2009 despite worsening market

conditions. In 2012 alone, while tonnage demand increased 7 percent, the fleet expanded 12 percent. The large bulk carriers (referred to as Capesize) that earned average \$116,049 per day during the peak years in 2007, averaged a meagre \$7,680 per day in 2012. The RS Platou weighted dry bulk index for 2012 dropped to \$9,400 per day from \$15,200 in 2011. Figure 1 below shows the decline in average daily freight rate for each of the four categories of dry bulk carriers. Ship owners attempted to control the excess capacity by slowing down their ships, and also recycling older tonnage. This led to the removal of 529 bulk carriers, 37% of the total 1,414 ships recycled in 2012.

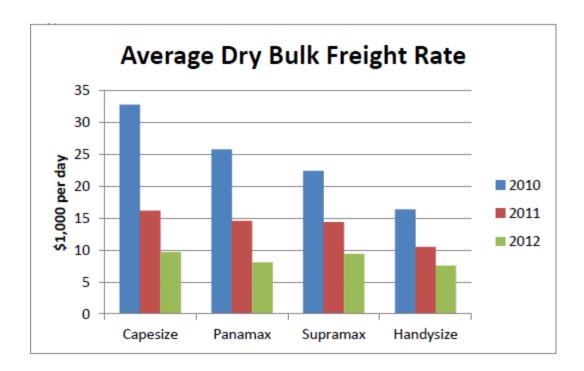


Figure 1. Average Dry Bulk Freight Rate. Source: RS Platou Annual Report (2013)

Vale, the Brazilian mining giant has also inadvertently contributed to the extremis situation faced by Capesize bulk carriers. Their strategy revolves around using 32 very large ore carriers (VLOCs) of around 400,000 DWT to better control their supply chain and lower the total logistics cost. Twenty-four of these giant ships are now in operation and 8 more are on order. A Lloyd's List analysis shows that the volumes shipped on Vale's own fleet went up from 30 percent in 2011 to 46.1 percent in the last quarter of 2012 as planned. However, contrary to Vale's expectations, their supply chain costs including maritime freight costs escalated. There is widespread belief that the VLOCs are inefficient and costly in addition to having various operational challenges. Nevertheless, these massive ships have directly impacted the demand for Capesize bulk carriers and also worsened the excess capacity situation.

2.2 Tanker Market

This turned out to be the most complicated shipping market in 2012 for a number of reasons. There were major developments such as a wide embargo on Iranian oil and the near total return of Libyan oil as well as the stunning bankruptcy of tanker giant Overseas Shipholding Group (OSG), a venerable name in American shipping. AP Moller-Maersk, another tanker giant with 116 owned and 46 chartered ships, posted a net deficit of \$314 million for the year, surpassing their \$153 million loss incurred in 2011. The value of modern VLCCs continued their downward slide. Figure 2 shows the 56 percent decline in value of a trading fleet of 404 very large crude carriers (VLCCs) of less than 10 years age as estimated by VesselsValue.com. The older tankers are now worth only their scrap iron.

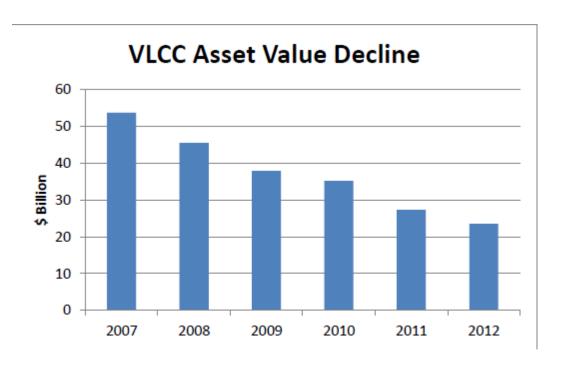


Figure 2: VLCC asset value decline, Source: VesselsValue.com

The first half of the year provided good trading conditions for crude carriers whereas the second half favoured product carriers. Both crude oil and refined products sectors benefited from increased sailing distances that resulted from the big Asian importers substituting Iranian oil with West African crude and the U.S. replacing West African crude with Saudi Arabian exports. Sixty-seven percent of the 1.1 billion tonnes of crude oil exported from Middle East, the world's largest exporting region, went to the Indian subcontinent, Southeast Asia and the Far East. India in particular has also attracted sizeable crude traffic from the Caribbean region to source its one

million barrels per day *super* refinery in Jamnagar from where the products are distributed globally. The combined effect of a small increase in total oil traded, greater sailing distances and lower fleet productivity through slow steaming (with average speed dropping to 12 knots from 12.5 as per RS Platou statistics) was not enough to build market confidence. The medium-size crude tankers in particular became a victim of the change in U.S. oil sourcing pattern.

