2009 U.S. Merchant Marine and World Maritime Review

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Introduction

The 2008 Annual Review referred to ominous signs of a change in market dynamics for the worse, replete with many lurking signs of uncertainty. There were clear signals a year ago that indicated a turbulent year ahead in general and a cloudy maritime horizon in particular. Although a down cycle was expected, the magnitude of the current downward spiral has far exceeded the predictions of every analyst in the field and its impact has been so draconian that most players in the market seem perplexed. While the former half of 2008 left the maritime world confounded by bunker prices that climbed as high as $750 per tonne and high inflationary pressures, the latter half provided the antithesis through a global financial meltdown and impending deflation. Sadly, the decline continues unabated in 2009 and new terms like deglobalization are entering our lexicon. There seems to be no immediate end in sight for the current crisis. Every shipping market is in turmoil today and the nations of the world and their citizens, in disarray.

The dramatic growth of the Chinese economy and its role as the mainsail of global maritime prosperity has come to a sudden pause. There were indications in the past that despite economic slowdowns in developed countries, the momentum set off by fast-paced growth in China, India and other fast growing developing countries could sustain the longevity of the upward cycle in shipping. Alas, the interdependency between the nations of the world has once again been illustrated candidly. The phenomenal growth in Chinese GDP has slowed from 13% in 2007 to 9% in 2008. It is estimated to grow at 6.5% in 2009 although a $586 billion economic stimulus package was recently enacted to attain targeted 8% economic growth. Both imports and exports from China posted drastically lower numbers in the last quarter of 2008 compared to prior years and the trend intensified in early 2009. Empty containers are now piling up in Chinese ports and some of the nation's recently announced shipyard ventures are unlikely to see the light of day.

The International Monetary Fund revised downward its forecast of world trade growth; indeed the very mention of any growth in 2009 is overly optimistic. Developed nations are expected to post a contraction in their GDP growth in 2009, a first in the post-WWII era. The anchorage off shipping hubs like Singapore is being transformed into maritime parking lots, filled with ships awaiting business. Many illustrious names in shipping have announced major cutbacks and vessel layups, and some have even ceased operations during the last year. Had it not been for the sheer number of these spectacular failures, each one of them whether in shipping or in the broader market would make headlines and engage the global community for a long time like the Enron bankruptcy a few years ago. There was however at least one shipping story that did enthrall the average citizen which unfortunately was about rampant escalation in maritime piracy and ship hijacking off the Gulf of Aden There was, however, at least one shipping story that did enthrall the average citizen—unfortunately, it was about rampant escalation in maritime piracy and

ship hijacking off the Gulf of Aden and Somalia, the latest in the saga being the daring rescue of the Captain of the U.S.-flag containership Maersk Alabama by navy seals. Most other stories in the industry have been comparatively lame and lack the pizzazz of the high profile global macroeconomic developments mentioned above. Nevertheless they are important for maritime connoisseurs and are discussed here.

Market Developments

The 5% sustained growth in global economy over the past five years was exceptional and induced 8% annual tonnage growth in shipping capacity. Despite high oil prices, the first few months of 2008 continued that trend like the proverbial lull before the storm. It was during the latter months and in particular the 4th quarter that the bottom literally fell off the dry bulk and liner markets. The tanker sector maintained good returns almost till the very end of the year. Even the relatively nascent LNG market contracted in 2008 with about 10% of the global fleet unemployed. Confidence level in the industry dropped 20% last year.

Dry Bulk Market

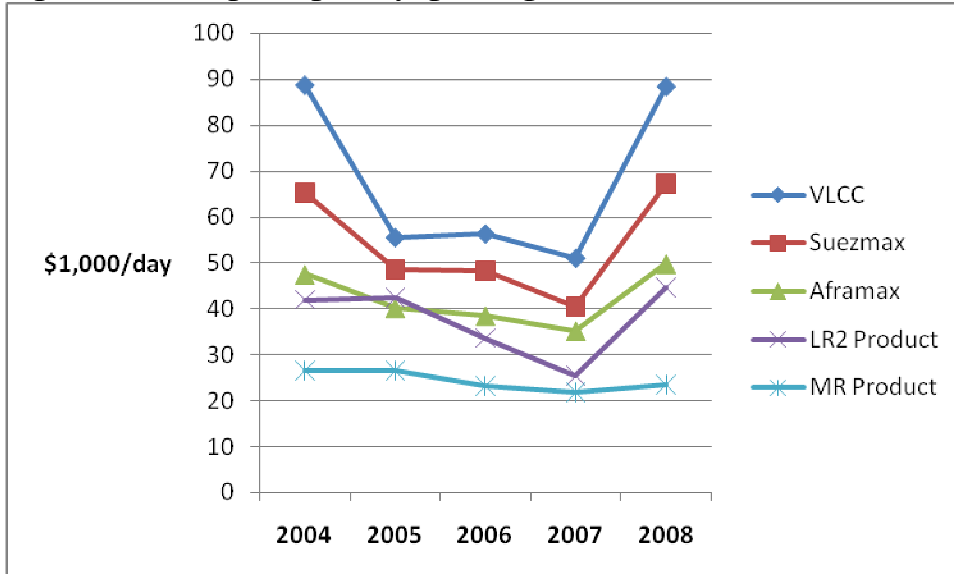
Dry bulk market was unquestionably the star attraction in 2007 with Capesize bulkers earning well over $200,000 per day. The average daily hire of $97,000 posted for the year by these ships masks the extreme income variations experienced. The 2008 Baltic Dry Index (BDI) for these ships began at 8702, peaked at 11,793 in mid-May and then dropped precipitously to 773 by the end of the year, completing the most volatile year in history. Some Capesize ships did fetch reportedly $230,000 per day in June 2008 but in December, they were earning as low as $5,000 per day. Spot rates for Supramax and Panamax bulk carriers are also below $5,000 per day and annual time charter hires, around $10,000 per day. Along with the drastic reduction in demand resulting from the global credit crunch and the cooling Chinese economy, the supply of dry bulk carriers grew about 6.5% in 2008, worsening the imbalance. A further increase in the supply of bulk carriers through new deliveries will continue for at least two more years and deepen the current imbalance. The value of five-year old bulk ships have dropped by about a third and that of new ships by about 11%, and the trend is worsening.

