

Ref: 2014-005

10 February 2014

**To : The President of the Stock Exchange of Thailand**

**Subject : Submitting the Annual Review 2013 of Precious Shipping Public Company Limited**

## **ANNUAL REVIEW**

**2013 a year of contrasts:** And what a stark contrast it has been! In the first half of this year quite a few companies went belly up with STX Pan Ocean, Today Makes Tomorrow and Excel Maritime, just to name a few, being the most visible and spectacular of the lot. The second half of the year was like a cooling salve on a burning wound with rates rebounding to levels where almost all owners would have covered their operational costs and some would have even started to make profits. The averages for the BDI tell this story quite succinctly. The average BDI for the first half was a measly 842 points, the 3rd lowest in history. That coming on the back of almost 5 full years of freight market misery was the straw that broke the proverbial camel's back and led to the rash of chapter 11 filings, restructurings and bankruptcies. The average BDI in the second half of the year at 1,564 points, the 12th highest in history, highlights the contrast between the two halves of this year. The speed at which the Freight Markets change highlights the extremely volatile, and basically unpredictable, nature of our business.

Marine Money had a great answer to the perennial question of why is it that we love shipping. They stated "Is it the variety, the characters; is it the simplicity of transporting a cargo from A to B and being the vital cog of world trade; or is it the complexity of ship types, hazardous cargos, high capital investment, uncontrollable supply and demand. One reason is certainty because no one day is like another and there is very little certainty to rely on. Shipping is indeed unpredictable. The pieces of the jigsaw are many and those pieces are a moving puzzle. Ship supply is relatively easy to project and the signs are mixed. We are getting over the last bubble but we must make sure we do not create the next bubble by over-ordering. Cargo demand

on the macro scale may also be easy to predict but on the micro scale – individual ports and producers – the story is very different with unexpected politics, inclement weather and a host of other variables playing havoc with plans and forecasts. But isn't that why we all love shipping!"

**Shipping banks** contributed to the current debacle with 'easy loans', during the boom years prior to and including 2008, allowing ship owners to over-order/buy ships with little equity and no forward contract coverage. Banks are now struggling to extricate themselves from these bad loans as asset values have declined precipitously. The strategy of 'amend, pretend and extend' and 'kick the can down the road' has finally come to an end. Restructuring, inside or outside the bankruptcy courts, has happened in quite a few cases and others are in negotiation. As a result many traditional shipping banks have been selling their loans in specifically targeted companies or reducing their portfolio via a bulk sale of shipping loans to others or simply exiting this business all together. All these actions result in losses meaning ship lending banks will be loath to lend any more funds to our industry. Ship finance is, therefore, not going to get any easier. The lack of current/future bank finance and absence of new equity sources will help to stabilize the markets, but the economic outlook for world trade suggests recovery will arrive sometime in 2014 and all these reluctant lenders will be back again, providing easy credit, and the cycle will start once again.

The situation at the **newbuilding shipyards**, especially those that had been newly developed in the recent past, has become impossible. Those that have managed to survive have reduced their existing capacity via consolidation; some have gone back to block-building and ship repairing; and others have converted to 'green' recyclers. Newbuilding shipyards are actively marketing their vessels as 'eco friendly' and describing them with speed and consumption figures that appear very attractive for shipowners and charterers. In other parts of our report we have listed some energy saving measures which can be used effectively. While many of these methods have been incorporated with the superior technology available today, the figures being bandied about tend to be somewhat inflated and are more realistic when corrections for variables such as calorific value of fuel, design, scantling draft and 'Sea margins' are taken into consideration. China and South Korea are home to many newbuilding shipyards that have been reported in the shipping press as having closed down or being in deep financial distress.