The current tanker fleet is exceptionally young with an average age of eight years and in relation to its size, new orders placed in 2012 are the lowest it has ever been. Among notable new-building orders is the recent decision by BP to build 13 new "green" tankers. Another one is the Frontline decision to spend \$2.6 billion on 53 new fuel-efficient tankers. This will help them emerge as the world's largest eco-ship fleet and hopefully, the most profitable one as well, taking advantage of the current low cost of new ship construction. The global fleet of small product tankers, (27,000-42,000 deadweight capacity, often referred to as handy-size tankers) is shrinking whereas the medium range tonnage is growing rapidly. This reflects the changing dynamics in oil trade caused as a result of India and China building huge refineries, and several older refineries shutting down in the Atlantic basin and in Europe.

2.3 Liner Market

This was a difficult year for the liner sector although a substantial improvement from the \$5 billion collective loss suffered in 2011. Indeed the average freight rate per container registered an increase in 2012 although there was high volatility. The charter rate for containerships took a significant hit during the year because of surplus tonnage in the market. The operators appeared to exercise self-discipline and work toward rate restoration rather than pursue market share at any cost, their traditional Achilles' heel. Also they were successful in controlling the fleet productivity and capacity. In the Asia- Europe trade, one group of carriers lengthened their typical 63 day round trip to between 72 and 84 days by slowing down ships which provided employment for two additional ships. Maersk Line, the market leader, reported a profit of \$525 million EBIT (earnings before interest and tax) compared to a loss of \$482 million the previous year.

Some major operators like Neptune Orient Lines and Hapag-Lloyd remained unprofitable in 2012. At this point, carriers have done everything they could to enhance their market returns yet

their prosperity seems far off unless demand picks up significantly, especially with the 11 percent new capacity infusion expected in 2013. Even Maersk Lines, the market leader, has announced new strategic moves to lower their network costs. They plan to serve U.S. East Coast ports from Asia through the Suez Canal, leveraging their bigger ships and reconfiguring the current Asia-Europe service. At least for Maersk, the ongoing political risk and associated Suez transit costs does not exceed the escalating cost of Panama Canal transits.

The first Triple-E Maersk ship (Economy of scale, Energy efficient, Environmentally improved) came out of the Daewoo dry-dock for fitting in early March 2013. These "dream" container ships will have a design speed of 19 knots, 21 percent slower than the 24 knots speed typical until recently. United Arab Shipping Company (UASC), another major container operator, took delivery of a fleet of nine 13,500 TEU ships and reported a network-wide savings of \$200 million. UASC now plans to invest in even bigger ships similar to the Triple-E's. While carriers' benefits from slow steaming and energy efficiency are very obvious, the ultimate impact on shippers remains unclear. There are certainly additional in-transit inventories and associated carrying costs that shippers face. The offsetting benefits from enhanced reliability of a global supply chain built around a ship operating at 19 knots add value to the shippers' business strategy. However, the overall net effects may very well parallel the Vale VLOC supply chain strategy outcome.

2.4 Shipbuilding Market

The prolonged lacklustre market conditions have had a perceptible impact on Ship owners' investment decisions and induced a greater sense of rationality in their thinking. Furthermore, with all new shipbuilding orders, there is an emphasis on fuel efficiency and energy sustainability. The South Korean lead in ship building is now limited to tankers and LNG ships while the Chinese have surged ahead in other sectors including container ships. Overall, Chinese yards received 40 percent of all new orders in 2012 followed by South Korea with 38 percent and Japan, 15 percent. However, it is far from smooth sailing for the Chinese yards. The massive 13 fold expansion in their shipbuilding capacity from 2002 to 2011, discussed in my annual reviews of previous years, is now a liability, and the country is unable to meet the planned \$80 billion annual export value of ships constructed there. Three large state-owned Chinese shipping companies placed a \$4.5 billion order for 50 super-tankers to be built in Chinese yards in 2012, a

timely gesture of solidarity with their struggling yards! This is also an important strategic move as China will have greater control over her energy supply chain which is critical for that nation's continued economic growth.

The tight market conditions once again led to significant slippage in the delivery of new tonnage, and it is expected to continue. Furthermore, a number of dry bulk and tanker new construction orders were cancelled despite unavoidable financial penalties. Also, new construction prices have been dropping throughout the year because of surplus shipbuilding capacity, stringent bank financing conditions and a major drop in the price of steel. It is estimated that the cost of building new ships today is 40 percent below where they were in 2008; as evidence, the Clarksons' new-building price index dropped to 73 at the end of 2012 from 95 in 2011 and 124 in 2007. The 2013 RS Platou Report estimates that the worldwide decline in steel price alone has brought down the cost of constructing a Korean-built Aframax tanker by \$8 million. New construction orders in 2012 were the lowest it has ever been in recent years and 40 percent less than in 2011. Furthermore, ship owners are becoming more demanding with the ships they order now rather than accepting series productions. Correspondingly, global shipbuilding capacity has shrunk one-third from its 2008 peak through yard closures and cutbacks.