Tanker Market

Tanker market was a winner in 2008 with average earnings close to $90,000 per day for VLCCs. This is not much lower than the daily record high of $96,000 established in 2004 during the early part of the super cycle. Although the tanker supply increased 8.4% in 2008 through new deliveries, it was partially offset by many single hull ships exiting the market. Furthermore, the decline in oil price towards the year end created a novel market for storage tankers. Reportedly, there are at least 30 VLCCs used for storage currently. For the first time after 1983, the global demand for oil is forecast to decline in 2009. This along with the planned delivery of replacement tonnage for single hull tankers mandated for phase-out by 2010 started impacting market conditions and lowering time charter rates in early 2009. The anticipated increase in oil shipping distances because of changes in production decisions by key suppliers is insufficient to offset the overall trend. World oil consumption in 2009 is forecast to decline by 1.6 mbd in OECD countries. Even in the U.S., the demand for oil fell 6.1% in 2008 and is

forecast to fall another 2.2% this year because of the sour economy. The recent OPEC production cutback alone will eliminate the need for one VLCC per day, worsening the anticipated excess supply. Even top tanker operators like OSG and Teekay are now being downgraded by market analysts.

Figure 1. Average Single Voyage Freight Rates



Source: R.S. Platou 2009

Liner Market

All forecasters were in unison a year ago that the projected increase in container carrying capacity would exceed demand growth in 2008 and impact carrier profitability. However, the pace at which the liner market collapsed in 2008 and early 2009 is simply stunning. A particularly painful indicator is the number of laid-up container ships. In late Fall 2008, whereas 70 ships with a cellular carrying capacity of 150,000 TEUs were laid-up, the worldwide figure catapulted to 484 ships with a carrying capacity of 1.41 million TEUs by mid March 2009. This is expected to more than double in the next two years. As every container slot needs roughly three suits of containers, more than 4 million empty TEUs are presently stacked up in ports all over the world. German owners who maintain beneficial ownership of a number of the laid up containerships have reactivated a mutually funded compensation scheme from 1/1/09. The impact of the ongoing economic meltdown on this market is so severe that carrier strategies under these conditions merit further analysis in a later sub-section.

Cruise Market

As per Cruise Line International Association (CLIA) statistics, the North American cruise industry grew 7% in 2007, created 354,700 jobs and generated $18.7 billion in direct spending and $38billion in total economic output. Florida continues to be the primary beneficiary of these activities followed by California, Alaska, and New York. CLIA believes that the North American market has reached a plateau with 75% of the global market and anticipates the growing European market to accommodate the new mega cruise ships entering service from 2009 onwards. The active global cruise fleet now

consists of 326 ships of 1,000 GT. All new ships delivered in 2008 were megaships that carry more than 2,000 passengers; such ships now account for 51% of the global berth capacity. Thirty-eight cruise vessels valued at $21.6 billion--roughly about 1/4th of the existing fleet—are under construction now, including Royal Caribbean's 5,400 passenger *Oasis of the Seas*.

The top four North American cruise operators—Carnival, Royal Caribbean, NCL and Princess--carry more than a million passengers now with Carnival having 1/3rd the marketshare. The Norwegian Cruise Line withdrew two of its three U.S.-flag ships, the Norwegian Sky and the Norwegian Jade. Queen Elizabeth 2 made its final call to the nation when it sailed into New York City in late Fall, 2008. It was the ship's 710th call to NY and then went on its final transatlantic crossing. She was Cunard Line's flagship for almost 35 years, travelling more than 5.9 million nautical miles and carrying more than 2.5 million passengers during her service life. The much revered QE2 is now destined to become a luxury hotel cum maritime museum in Dubai.

Ship Recycling Market

Understandably, the ship demolition sector did poorly during the six year supercyle. However it is making a strong comeback under the current conditions. There was significant increase in ship recycling in the latter half of 2008 that led to a drop in price from $750/ldt in summer to $250/ldt by the end of the year. With 69 million DWT single hull tankers mandated to exit the market before 2010 and 77 million DWT of dry bulk carriers 25 years or older, environmentally savvy ship recyclers appear poised for strong recovery.

The U.S. Merchant Marine

2008 was a lackluster year for the U.S. merchant marine. There were no spectacular industrial developments to boast or significant private sector milestones to chronicle. The message that reverberated throughout the year was one of extreme concern and negativity, initially driven by escalating fuel costs and stringent antitrust investigations and later by the ongoing credit crunch. Unsurprisingly, bulk of the notable maritime developments of the year was driven by one or more government agencies directly or indirectly.

Maritime Administration Initiatives

The multi-pronged activism of a rejuvenated of Maritime Administration under the leadership of former Administrator Sean Connaughton, begun in late 2006, picked up further momentum in late 2008. The promotional agency reached a number of epoch-making milestones prior to change in administration and earned many accolades from industry pundits domestically and overseas. Some of the key accomplishments in 2008 include encouraging a holistic "systems approach" to marine transportation in general, promoting the Marine Highways Program as a viable partial solution to landside congestion, increasing attention on green shipping and environmental stewardship, and facilitating enhanced training opportunities for students at federal and state maritime academies through agreements with well reputed foreign-flag operators. The agency continued its advocacy of the Jones Act and Cargo Preference laws and offered grants to

U.S. shipyards to make capital and infrastructure improvements. Its leadership role in coordinating international efforts to combat maritime piracy gained global prominence.

The agency released two insightful documents in early 2009 both of which are highly noteworthy in terms of its substantive contributions and its potential to reopen long-simmering maritime policy debates. In a report prepared by HIS Global Insight for the Maritime Administration titled *An Evaluation of Maritime Policy in Meeting the Commercial and Security Needs of the U.S.*, it is argued that our maritime policy does not support participation in international trades, the same conclusion reached by this author in 1993. Very little has changed in 16 years with regard to national maritime policymaking. The MARAD-HIS Report posits that even though marine transportation is the most important mode for the future growth of U.S. economy, our current policies are focused solely on domestic trades and ships, akin to concentrating on a few trees and ignoring the big forest of opportunities for the U.S. maritime milieu. Another entity that has asked for a comprehensive review of our maritime policy is the Navy League which would like to see greater importance being given to cargo preference, Jones Act and the Maritime Security Program. The Navy League has called for strong policy measures that will promote both the commercial and defense sectors of merchant shipping. It advocates a 313-vessel Navy that will necessitate significant new construction, and thereby expand the nation's maritime industrial base.