**Scrapping** in 2012 had a stellar all time record of 35.97 MDWT dry bulk ships being torched. However, 2013 scrapping came in at a disappointing 21.39 MDWT. **Slippage** is the difference between the DWT of new ships on order at shipyards at the beginning of the year and

the actual deliveries of DWT of new ships at the end of the same year. Slippage in 2013 came in at 38% which was higher than the average for the past 5 years. As a result, the net increase in supply for 2013 was 42.45 MDWT with a yearend number of 735.19 MDWT! This amounted to a 6.13% net increase in the World Dry Bulk fleet, the smallest in the last 8 years! With slippage and scrapping demonstrating such volatility, the net increase in DWT of ships in future years will remain difficult to predict with any real accuracy. We think that slippage and scrapping will retain their unpredictability and will fluctuate inversely with the strength of the Baltic Dry Index (BDI). If we assume annual slippage at 35% and scrapping at 20 MDWT, then net increase in the Dry Bulk Sector would be 3.90% or 28.64 MDWT to 763.83 MDWT at the start of 2015. Applying the same assumptions we get a net fleet growth of 26.79 MDWT or 3.51% to 790.62 MDWT by the start of 2016.

On the **demand front**, the large clouds on the horizon have begun to dissipate. **China**, the big mainstay of the dry bulk markets, has struggled with GDP growth at an anemic, at least for China, 7.7% in 2013. China's economy in 2014 is expected to grow around 7.5 to 8% based on the assumptions of modest easing, prudent monetary policy, clampdown on corruption, increase in domestic consumption and an increase in exports due to the healthy macro economic trends exhibited in their largest markets, the USA and the EU. Economic reforms will continue under the New Leadership. China is trying to stimulate its domestic economy and curb its dependence on its export markets. According to various reports, crude steel production is forecast to rise to 810+ MMT and coal/iron ore imports are expected to reach 350+/850+ MMT respectively in 2014.

Economic traction is beginning to take hold in the **USA**, the largest market in the world, where the Federal Reserve has started tapering of QE as the economy is able to stand on its own two feet.

The **EU**, including the UK, continues to provide improved economic growth with Spain being the latest member to show improving numbers. The EU is the second largest economy in the world after the USA and one of the largest exporting blocs in the world. If their economies start to improve they will need more bulk imports to convert to semi-finished and finished products that would need to be shipped out requiring the services of our industry.

**Japan**, the second largest dry bulk player in the world, is faring well under Abenomics. Nuclear power is shutting down so more coal is being imported. Japanese companies have made windfall profits, thanks to the Yen being allowed to depreciate from 75 to 105 Yen to the Dollar,

and will likely reinvest in Japan as well as all their manufacturing plants in Asia/around the world requiring more dry bulk imports.

**India**, with its weak currency and bumper monsoons/crops, might become a very large exporter of Agricultural products from their smaller, shallower drafted and inefficient ports which would result in massive congestion and consequently a reduction in effective supply of smaller ships. This would push the small handy sector in the same way that iron ore is currently pushing the cape sector.

The consequence of increased demand would be a reduction in the scrapping of older ships as we have already seen in 2013. In the next four years time i.e. before the end of 2017, 16.63% of the current dry bulk fleet of 735.19 MDWT would be over 20 years of age, equal to 122.28 MDWT, and some part or all of them could head for the scrap yards.

To keep things in perspective with regards to PSL, we would like to highlight the annual net profit/loss over the past few years.

<b>Year</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Av. BDI</b>	2,617	4,510	3,371	3,180	7,065	6,390	2,617	2,758	1,549	920	1,206
<b>Net Profit \$m</b>	24.8	110.1	154.2	92.6	125.1	148.1	88.1	35.5	23.6	4.5	17.5
<b>Av. No. of Ships</b>	28.39	44.63	52.89	54.00	44.97	44.12	32.79	21.39	21.91	30.44	38.93
<b>Net Profit/Ship \$m</b>	0.87	2.47	2.92	1.72	2.78	3.36	2.69	1.66	1.08	0.15	0.45

Our results for 2013 must be viewed against the average BDI for the year of 1,206 points, being the 9th lowest figure in BDI history. Whilst most of our peers were seeking protection under Chapter 11 or undergoing restructuring of some sort or the other, we managed to turn in a tidy profit. 2009, 2010 and 2011 will be remembered as the ‘consolidation years’ at PSL when we shrank our balance sheet, reduced our fleet size and prepared for the rejuvenation of our fleet with modern, efficient and larger ships.