2.5 Cruise Market

Although 2012 began on a negative note for the cruise sector (because of the Costa Concordia incident), it turned out to be another banner year and attracted 5.4 percent more passengers worldwide compared to 2011. As per Cruise Lines International Association (CLIA) statistics, the total cruise ship fleet today consists of 336 ships of 1,000 Gross Tons and above, and has annual passenger carrying capacity of upwards of 17 million. Two out of every three passengers that boarded a CLIA owned cruise ship in 2012 were from U.S. and Canada, and Australia is the fastest growing market. The average cruise fares dropped in 2012, reflecting prevailing market conditions. There are 24 cruise ships (valued at \$15.8 billion) for delivery between now and 2017. All but six of these ships are of the megaship (2,000+ berths) type, the biggest being the \$1.32 billion Oasis class ship for Royal Caribbean International due for delivery in 2016. Another anticipated delivery in 2016 is a nostalgic replica of the RMS Titanic.

Consequences of the Concordia tragedy continue to haunt the cruise sector. The cost of removing the ship's wreck alone is expected to exceed \$800 million. Italy failed to complete the final technical report that was to be published within one year of the accident. A number of lawsuits have been filed related to the incident, including many in Florida. In order to regain consumer trust and confidence, the cruise industry voluntarily undertook a thorough review of their current operating policies. The panel of review experts has proposed 10 new policies that surpass current international regulatory standards. Regardless of the industry's resilience, a recent spate of technical problems on board four Carnival Cruise ships (Legend, Elation, Triumph, and Dream) makes one highly sceptical of the market leader's safety standards and quality assurance system. There are increasing calls in the U.S. for a (Cruise Ship) Passenger Bill of Rights.

3. The U.S. Merchant Marine

2012 was a year of serious ups and downs in the domestic maritime industry. While there were some remarkable positive developments and initiatives, overall the year was unpleasant and discomforting. The dispassionate fury of market forces was very visible and equally painful domestically as elsewhere. On the positive side, President Obama signed off on seven fast-track port projects in 2012. Five of these projects are expected to boost the competitive advantage of large East Coast ports when the Panama Canal widening is complete. A Maritime Administration report on Great Lakes Shipping found healthy signs of recovery in that region from severe recessionary effects that began in 2009. The report states that with the sole exception of coal, all other major cargos traded in the Great Lakes region such as iron ore and limestone are either fully back to prerecession levels or making significant inroads. The demand for medium sized supply vessels, supporting the Gulf of Mexico offshore oil and drilling industry rose significantly in 2012. With daily rates reaching \$27,000, some U.S.-flag supply vessels returned back to the Gulf of Mexico.

Matson Lines acquired Reef Shipping, a regional operator that serves New Zealand and other nearby islands. This is new territory for Matson but an integral part of their global strategy that includes a network of Pacific Island services. Matson is the sole operator in the U.S.—Guam trade now and has also entered the China trade. TOTE, a Jones Act carrier, ordered two new ships to be built at the General Dynamics NASSCO (National Steel and Shipbuilding Company) yard in

San Diego. These ships of 3,100 TEU each are to replace two 1,200 TEU vintage containerships in the Puerto Rican trade. The new ships will have LNG propulsion, the first such purpose-built vessels in the world. They will carry enough LNG for two and a half round-trip voyages between Jacksonville and Puerto Rico, and their GHG emission will be very low. It is perhaps poetic justice that LNG-propelled containerships would be pioneered by the very nation that introduced the whole concept of containerized shipping services in 1956. NASSCO has also finalized plans to convert two RO/RO ships (also owned by TOTE) to LNG propulsion.

Unprecedented drought conditions in the Midwest region and limited dredging of the Mississippi river from Cairo, IL to St. Louis, MO would have caused a cessation of river traffic this year and a major economic crisis for the region. It was resolved through timely actions by the U.S. Army Corps of Engineers. They began blasting rock formations in the affected areas in December 2012 and the river traffic continued uninterrupted. Kirby, the biggest coastwise barge operator in the nation, reported \$209 million profit in 2012 because of high capacity utilization and robust pricing. A market leader in inland and coastwise barge transportation, Kirby has made a number of key acquisitions in the recent past.

On the negative side, there have been several developments during the past year. The automatic cuts to federal spending (sequestration) that began on March 1, 2013 will impact the nation's economic recovery, international commerce and the maritime economy including the nation's critical maritime security program. Bottlenecks are expected in cargo clearance and other essential functions carried out by the U.S. Coast Guard and the Department of Homeland Security. There were more additions to the long list of U.S. carriers delisted by the stock market in recent years in addition to OSG, the big tanker operator who had a market value of over \$3 billion barely four years ago and now, under ignominious Chapter 11 protection.

The agony of Jones Act carriers continues unabated including an unanticipated legislative setback. The 2012 Surface Transportation Act in its final version has a provision to lower the requirement to carry international food aid cargo by U.S.-flag ships. The Maritime Administration (MARAD) estimates that this will lead to a loss of \$90 million in revenue and 2000 direct and indirect jobs, including 640 mariner jobs. There are concerns about the declining number of U.S.-based ship owners in the Maritime Security Program (MSP) that supports 60 commercial vessels with military use potential. True American ownership has declined among

MSP carriers through mergers and acquisitions. The ongoing sequestration may further impact the motivation of some carriers to remain as MSP participants. A Government Accountability Office (GAO) cost-benefit analysis of the Jones Act on commerce in Puerto Rico was released recently. It is likely to rekindle highly emotive debates on maritime promotional policies in general and the Jones Act in particular.