America's Ports and Intermodal Transportation System, the 2nd Maritime Administration report released in January 2009, highlights the importance of investing in a national port and intermodal system to better integrate the American economy with global developments and facilitate seamless cargo movements. It emphasizes the weaknesses of our current system, driven by dated mode-based statutory and regulatory framework, and lays a laudable foundation for national port policymaking. The report argues that our current port development is driven by a mix of public and private stakeholders with no dedicated funding or coordinated planning of marine infrastructure on land. The current system of federal oversight and involvement is driven by mode-based functional silos that do not solve let alone recognize the complexities of 21st century global supply chains. The operational flexibility of our strategic ports to handle routine commercial operations concurrently with a surge in military cargo is suspect. Our waterfront acreage is increasingly subjected to competing use, ignoring the maritime nexus and the current system of environmental review and permits impedes investment in essential maritime infrastructure. The potential of a Marine Highway System to avoid congestion on highways is still not fully explored while the bottlenecks faced by outbound and inbound cargoes from and to interior points are worsening. The nation has done very little to incentivize shippers for using alternatives to the surface modes. In terms of information dissemination, we do not conduct adequate research on best practices in technology or operations, alternative energy and green options, or have even developed uniform measures of port productivity. Origin-destination data on cargo flow is not provided or used in an efficient manner to address present and potential bottlenecks. Despite the presence of huge reserves in the Harbor Maintenance Trust Fund, the nation's ports are not adequately dredged and our ability to handle the new generation of mega containerships is limited. The critical infrastructure in our major river systems are of

vintage era. We have not invested in modern navigation systems nor do we do enough to enhance the skills of our maritime workforce. There is increasing competition from ports in our neighboring countries and a strong national transportation policy remains imperative. These two reports, briefly discussed here constitute a powerful one-two punch in national maritime policymaking although the timing is far from ideal with the national and international attention presently centered on broader macroeconomic concerns.

The Stimulus Bill

The American Recovery and Reinvestment Act, referred to as the economic stimulus package includes $100 million for the Maritime Administration out of the total $52 billion to be spent on infrastructural improvements. The funds will be distributed as supplemental grants, 75% being set aside for small shipyards with 600 employees or less and up to $25 million for yards with 1,200 employees or less. This is a massive increase compared to the $9.8 million distributed among 19 shipyards in 2008. The new grants are to cover 75% of the cost of estimated improvements in capital and infrastructure for enhancing the cost-effectiveness and quality of domestic ship construction. States will receive $60 million for ferry and ferry terminal improvements. The Coast Guard will receive $450 million for acquisition, construction, and improvements of which $195 million are reserved for shore facilities and aids to navigation, and $255 million for priority procurements due to materials and labor cost increases, and to repair, renovate, assess, or improve vessels. The Army Corps of Engineers is slated for $4.6 billion of which $2 billion is for construction, $1.9 billion for operations and maintenance, $500 million for the Mississippi river system, $25 million for the regulatory account, $25 million for investigations, $100 million for the sites remedial action program and $50 million for flood control and coastal emergencies.

Alleged Jones Act Abuses

The antitrust investigation into alleged execution or attempted cover-up of a wide-ranging conspiracy to rig bids, fix prices, and allocate marketshares in the U.S.-Puerto Rico trade that began in early 2008 has resulted in one conviction. A Senior Vice President for yield management pleaded guilty and was sentenced to four years in prison, $20,000 in fine and two years of supervised release. This is the longest sentence imposed for a single antitrust violation in the country. Four other carrier executives, three from Horizon Lines and one from Sea Star, will be sentenced in late April.

The scope of the investigation has expanded to include the entire Jones Act realm and customers have filed close to three dozen private civil antitrust lawsuits, consolidated in San Juan and Seattle. Government agents seized documents and computers from the offices of Horizon, Sea Star and Crowley Maritime, and subpoenaed information from Trailer Bridge and Matson Lines. The Hawaii and Guam lawsuits allege price-fixing, limiting capacity and fixing domestic intermodal rates in the Guam trade by Matson and Horizon. The timing of these investigations could not have been worse as the operators are also dealing with the consequences of an unprecedented economic malaise concurrently. Horizon Lines alone has reportedly spent about $11 million so far in this litigation. Perhaps sheer coincidence but the current circumstances parallel the 1930s

investigations into the mail subsidy abuses of the depression era that culminated in the Merchant Marine Act of 1936. The timing may be perfect for a new *magna carta* for American shipping.

Other Legal Developments

Nineteen years after the Exxon Valdez oil spill, Supreme Court reduced the $5 billion punitive penalty against Exxon Mobil to about $500 million in June 2008. In a 5 to 3 decision, the Court settled on a one-to-one ratio between compensatory damage and punitive damage and established a landmark precedent. Prior to this, the median punitive damage was about 65% which prompted the Court to settle on the new ratio as a fair upper limit in maritime cases. The Court rendered a split decision on whether Exxon could be held accountable for Capt. Hazelwood's recklessness. Accordingly, the lower court ruling that Exxon might be held responsible would stand.

The Coast Guard interpretation of Jones Act ship construction rules was upheld by U.S. District Court of the Eastern District of Pennsylvania. The case was filed by the Metal Trades Department of the AFL-CIO against the Commandant of the Coast Guard and the National Vessel Documentation Center. The Court denied the union position that attaching modules manufactured abroad to ships being built in a US shipyard should disqualify them from Jones Act privileges. This would allow continuing the new Jones Act constructions at Aker Philadelphia Shipyard and the General Dynamics NASSCO Shipyard. A federal court in Virginia however ruled against the Coast Guard in two cases for approving major repairs on board two Jones Act ships in foreign yards.

The Hawaii Superferry operations ceased on March 16 when the state Supreme Court ruled that the state law allowing the ferry to continue its services prior to completing the environmental impact study was unconstitutional. The Florida Attorney General and major cruise line operators came to a settlement regarding retroactively charged fuel surcharges on cruise passengers. Carnival Cruise Lines returned $40 million to irate passengers who made their reservations before November 7, 2007, and Royal Caribbean and Celebrity Cruises, $21 million.