## **AWARDS AND ACCOLADES:**

PSL were the winners of the **Maritime Security & Safety Award** at the Seatrade Asia Awards 2013 ceremony held at the JW Marriott Hotel, Hong Kong on the 21st of June 2013. At the same ceremony, PSL was a finalist in '**The Wet/Dry Bulk Operator Award**' category. The Marine Money June/July 2013 '**worldwide ranking**' issue listed the top 10 performers over the last 8 years and PSL was ranked 6th in the world over that period of time! The Stock Exchange of Thailand gave PSL the **Best Investor Relations award** in the mid-cap sector at their annual SET Awards 2013 in November! And to validate this award from the SET we were in **the South East Asia Top 100 ranking** in this year's IR Magazine's investor perception survey in their November/December issue. We were finalists for the IBJ Awards 2013 for the **Bulk Ship Operator of the Year** in October. We were also finalists for the Lloyd's List Asia Awards 2013 in the **Ship-manager of the Year** category held in November.

## **FINANCIAL HIGHLIGHTS (THAI BAHT TERMS) AND REVIEW OF THE YEAR:**

In terms of operations, during the year under review, the Total Revenues of the Company were Baht 4,828.61 million [2012: Baht 3,828.02 million] and the Company earned a Net Profit of Baht 527.77 million [2012: Baht 141.03 million]. The Shareholders' Equity of the Company is Baht 15,631.03 million [2012: Baht 14,484.23 million] and the Total Assets of the Company have increased during the year to Baht 25,509.76 million [2012: Baht 24,029.69 million] mainly due to the delivery of 4 Ships in 2013. The increase in Total Assets would have been higher had internal cash reserves not been utilized for prepayment of loans, payment of dividends, advance payments towards new buildings and part-payment of Ships acquired during the year. It is also to be noted that Total Assets in Thai Baht (Reporting Currency) being restated from U.S. Dollars (Functional Currency) was higher due to depreciation of the Thai Baht against the U.S Dollar as at the end of year 2013 as compared that at the end of year 2012.

During the year, the Company earned Baht 522.34 million [2012: Baht 150.83 million] as Net Profit before Exchange gain of Baht 13.33 million [2012: Exchange Loss of Baht 5.65 million] and Income Tax of Baht 7.90 million [2012: Baht 4.15 million]. In terms of the Earnings, the Company's ships achieved an average time-charter equivalent earnings of USD 7,508 per day per ship as compared to USD 8,221 per day per ship for year 2012. The Net Ship Operating Income (net of voyage disbursements and bunker consumption) in absolute terms was

higher than that of the previous year, mainly due to higher average ships operated in 2013 (39 ships) as compared to 2012 (30 ships). However average time-charter equivalent earnings per day per ship in year 2013 was lower as compared to year 2012. Absolute ship running expenses (Opex), also increased by about 33%, mainly due to an increase in average number of Ships operated in 2013 as compared to 2012. Average ship running cost per day per ship (Average Opex per Day) during the year was marginally higher as compared to 2012. The technical downtime was an average of 6.85 days per Ship, which is very good considering the average age of the fleet of about 11 years in 2013. The Company received Baht 6,602.93 million through novation/cancellation proceeds and recorded gains of Baht 935.41 million on account of novation/cancellation of 12 shipbuilding contracts during the year. As a result of the receipt of novation/cancellation proceeds, the Company continues to maintain a high level of liquidity during 2013 and has paid dividends of Baht 415.47 million during the year 2013.