In early 2012, there was an unsolicited bid from APM Terminals to take over all container terminal operations at the Port of Hampton Roads in Virginia. It is a natural deep-water port that can accommodate the large containerships likely to visit East Coast ports after the Panama Canal widening. For the last thirty years, the terminals were operated by Virginia International Terminals, a non-profit arm of the Virginia Port Authority. APM Terminals' offer is to lease the facilities for 48 years in return for potential \$3.8 billion revenue for the Commonwealth of Virginia. The state also received another unsolicited competing bid from banking giant JP Morgan in partnership with Maher Terminals and Noatum Ports, a JP Morgan affiliate, proposing a similar option for \$3.1 billion. The privatization proposals ran into considerable opposition from the local maritime community and the port authority's state-appointed board of commissioners decided to continue the status quo with a revitalized and restructured company operating the terminals.

American Petroleum Tankers, a fuel-shipping company majority owned by the Blackstone Group on behalf of their investors, has announced plans to build two new product tankers at the NASSCO yard in San Diego. The contract is contingent upon receiving a \$340 million Title XI loan guarantee to refinance APT's existing five tankers. Those five double-hulled Jones Act product tankers were delivered by NASSCO in 2009 and 2010. Should the loan guarantee be approved, product tanker construction will resume in a U.S. shippard after two-year hiatus.

The New York-based American Feeder Lines (AFL), an innovative marine highways operator discussed in my previous annual reviews, did not complete its first year of operation and went out of business in April 2012. They abruptly cancelled their nine month long feeder service with a chartered 700 TEU feeder vessel between Halifax, Nova Scotia and Portland, Maine and Boston, Massachusetts, citing insufficient volume to support the endeavour. It turned out to be a money-losing operation and their German investors withdrew support although the province of Nova Scotia was willing to extend a \$500,000 loan guarantee to support the weekly service.

AFL was hoping to get a waiver from the build-U.S. requirement until they could raise funds to build ten ships in U.S. yards and commence weekly short-sea services linking 18 ports under the Jones Act.

3.1 Regulatory Developments

BP Exploration and Production Inc. pleaded guilty to 14 criminal counts (11 counts of felony manslaughter, one count of felony obstruction of Congress, and also violations of the Clean Water and Migratory Bird Treaty Acts) for illegal conduct leading to and after the 2010 Deepwater Horizon incident, the nation's worst environmental disaster to date. BP was sentenced to pay \$4 billion in fines and penalties, the largest such penalty in U.S. history. In addition, civil proceedings are also underway against the company. The rig owner Transocean, another major player, also pleaded guilty to violation of the Clean Water Act (CWA) for its illegal conduct leading to the incident, and was sentenced to pay \$400 million in criminal fines and penalties, making it second only to the penalty imposed on BP.

A U.S. District Court jury in San Juan, Puerto Rico, found the former president of Sea Star Line and a former Vice President of Crowley Liner Services guilty of antitrust conspiracy in the continuing saga of price-fixing by carriers in the U.S.-Puerto Rico trade between late 2005 and early 2008. Violations include colluding with others to rig bids, fixing rates and surcharges, and allocating customers through manipulation of bids. It follows guilty pleas by five other carrier officials — two from Sea Star and three from Horizon, and could result in a maximum penalty of 10 years in prison and a \$1 million fine per individual. Sea Star Line, Horizon Lines, and Crowley Liner Services have paid upwards of \$46 million in criminal settlements, and the investigation is continuing. Horizon Lines pleaded guilty to violations of international and national pollution laws relating to transfers and discharges of oil and oily waste onboard the container ship Horizon Enterprise, and was sentenced to pay a fine of \$1.5 million.

Following the Costa Concordia disaster, a number of cases were filed in Florida against the Miami-based Carnival Cruise Corp. seeking redress. Given the many inefficiencies of the Italian legal system and the low probability of getting a verdict in favour of the claimants despite high costs, this was widely expected. As an example, Italy has a cap on damages, and claimants are required to post 10 percent of the expected damage award prior to filing a lawsuit unlike the U.S.

where payment is made only if the clients succeed. A U.S. District Court Judge dismissed the case filed by affected Italian businesses, located in the Tuscan island of Giglio off which the ship ran aground and advised them to seek grievance under the Italian legal system. However, on February 15, 2013, two cases filed on behalf of 104 survivors were approved for trial under the Florida court system. The plaintiffs are seeking at least \$2 million in compensation per passenger and \$590 million in punitive damages.