Lawyers from the Department of Justice re-submitted their revised racketeering case against the International Longshoremen's Association (ILA) and in return, the ILA has filed a request to dismiss the case and allow them to maintain control of their benefit funds. As of early 2009, there has been no progress and ILA's plan to settle it prior to the next master contract negotiations looks unlikely. There is continued lack of clarity as to whether the Carmack Amendment liability provision would apply for inland moves when a through bill of lading has been issued. The decision in the 2008 Gillette vs. P&O Nedlloyd cargo damage claim did not provide a definitive answer. It appears a Supreme Court ruling is required to clarify this ambiguity.

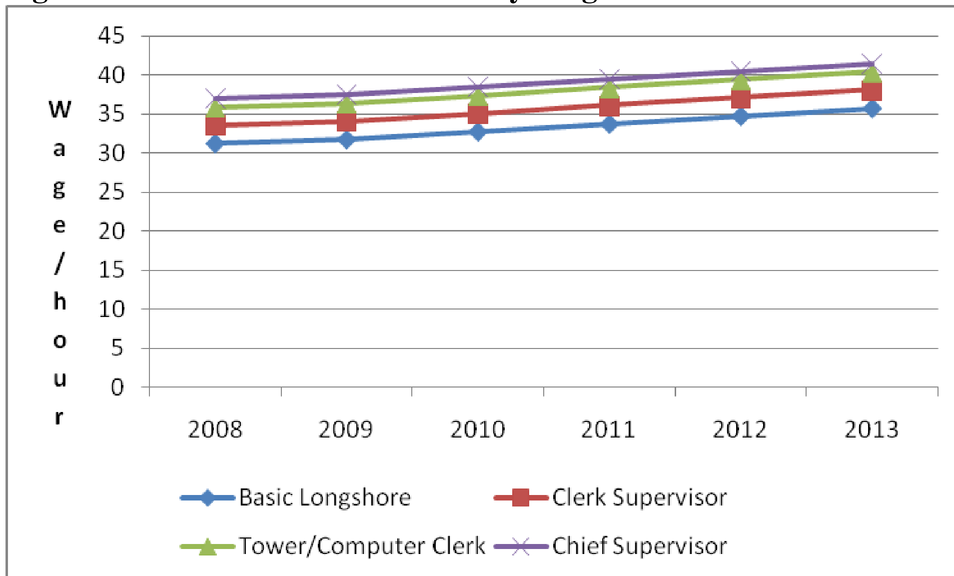
Domestic Shipbuilding

The Aker Philadelphia Shipyard has delivered 10 Jones Act ships in 10 years and four additional ones are now under construction. General Dynamics NASSCO delivered M.T.

Golden State, its 1st product carrier to U.S. Shipping Partners on January 1, 2009. The San Diego yard will build nine Jones Act product tankers under the current contract.
The Governor of Mississippi announced that $20 million from Katrina recovery funding will be used to establish a shipbuilding academy at the Mississippi Gulf Coast Community College.

Stevedoring Contract Negotiations
International Longshore and Warehouse Union (ILWU) and the Pacific Maritime Association (PMA) signed their new six-year contract in late July, 2008, maintaining the status quo. The union's bargaining tactic included a 2½ week long work slowdown. Figure 2 shows the new hourly wages for selected ILWU job categories. The new contract is a disappointment for those who expected enhanced port productivity measures and some may even find it a step backwards. To make matters worse, ILWU pension fund has been hit very hard by the stock market decline as well as the decline in cargo volume and man hours worked. This may escalate the cost of using west coast ports further. A gradual erosion of the intermediacy advantage of west coast gateway ports and hence, their share of discretionary intermodal cargo is very likely.

Figure 2. Selected New ILWU Hourly Wages



Source: Pacific Maritime Association/ILWU

The east and gulf coast stevedoring contract between ILA and US Maritime Alliance (USMX) expires on September 30, 2010. ILA has raised a number of key issues such as ending the tiered wage system, eliminating caps on container royalty bonus, improving medical benefits and enhancing work safety rules. Current economic conditions do not help the union's bargaining position. USMX wants to freeze wages at current levels and introduce other cost saving measures.

Container Ports and Terminals
The economic slowdown affected U.S. ports in 2008 although not to the same level as ship owners and operators. Port congestion is no longer a concern and ports are cutting

back discretionary expenses although long-term capital projects are still on schedule. Terminals in Los Angeles and Long Beach will eliminate Saturday gate hours in 2009, and scale back the PierPass program. Savannah has decided to cancel Thursday night gate operations. West Coast stevedoring hours dropped 5% in 2008 and is expected to drop further in 2009. There is a major shift towards wheeled operations to eliminate the cost of duplicate container moves with some terminals reporting 80% wheeled operations.

Maersk was unable to meet Charleston's minimum volume requirements in 2008 and paid a substantial penalty. A future alternative offered to the carrier was to operate from the same common-use area of the Wando Welch terminal used by Maersk's competitors and staffed by non-union employees. This met with opposition from ILA who would then lose 52 union jobs. Accordingly, Maersk will drop Charleston after 2010 when its current contract expires. The Charleston business model is under severe threat and the port's leadership is in flux. There is increasing pressure to privatize the terminals in Charleston and/or build huge distribution centers to attract customers.

East coast ports continue their capital projects for accommodating larger ships from 2014 when the Panama Canal expansion project is scheduled to complete. Approximately $11 billion infrastructure investments are presently planned for this purpose. However, fundamental operational weaknesses of American ports remain unresolved. Our container moves per crane barely reach 2/3rd the global benchmark and the container throughput per acre is at ½ the level in major Asian and European terminals.

Environmental Issues

From December 2008, ships operating in designated areas on the East Coast are required to slow down to 10 knots. NOAA imposed the mandate to protect the endangered North Atlantic right whales from ship strikes. The reduced speed zone extends out 20 nautical miles from major ports and applies to all vessels 65ft or longer on a seasonal basis.

The ports of Los Angeles and Long Beach announced their ambitious Clean Truck Program in late 2006 with the goal of cutting port-generated diesel pollution by 45% within five years. A key action item included replacing roughly 16,800 old harbor trucks with newer trucks that burn ultra-low-sulfur diesel fuel and meeting rigid pollution standards. The initiative to replace old trucks was estimated to cost close to $2 billion. The ports would subsidize 80% of the cost of buying a new unit, or pay the full cost of refitting a 1994 or later truck by imposing a $35/TEU fee on cargo owners. Pre-1989 trucks were denied entry to the port from 10/1/2008 and by 1/1/2012, all harbor trucks would be 2007 or later models. However what began as an epoch-making environmental stewardship initiative has transformed into a controversial tug-of-war embroiling the ports, labor unions, environmentalists, the trucking lobby, and most recently the Federal Maritime Commission (FMC).

Although opposition to the ports' plan began almost as soon as it was announced, it was the Port Fee Services Agreement submitted to the FMC for anti-trust immunity that created the most recent hurdle. The regulatory agency determined in late October that

implementation of some aspects of Clean Truck Programs may reduce competition thereby increasing cost and affecting services. In particular, the Port of Los Angeles' plan to switch from owner-operators to employee drivers and other operating concessions demanded by the two ports have been most controversial. The ports on their part have remained steadfast and contend that FMC has no jurisdiction over the case while the regulatory agency is seeking unprecedented legal injunction against the two ports. The ports have begun collecting the $35 per container fee from 2/18/09 after a two month delay that cost them a million dollar a day in lost revenue. Meanwhile, many truckers and shippers are making their own private financing arrangements, avoiding the port bureaucracy and eliminating the $35 fee. As this gains further popularity, port subsidy program may be relatively short-lived. Long Beach has a current policy of extending only 50% fee exemption for privately financed trucks ordered after 10/1/08 which is difficult to justify. Every port in the nation is looking at introducing their own versions of Clean Truck Programs hopefully without the legal mess created in Southern California.

Maritime Security

As per Department of Homeland Security statistics, almost a million transportation workers are now enrolled in the TWIC (Transportation Worker Identification Credential) program. Its primary objective is to proactively approve those who may need unescorted access to secure areas within a port including ships. Presently, 36 of the 42 Captain of the Port Zones mandate the need for a TWIC card for unrestricted access. The final date of nation-wide full implementation is 4/15/09. This has a direct impact on U.S. merchant mariners as a TWIC becomes essential for any dealings with the Coast Guard.

The C-TPAT (Customs-Trade Partnership Against Terrorism) program, codified in SAFE Port Act (2006) was reviewed in previous issues by this author. Its goal is to prevent the entry of weapons of mass destruction into the U.S. The C-TPAT members benefit from fewer physical inspections with only one out of every 33 containers arriving by sea being subject to inspection in 2008. A 2008 GAO Report on the program acknowledged the improvements made but cited weaknesses in validation and record management. The Report advised the Customs and Border Protection Agency to remedy those and also develop performance measures to assess the program's effectiveness in improving supply chain security.

The 100% scanning of all U.S.-bound containers in foreign ports by July 2012, mandated by SAFE Port Act remains controversial. It is unlikely that this measure will be accomplished because of ongoing political, technical and procedural problems and the concern was reaffirmed by the new Secretary of DHS. A World Customs Organization study to assess the economic impact of the 100% scan law identified major direct and indirect costs while recognizing some benefits. All import containers are now required to have tamper-resistant seals that meet ISO standards from mid October, 2008. This may soon apply to export containers as well as those that cross the border through surface modes.

International Issues

New IMO Air Emissions Standards

The Marine Environmental Protection Committee (MEPC) of the International Maritime Organization (IMO) adopted amendments to MARPOL Annex VI in 2008. The amended provisions will lower the global cap on sulphur content in marine fuel, progressively lowering it to 0.5% by 2020 and aggressively limiting sulphur oxide emissions. Certain ships constructed from 2016 onwards must have engines with very strict controls on nitrogen oxide emissions; greenhouse gas emissions from ships will also be reduced. These changes meet the stated U.S. objectives and are expected to dissuade individual states from freelancing and establishing their own counterproductive environmental regulations. Subsequently, President Bush signed into law the Maritime Pollution Prevention Act of 2008 (H.R. 802) and delivered the diplomatic instrument of ratification to the IMO, making the U.S. the 53rd state to ratify Annex VI. As a signatory, the nation can designate one or more Sulphur Emission Control Areas (SECA) off its coast where the emission level would drop to 0.1% by 2015. The U.S. and Canada are reportedly planning to establish the world's largest SECA which will extend 200 miles off the joint coastline. The stronger international standards will have significant overall positive effect on air quality and public health.

Shipbuilding Crossroads

The shipbuilding orderbook is currently valued at around $500 billion of which about 75-80% is bank financed. One immediate effect of the current credit crunch is that ship financing has become difficult for owners; furthermore, shipbuilders themselves are experiencing financial problems. Despite that, 14 new Chinese yards and five new Korean yards came on line in 2008, building ships 30,000 DWT or more. Chinese yards have announced plans to increase deliveries in 2009 by 75% and Koreans by 32%. As per 2009 Platou Report, unless there is 35-40% deletion of the current bulk carrier and containership orderbook and a one-year delay for 20% of 2009 deliveries, there will be structural overcapacity in the market. Structural overcapacity is a precursor to prolonged shipping depression, reminiscent of the period 1974-86. Order cancellations and selling new ships at discounted prices have already started depressing ship values. Some Chinese shipyards have announced the cancellation of 1/5th of their orders. During the entire month of December 2008, Japanese yards received six new orders, a 91% decline from December 2007. New orders have dried up worldwide in most categories.

End of Liner A/T Immunity in EU Trades

The European Union (EU) competition rules became fully applicable to the maritime sector with the lifting of liner conference block exemption on 10/18/08. It is now illegal to engage in conference activities in EU trades. Liners are however allowed to continue their membership in consortia operations that provide joint services but not price-fixing. There is a general feeling that this option will also be curtailed further by 2010. Even the operation of tramp shipping pools and pooling arrangements is coming under EU

scrutiny. A pool involves a number of ships of the same type owned by different owners that are operated under the same commercial management. EU is expected to look at each pool on a case-by-case basis to ascertain whether the main purpose of the pool is joint production or joint marketing. While joint production may continue in future, joint marketing may become a past privilege.