In November 2012, 15 members of the Transpacific Stabilization Agreement (TSA) filed an amendment with the Federal Maritime Commission (FMC) to expand their scope to include the nine-member Westbound Transpacific Stabilization Agreement (WTSA). Under the provisions of the U.S. Shipping Act of 1984 as amended, a research and discussion carrier group such as TSA can make recommendations to member carriers in their service contract negotiations with customers, but has no rate-setting authority. Carriers expect the stabilization agreement's expanded scope to help resolve the traditional imbalance in capacity utilization between eastbound and westbound transpacific container movements. National Industrial Transportation League (NITL), the body representing major shippers, has asked FMC to "examine the ramifications and impacts" of the proposed merger although they support the consolidation in principle. The proposed merger is likely to be approved and will go into effect from mid-April this year. This will help bring down overheads and other avoidable expenses, and add efficiency in transpacific container services.

3.2 Overseas Ship-holding Group, Inc.

Five years ago, OSG stock was trading around \$100 and even mentioning its name and bankruptcy in the same breath would have been a sacrilege. Nevertheless, in November 2012, the biggest U.S.-based shipping company with a fleet of 112 ships (67 owned and 45 chartered) sought Chapter 11 protection. The company's market capital value had dropped from a peak of \$2.7 billion five years ago to \$38 million prior to its bankruptcy, an astonishing fall for the nation's first publicly traded ocean shipping company and one of the world leaders in oil transportation. Earlier, the Standard & Poor's rating agency downgraded its long-term corporate credit rating as well as its senior unsecured debt to CCC- (from CCC+). The company became a casualty of the highly volatile spot market for large tankers with weak liquidity and unsustainable financial leverage. They reported losses throughout the last four years and their

\$1.5 billion revolving line of credit was fully exhausted by the summer of 2012. OSG's attempts to raise funds through long-term bank financing and other arrangements such as sale and leaseback could not stop the inevitable and they joined the ranks of other recent U.S. shipping companies that sought Chapter 11 protection such as American Commercial Lines, General Maritime, Horizon Lines, Trailer Bridge and TBS International.

OSG reported pre-tax net loss of additional \$20.5 million during the six weeks between Chapter 11 filing and the end of the year. Their attempt to repudiate some of their charter agreements to serve the best interests of creditors has received legal approval. By the same token, the unilateral plan by BP to liquidate Alaska Tanker Company (ATC) will be a major blow for OSG's bankruptcy estate if it goes through. ATC is a joint venture between BP, OSG and Keystone, and features four BP-owned tankers. BP and OSG own 37.5 percent each in ATC, and the rest, Keystone. Also, law firms that specialize in securities class actions are pursuing OSG for their likely violations of the federal securities laws. This relates to certain statements issued by the company between May 2009 and October 2012.

3.3 Longshoremen Contract Negotiations

There was considerable drama to the protracted master contract negotiations between International Longshoremen's Association (ILA) and U.S. Maritime Alliance (USMX), and strong indications of a massive port strike that was to begin on February 6, 2013. ILA represents the 14,500 dockworkers in 15 ports on the East and Gulf coasts of the country, and U.S.MX, the management. The tense negotiations, brokered by Federal Mediation and Conciliation Service, began in March 2012 and involved two contract extensions before reaching a tentative agreement on February 1, 2013. The final agreement would be subject to ratification by both parties and also to crucial local agreements notably in the Port of New York and New Jersey which employs roughly one out of every three ILA members. The local agreement between ILA members and New York Shipping Association representing the management continued to be a tense challenge for another month, with other local chapters awaiting its outcome. A deal was finally reached in New York on March 8, 2013 and the master contract was approved in principle by the ILA rank and file on March 13, 2013 with ratification expected in April 2013.

4. International Developments

4.1 Green Shipping

As the year 2012 began, there was considerable consternation among shipping circles that the European Union might implement unilateral green shipping initiatives because of the slow pace of progress in global efforts toward emission control. Several nations and trade organizations were among those who feared the EU repeating what they did in the aviation sector in 2011. The subsequent decision by EU in 2012 to abstain from independent action was well received by the shipping community. The North American Emissions Control Area (ECA) went into effect on August 1, 2012 and mandates the use of one percent sulphur Heavy Fuel Oil (HFO) or residual fuel oil for ships within 200 miles of the continent of North America. The EPA interpretation of one percent fuel requirement has been of considerable help to ship owners and operators who were concerned about switching over to lower distillate that caused major engine problems on the California coast in 2009. The USCG has started enforcing the fuel oil regulations and two ships were detained in March 2013 for noncompliance. In all ECAs, maximum sulphur content will drop to 0.1 percent by 2015 (equivalent of gasoline or clean distillate) from the current level. The global standard for maximum sulphur content in non-ECAs will become 0.5 percent from 2020 although this will be mitigated in part by the introduction of energy efficiency measures in ships. Future plans to meet these requirements other than switching to low sulphur marine fuel oil include installing exhaust cleaning system and using natural gas propellant. The natural gas option is getting considerable attention worldwide including in the U.S. and EU. The EU is strongly pushing 130 LNG bunkering stations for coastal and inland ports. A recent report from Det Norske Veritas (DnV) states that 10 percent of all ships being built during the next eight years will have gas fuelled engines. The same report states that by 2020, new ships will emit up to 35 percent less CO2 than today. The Energy Efficient Design Index (EEDI) regulation went into effect in January 2013 and requires ships to be 30 percent more energy efficient than today's average ship by 2025. This will drive more ship owners to follow the TOTE leadership in LNG propulsion. While EEDI applies to all new ships, the concurrently introduced ship energy efficiency management plan (SEEMP) will apply to all ships.

4.2 Piracy

Pirates attacked 239 ships in 2012, the lowest in five years according to statistics released by the International Maritime Bureau, a division of the International Chamber of Commerce. In contrast, there were 439 ship attacks in 2011. The number of incidents off Somalia dropped considerably with only 75 reported ship attacks in 2012 as opposed to 237 in 2011. However, East and West African coasts still remain most piracy-prone with 150 attacks in 2012. Pirates boarded 174 ships last year and hijacked 28 of them, 14 of them off Somalia; 585 crew members were taken hostage in 2012 (compared to 802 in 2011); six crew members were killed and 32 assaulted or injured. Vessels under most risk continue to be fully loaded tankers, bulk carriers, fishing vessels, smaller boats, and also container ships. As of 13 March, 2013, Somali pirates are holding on to 5 ships and 65 hostages. In 2013, there have been 47 attacks and 3 hijacks so far with four of the attempted attacks being off Somali waters.

One reason for the decline in piracy off Somalia is the adherence to best management practices by vast majority of ships transiting the area. Another reason is the presence of armed security guards; it has gone up from one in 20 ships in 2011 to two out of every three today. More than 50 percent of ships transiting the region are insured against piracy now and receive up to 50 percent reduction in premium for carrying armed guards. BIMCO (Baltic and International Maritime Council) is recommending minimum four-man security teams on board to provide adequate all-around coverage; this includes one person staying with the Master at all times. The case of the two armed guards on board Italian tanker Enrica Lexie who erroneously shot and killed two Indian fishermen off the coast of Kollam, India on February 15, 2012 caused a major diplomatic row between India and Italy. The Italian ambassador was prohibited from leaving India and his diplomatic immunity was in jeopardy, and restored after the marines returned back. It should be noted that piracy still remains a strong threat. In fact, hostage captivity is now longer than ever before; from 68 days in 2008, the average time now exceeds 320 days. Also, the average ransom payments have doubled from 2008 to well over \$3.5 million today, with some exceeding \$25 million. The barbaric torture inflicted upon the crew of MV Iceberg by Somali pirates is a sad illustration of man's inhumanity toward fellow humans. The ship with its crew of 24, was captured on March 29, 2010 off the port of Aden in Yemen and remained under captivity for 33 months. The pirates broke off negotiations when owners turned down their \$10million ransom demand and turned their wrath toward the helpless hostages. The prolonged

severe physical and psychological atrocities committed against these innocent merchant mariners included starvation, hanging upside down and even sawing off the ear of one crew. The torture reached a new high when pirates threatened to take out the internal organs of hostages and sell them in the lucrative medical "black market." One frightened mariner jumped overboard and committed suicide. The security forces finally freed 22 of the remaining 23 hostages in December 2012, the second casualty being the ship's Chief Officer, presumably killed by pirates. The Greek owned MT Smyrni, a fully loaded million barrel crude tanker, hijacked by pirates in May 2012 was finally released on March 11, 2013. The owners reportedly paid a ransom of \$9.5 million for the safe release of the ship and its 26 crew including Captain H. Upadhyay, my fellow classmate, who spent ten long months under captivity.

The Gulf of Guinea (off Nigeria, Togo, and Benin) is quickly emerging as the next hotbed of activities. There were 58 incidents in the area in 2012 including 10 hijackings and 207 hostages. Piracy on this side of Africa is particularly violent and there is frequent use of guns. Nigerian law prohibits the use of third-party armed personnel on board ships. The focus here appears to be on the petroleum cargo that is often sold off within 48 hours of capture. In the case of hostages, the average detention time so far has been eight days. In general, piracy is escalating rapidly here, and there is fear of considerable underreporting.

Bloomsburg Business Week reports that a private navy is being set up in the UK to deal with piracy and will recruit 240 former marines and sailors. The plan is to establish a fleet consisting of a UK-flagged mother ship, high-speed armoured patrol boats, and armed soldiers whose mission will be to deter pirates. It will be financed by shipping companies who are unhappy with the current level of protection available to shipping and the inefficiency in prosecuting captured pirates. The average daily cost of pirate court trials is estimated around \$40,000 and on top of that, trials and incarceration have had little impact on bringing the ringleaders to justice or curtailing their activities. A more logical strategy is to rebuild Somalia and create jobs that will keep its youth legally employed. Shell International Trading and Shipping is taking the lead in promoting this cause. They have brought together many top tier shipping companies of the world and donated \$1million to support job creation and capacity building projects in Somalia, and pledged an additional \$1.5million for the United Nations initiatives there.