Liner Strategies

If liner operators anticipated their worst outcome in 2008 to be the elimination of antitrust immunity in EU trades, they were sadly mistaken. There were dire predictions about the gloomy fate of the industry last year but it was not expected to reach calamitous proportions. Sadly for the liner operators, the market literally fell off its bottom during the 4th quarter and is worsening in 2009. Freight rates have dropped in the trans-Pacific trade with most ships sailing 1/3rd empty. With no conference system to hold water, the Asia-Europe trade, an industry savior in 2007, took a terrible beating in late 2008. Some carriers dropped freight rates competitively to an extreme level of marginal cost pricing, charging only the applicable surcharges. As per Port Tracker statistics from National Retail Federation and IHS Global Insight, US retail container traffic dropped 7.9% in 2008 and will sink another 12% in the first half of 2009. As late as end August 2008, US exports were growing at 20% and many exporters complained of container shortage. But even the lower priced U.S. exports declined subsequently due to low demand, and the shipment of commodities like waste paper has literally hit the trash. There are so many dire forecasts in the market today based on various assumptions; as an example, the 2009 trans-Pacific trade alone is expected to drop anywhere from 4.1% to 15% depending on the source and its underlying assumptions.

Four container operators failed in late 2008 and the maverick Senator Lines, under Hanjin ownership, bankrupted in early 2009 citing falling volumes, increasing competition and rampant overcapacity. Meanwhile, containership orderbook still exceeds 50% of the current fleet and global container carrying capacity is projected to rise another 12.7% in 2009. The confounded carriers are resorting to various strategies, conventional and unorthodox, to deal with their predicament. Traditional cost cutting and administrative optimization measures are pursued by all carriers with the American President Lines' move to downsize staff and move to Phoenix, AZ from Oakland, CA being a classic example. The reduction in bunker cost during the latter part of 2008 has made it pointless to pursue a slow-steaming strategy any further. A preferred option is to control the supply by idling ships at anchor or alongside, or laying them up. Operators are releasing chartered tonnage as they come off their contract; beneficial owners then lay up those ships. In the case of owned ships, operators prefer laying up older tonnage. One major operator has announced chances of laying up 1/4th of its total tonnage.

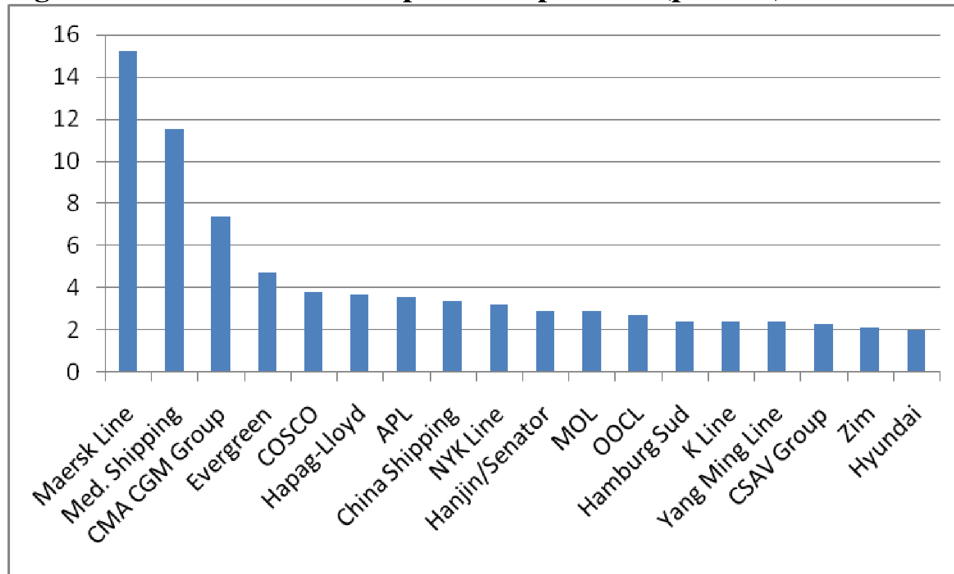
One liner strategy is to save the high cost of major canal transits. With the cost of Panama Canal transit now reaching $250,000 for a fully laden Panamax ship and $600,000 for a new genre megaship transiting the Suez, operators' intentions seem rational. Maersk Line is routing its Asia Europe Service round the Cape of Good Hope thereby not only saving the transit fee but also avoiding the pirate-infested waters off the Gulf of Aden. The service, provided with eight 11,000 TEU ships and one back-up 8,500

TEU ship, will add 5 to 7 days on eastbound transit times to Asia to cover the additional 4,000 miles. Carriers have approached the Panama Canal Authority to suspend planned increase in canal tolls and some are contemplating voyages round the Cape Horn. Overcapacity in the market and the low cost of bunkers support this circuitous voyage strategy.

The members of the Transpacific Stabilization Agreement (TSA) approached the FMC in late 2008 to amend their discussion agreement seeking authority to discuss capacity issues, driven by the 8% drop in eastbound container volume. The 14 carrier members of TSA have a marketshare of 85% today and are restricted to discussing rates and industry conditions. The request would have gone into effect on 2/1/09 had not the FMC asked for additional information which prolonged the review period by another 45 days. Sensing futility and likely denial, TSA and the carriers withdrew their request in mid-February.

After much ambiguity and posturing, Hapag-Lloyd was purchased for $5.8 billion by Hamburg's Albert Ballin investor group. There were reports that the buyer wanted to renegotiate the original deal agreed in October 2008. This gives Kuehne and Nagel, the global logistics and supply chain leader a 25.1% stake in Hapag-Lloyd. There are continuing rumors of a merger between Hapag-Lloyd and Hamburg Sud, the other Hamburg-based operator. With market conditions deteriorating, further consolidations are anticipated in the sector which is still highly fragmented. Figure 3 shows top liner operators with 2% or higher marketshare, some of who may become candidates for a merger or acquisition. It should be noted that liner participation is only a minor portfolio for many of the firms listed in Figure 3.