4.3 Mariner Issues

The International Labour Organization (ILO) has been working for over a decade with the International Transport Workers Federation (ITF, representing the seafarer unions worldwide) and the International Shipping Federation (ISF, representing employers) to codify all previous rules related to seafarer employment on board ships. This compendium referred to as the Maritime Labour Convention (MLC 2006) is truly the long awaited *magna carta* of the fundamental worldwide rights and privileges of mariners. It is perceived as the fourth pillar of shipping regulation along with the Safety of Life at Sea (SOLAS) Convention, Marine Pollution Prevention (MARPOL) Convention, and Standardization of Training, Certification, and Watchkeeping (STCW) Convention and will go into on August 20, 2013. There are 35 countries that have ratified MLC 2006, France being the latest. The U.S. is not a signatory but this does not absolve U.S.-flag ships from compliance with its provisions when calling a port in a country that has ratified the Convention.

MLC 2006 will have far reaching impact on seafarers and the quality of their work life. Although vast majority of shipping companies provide a good professional work environment on today's ships, trade journals continue to report abuse of seafarers by unscrupulous owners, operators, manning agents, and senior officers on board. Such allegations typically include contractual violations including non-payment of wages earned, abandoning the crew in a foreign port because of owner's financial problems, inhuman working conditions and unsafe ships. The new convention will put an end to such abusive practices, long abhorred by civilized society, and provide a decent self-respecting work environment for the estimated 1.2 million seafarers worldwide often toiling in waters far off their native land and in pursuit of an honest livelihood. Once MLC2006 is implemented, seafarer employment contracts must provide basic health and social security benefits as in any other profession. Seafarer work and rest hours will be regulated as well as their training, medical care, and workplace safety.

From August 2013, Port State Control inspectors will inspect not only the ship's compliance with global safety standards of operation and maintenance but also the existence of minimum acceptable working conditions for its crew. All ships over 500 gross tons operating in international waters must carry appropriate compliance documents issued by the flag administration after an inspection and demonstrate ongoing compliance. Hospitality crew on

board cruise ships will also get the same protection as traditional crew. MLC will become part of the national maritime legislation of signatory nations and seafarers will have the ability to report violations without fear of retribution. In general, it is expected that Port State Control inspectors will pay increased attention to seafarer work and rest hours during their ship inspections. The Oil Companies International Marine Forum (OCIMF) is advising its members to invest in customized

computer programs to manage seafarer work and rest hours on board ships and demonstrate compliance with all applicable regulations. The USCG is proposing a voluntary inspection program for ships calling MLC-compliant foreign ports, with approved classification societies conducting the inspections.

The Manila Amendments, commonly referred to as STCW (Standardization of Training, Certification, and Watch-keeping) 2010 came into effect on January 1, 2012 with a five year transition period until January 1, 2017. They constitute major revisions to the original STCW Convention. In addition to a general tightening of educational and training requirements, the amendments include strict mandatory limits on alcohol consumption (not greater than 0.05 percent blood alcohol level or 0.25 mg/l alcohol in breathalyzer test) and at least 10 hours of rest in any 24-hour period and a minimum 77 hours rest in any seven day period. A USCG policy letter, issued in October 2012, lays the framework for implementing the new work hour rules and has warned that some ships engaged in foreign trade may need to amend their crew strength to ensure compliance. As per a recent survey of 2,000 shore and sea staff conducted by Faststream, an international maritime recruiter, only half of all deck officers would choose the same career if given a second chance. Such sentiments are not difficult to decipher. One simple example is the increasing difficulty in stepping ashore at many foreign ports even after long and often arduous voyages. The number of countries that requires mariners to have visas prior to ship arrival for going ashore is on the rise. While this might be a feasible option for seafarers working on a container ship, it is impractical for those working on tramps. The International Shipping Federation (ISF) has taken the position that if visas

are required, seafarers should have the opportunity to apply for it immediately upon arrival or just before. The common courtesy of allowing mariners to step ashore and visit the port of call is a long established custom and also the humane way to treat them given the nature of their employment. It is time to review and reconsider shore leave privileges for merchant mariners.

Another de-motivating factor many mariners face is maritime criminalization. The tendency toward disregarding the basic legal principle of innocent until proven guilty is becoming disturbingly repetitive when shipping accidents occur. The increasing number of incidents, where seafarers were perceived guilty and treated like common criminals even after they took all possible measures to avoid an accident or an oil spill, is particularly troubling. This was clearly visible in the case of the Stolt Valor, a parcel tanker that was wrecked by a terrible fire and explosion in the Middle East Gulf in March 2012. The ship's master and chief engineer who survived the accident were served with arrest warrant prior to any investigation. The 77-year old Captain of the ill-fated tanker Prestige is now standing trial in Spain along with his chief engineer for the decade old 20 million gallon oil spill tragedy. Like a true professional and lawabiding global citizen, he sought port of refuge upon detecting structural problems on board. The Spanish authorities denied his request and asked him to steer farther away from the coast as if that would solve the ship's structural integrity problems. After seven tense days, with no coastal state willing to help, the ship broke apart and spilled oil in an environmentally sensitive area. When the captain was picked up from his sunken ship and brought ashore, he was treated as if it was a premeditated act on his part despite the weeklong tragic saga of irrational shore-based decisions. Although the Captain's actions in extremis conditions were exemplary, he was treated like a common criminal, denied legal help and prohibited from returning home. And now, a decade later, the prosecutor is seeking 12 years imprisonment for his impeccable professionalism. No wonder many deck (and engine) officers would choose a different career if they had a choice!