Figure 3. Marketshare of Top Liner Operators (percent)



Source: Alphaliner Mar. 2009

Piracy

Maritime piracy made international headlines in 2008 with the whole world condemning this despicable act against humanity. Piracy targets during the year included a variety of ships including a U.S. naval supply ship that was attacked in September. The prize catch of the year was however the Saudi Arabian VLCC *Sirius Star*, fully loaded with 2 million barrels of crude oil valued at $256 million, staffed by 25 crew members while sailing on a $47,000 per day time charter. The incident took place 400 nautical miles off the Kenyan coast. In summary, as per International Maritime Bureau (IMB) statistics, there were 293 acts of piracy against ships in 2008 compared to 263 in 2007. These resulted in 49 hijackings and 889 crew hostages, surpassing prior records. In addition, 46 additional ships were fired upon. Pirates used guns in 139 incidents, almost twice as many as in 2007, injuring 32 crew members and killing 11 with 21 missing and presumed dead. There were 111 incidents off the Gulf of Aden, 50 of them during the months of September, October and November. Nigerian waters were the next most pirate-infested with 40 reported incidents that resulted in 27 boardings, five hijackings, and 39 crew member kidnappings. Many incidents off Nigeria often go unreported according to IMB.

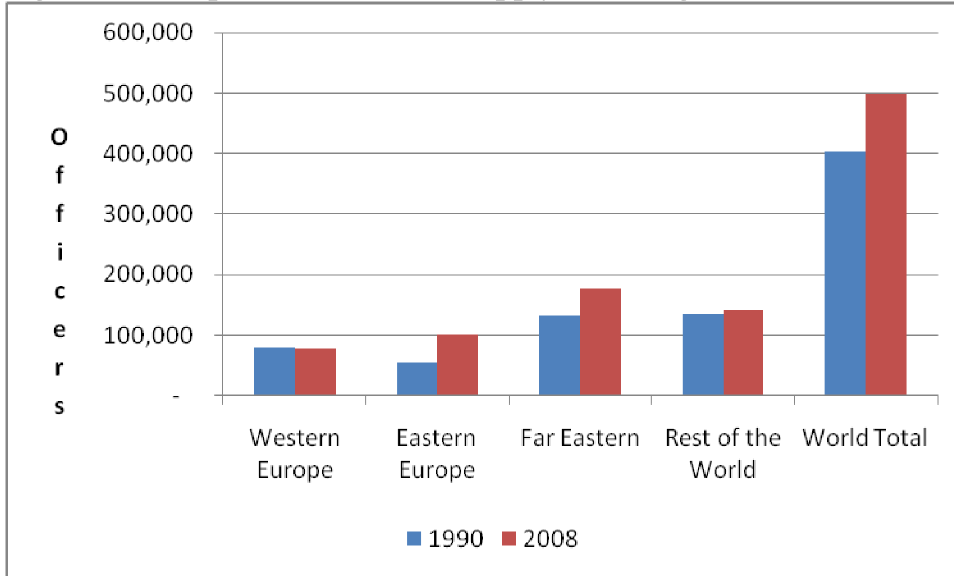
The economic coast of maritime piracy is becoming substantial. Somali pirates operating along its 1,880 miles of free-for-all coastline reportedly earned between $50-100 million in 2008. An approximate estimate of the total cost of maritime piracy today is well over $500 million per year. This comes through the added costs of altered sailing patterns, cost of security escorts, armed guards and hazard pay for mariners, and war risk insurance premiums. The cost of insurance alone has gone up from $500 per trip to $20,000 or higher. Some shipowners are now charging a piracy surcharge to cover the additional expenses. Naval ships and assets from 20 nations are currently active in the pirate infested Somali waters. However, with a million square miles to monitor, this is a formidable challenge. There is usually about 15 minutes between sighting a pirate boat and their attempting to board the target. Most attacks occur during daylight hours. Ships doing speed of 14 knots or less, and with freeboard less than 25 feet are ideal targets for Somali pirates. Reportedly, given the potential bounty involved, many local fishermen have switched over to piracy along with most former members of Somali security forces who have been unpaid for several years now. When apprehended, some pirates even claim that they are the self-appointed local coast guard, diligently protecting their maritime domain.

As per UN Resolution 1851, adopted on 12/16/08, member states may conduct air attack or go on land to fight piracy for the next calendar year. The EU Naval Force has initiated Operation Atalanta to support Resolution 1851. The Combined Maritime Forces has announced the establishment of CTF-151 to focus solely on anti-piracy issues whereas the earlier CTF-150 would focus on the more general deterrence of destabilizing activities. The US, UK and EU will sign bilateral agreements with neighboring countries to transfer alleged pirates and conduct fair trials locally given the legal lacuna in Somalia. There is a current lull in piracy incidents off Somalia. It is difficult to state whether this is an outcome of increased anti-piracy measures or the strong North East Monsoon winds that last until March. The only definite positive development in maritime piracy today is a relative decline in activities off Indonesia and the Malacca Straits where counter-measures are making a strong impact.

Seafarer Issues

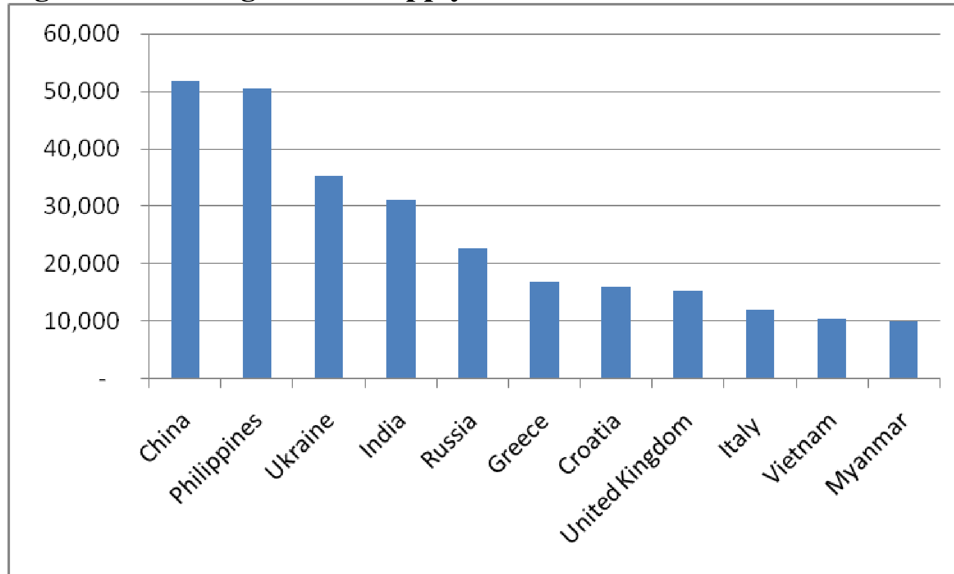
Global macroeconomic problems have temporarily supplanted crew shortage problems in the industry. This does not however erase the inherent problem which as per the most recent Drewry/Precious Associates Annual Report may culminate in a shortage of about 42,700 officers by 2013. This is after discounting for likely newbuilding order cancellations and increase in ship recycling. Figure 4 shows a comparison of officer supply from 1990 (BIMCO/ISF Data) to 2008 (Drewry/Precious Report). The main supply nations for Western Europe are Greece, United Kingdom and Italy. China, Philippines and India supply 75% of the Far Eastern supply. Ukraine, Russia and Croatia dominate the supply from Eastern Europe. Figure 5 shows the leading supply nations in 2008, and Figure 6, the fastest growing supply nations. Seafarer wage increase of up to 12% is expected in 2009 especially in the tanker sector.

Figure 4. Comparison of Officer Supply from Regional Blocks



Source: Drewry/Precious Associates Limited, 2008

Figure 5. Leading Officer Supply Nations in 2008

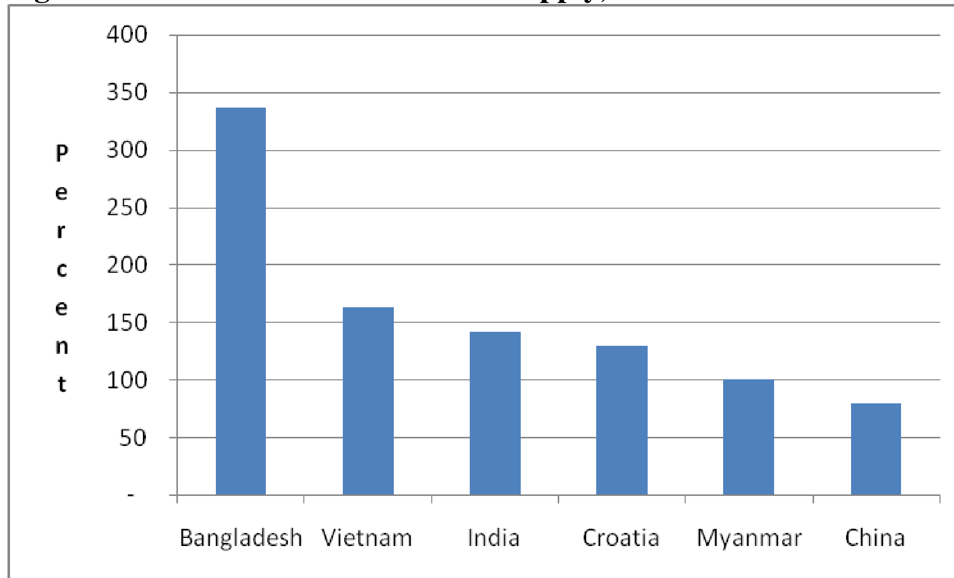


Source: Drewry/Precious Associates Limited, 2008

Although cutting back on training may be very appealing in difficult economic times, it would behoove the owners and operators to maintain if not expand their recruitment and training initiatives. Recent reports indicate that recruiting seafarers is becoming difficult in many fast growing Asian countries. This could become a huge problem as Asian seamen presently account for 44% of the world body of sailors and in flags such as the ocean going Japanese fleet, it is 94%. IMO launched a *Go to Sea* campaign in November 2008 to attract new entrants to the shipping industry. The U.S. initiative to provide a maritime-based charter school curriculum in prominent coastal cities is a commendable development.

It would also help if the working conditions at sea were to improve. The recent trend toward criminalization of innocent seafarers through a seemingly *reverse burden of proof* standard imposed on innocent merchant mariners does not bode well. In the *Hebei Spirit* case discussed last year, the two senior officers were found not guilty by a South Korean lower court in June 2008 only to be reversed by an appeal court in December. They were given tough jail sentences although their actions under severely adverse weather conditions were endorsed as extraordinarily prudent and seamanlike by virtually every professional association of merchant mariners. After notable global protest, the *Hebei Two* received bail in early January. They are still prohibited from leaving Korea although no one knows why.

Figure 6. Fastest Growth in Officer Supply, 1990 to 2008



Source: Drewry/Precious Associates Limited, 2008

Lloyd's Register has developed a "Seafarer's Bill of Rights" to facilitate the 2012 implementation of the ILO Maritime Labor Convention on new and existing ships. The new convention sets minimum standards on all aspects of working at sea and is expected to positively impact crew recruitment, retention and maritime safety in general. In some U.S. ports, implementation of the mandatory TWIC card has resulted in charging foreign seafarers as much as $300-400 for simply escorting them each time they step on port premises. Some terminals have banned shore leave altogether. It is time to come up with a rational policy toward the treatment of legitimate foreign seafarers wanting to step ashore in this country. The recent USCG initiative to establish a working group to explore this issue is noteworthy.

Outlook

By all accounts, market conditions today point toward a brewing perfect storm. Every shipping market has been affected negatively including the sub-markets with the sole exception of the ship demolition sector. Trade volumes will continue sagging in all major markets which along with scheduled new deliveries will worsen the tonnage oversupply despite substantial newbuilding order cancellations and delays in delivery time. Capacity utilization will decline further and shipowners will lay up more tonnage especially in the liner sector. Many operators will opt for cold lay-up to cut back their escalating operating costs. Key stakeholders, preoccupied with major fiscal problems, will inadvertently let the seafarer shortage problem slip off the radar. The global growth model perfected after China's entry into the WTO will undergo radical restructuring once the global economy recovers. Chinese policymakers will lean toward the Indian model of promoting internal consumption rather than depending strongly on export-driven growth. Major developed nations that outsourced production to China will reengineer their business model. The American consumer is undergoing a psychological catharsis that may well extend beyond two years. Recovery may come from 2010 to 2012, Europe

being the last to recover. All these do not bode well for shipping and the liner sector in particular.

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