4.4 Safety Issues

An 11 year old container ship in distress, the MSC Flaminia met with almost a similar fate as the Prestige during the summer of 2012. Despite being badly damaged by fire and explosion on July 14, 2012, the ship was refused entry into a port of refuge for almost two months before she was finally towed into Germany, her flag-state on September 9, 2012. It is believed that the cargo-owner did not declare its flammable properties which led to wrongful stowage and the consequent fire that resulted in three deaths. The German Classification Society Germanischer Lloyd is seeking the establishment of designated places of shelter for crippled ships which will be a welcome development. The 15,500 TEU Emma Maersk, the first ship in the world of that size and the torchbearer of the Ultra Large Container Ship (ULCS) breed was humbled when her

engine room was flooded because of problems with her stern thruster. It is unknown whether there is a structural flaw or if this was a freak accident. The ship was towed from Port Said in Egypt, site of the accident, to Palermo in Sicily where water will be pumped out from the flooded engine room. *Emma Maersk*'s seven sister-ships have been ordered to stop using their stern thrusters until the cause of the accident is clarified. These E-Class ships were the last container ships built in AP Moller Maersk's Odense Steel Shipyard before it closed.

A recent report from the International Tanker Operators Pollution Fund (ITOPF) provides good endorsement of improving safety standards in the industry. They classified all oil spills from the last 43 years into three categories, viz., large, medium and small, and determined that only 5 percent of them were of the large category, exceeding 5,000 barrels. More importantly, 55 percent of those large spills occurred in the 1970s although oil volumes traded today are substantially higher. There were only 33 large spills in the 2000s, just 7% of all large spills recorded (see Figure 3). The rest of the oil spills (95 percent) were of either medium (50 to 5,000 barrels) or small (less than 50 barrels) category. Among these, ITOPF found that 40 percent occurred during loading and 29 percent during discharging operations. Furthermore, 46 percent of all operational spills (caused during loading and discharging) were from hull and equipment failures, and not human errors. Collision and groundings caused the rest of the medium spills category and also 2 percent of the small spills.

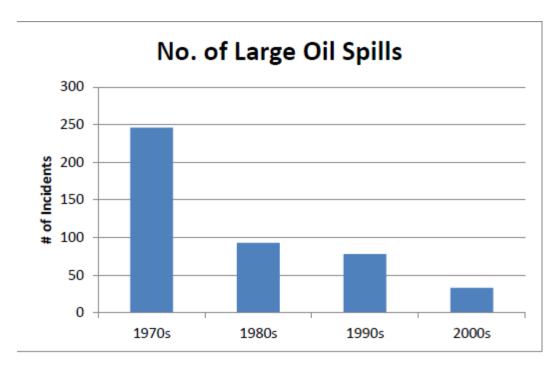


Figure 3: No. of large oil spills, Source: ITOPF

These excellent outcomes are a result of the various safety measures introduced over the last forty years including the International Safety Management (ISM) Code and more importantly, the professionalism and commitment to safety of the vast majority of men and women who sail commercial ships today. Regretfully, the ISM Code itself is coming under increasing criticism for its increasing propensity tendency to generate unnecessary paperwork for mariners. As per a recent survey of shipping experts, owners, managers, classification societies, surveyors, and senior officers by Capt. N. Singhal, a maritime quality assurance consultant, there is overwhelming consensus that seafarers are being tasked with excessive paperwork most of which is duplicative and difficult to read or understand. While survey respondents agree that simple, concise and effective documentation is essential, the prevailing sentiment is that the current level of ISM requirements are drowning the mariners in paperwork rather than assisting them in ensuring a safe and seaworthy ship. Capt. Singhal argues that the current trend is increasing crew fatigue and nonchalance and not engendering a safety culture, and articulates the crying need for a lean Safety management system and a thorough revision of the ISM Code.

5. Outlook

No drastic improvements are expected in 2013 other than getting a bit closer to the end of the tunnel. Although growth in OECD countries will continue to be anaemic, it is expected to pick

up steam in other fast growing countries such as China and India. New capacity will enter all major markets but it will be at the slowest pace witnessed in recent memory with the exception of liner trades where once again record new levels of capacity will enter. This, along with the shifting world consumption patterns, will start turning the tide around in 2013. However, new maritime investments will remain highly volatile and risky unless it is in the offshore sector. So, 2013 will not be the year of salvation but should certainly start paving the way toward seemingly long-forgotten good times in the industry, and a more optimistic 2014. *Au revoire!*

About the author:

Dr. Shashi Kumar is a Master Mariner, Fulbright Senior Specialist Fellow and Professor Emeritus of International Business and Logistics. He is in his 26th year of distinguished leadership and educational services to the U.S. & global maritime community.