We also undertook an “in-house” exercise to determine Total Return to Shareholders, which was calculated for the 20 years that we have been operating as a listed entity. Based on the closing share price as on Monday the 16th September 2013 of Baht 19.50 per share (we started trading on the SET on the 16th September 1993) and assuming you had subscribed at the IPO, then, at the end of 20 years, you would have 15.11 times your initial investment. This return does not assume any re-investment of the dividends into shares or any interest on the dividends received.

#### **FLEET REJUVENATION:**

At the start of 2014, our fleet had 40 ships-in-the-water (9 Supras and 31 Handy sizes) with an aggregate capacity of 1,351,583 DWT. This works out to an average 33,790 DWT per ship, and an average age of about 11 years. If we looked at just the Supras they had an average 55,707 DWT per ship and an average age of 2 years. The Handies had an average 27,427 DWT per ship and an average age of 14 years.

In a highly capital intensive business with very high leverage characterized by unpredictable and wildly swinging cycles, the timing of the purchase of ships is possibly the single most important decision that has to be made.

The Fleet Rejuvenation Plan of replacing the aging ships from our fleet with younger, better geared, economical and larger units began with the sale of 35 older ships. The replacement program since then has progressed well with the purchase of 7 second hand ships (average 5

years old when purchased) in the 30/34K range, 2 brand new 34K re-sales, and 6 brand new 57K re-sales during 2010/2012. Three brand new 34K ships from ABG have also joined our fleet during this period. 2 second hand (average 2 years old when purchased) and one brand new 53K ships were also added to our fleet. Additionally we are building 4X20K Cement ships for delivery during 2014 in China and, at that same yard, we have contracted another 2X38K ships for delivery in the second half of 2015. We have further contracted 2X64K re-sales at a different Chinese yard for delivery in Q3 2014 and a further 8 (4X64K + 4X38K) new builds at another Chinese yard for delivery between second half of 2015 and first half 2016.

The BHSI (Handysize index) and the BSI (Supramax index) have both gone up since the middle of September 2013. Asset prices have similarly gone up right through 2013, most sharply in the second hand ships, less so in re-sale candidates and least of all for brand new ships. The reason for the differential pricing of these three categories is the time lag between purchase and their respective delivery positions: second hand ships delivery is almost immediate; re-sales are within 6 to 12 months whilst new ship deliveries are within 12 to 24 months. Faced with this array of price choices, we have taken the safest route keeping the lowest price points in mind by buying a mix of some re-sales and some brand new ships as outlined in the previous paragraph.

We will also try and fix our new build/re-sale purchases in advance, if possible, on longer term contracts before they are even delivered to us. Hopefully that way, we will enjoy any healthy upward movement in the freight market not just on the ships that we currently have in the water, but also those that are scheduled to be delivered to us in the future without taking any undue risk of the cycle turning against us.

**ABG Shipyard:** We had contracted a total of 21 ships (12X34K, 6X54K and 3X20K Cement ships) to be built at ABG. From these the first 34K ship was delivered in the middle of June 2011, the second in the end of March 2012 and the third in January 2013. We then profitably 'sold', through novations, nine shipbuilding contracts (5X34K and 4X54K) to an unrelated third party during 2011 to 2013. Thereafter, we cashed refund guarantees on another 8 ship building contracts (3X34K, 2X54K and 3X20K Cement ships) during 2013 and January 2014. That leaves one outstanding ship building contract (1X34K) which has a latest delivery date of July 2014. We will have the option of cancelling this ship if it is not ready for delivery by its contractual delivery date, re-selling this 'late' ship building contract to others, or re-negotiating a fresh contract/price for this 'late' ship. That will bring an end to the ABG saga.

## **HIGHLIGHTS OF 2013:**

**The dry bulk market** did not get off to a good start in the first half of 2013 with three very large, and spectacular, bankruptcies. This was followed by a dramatic turn around with listed shipping companies share prices literally taking off, just like the BDI did, in the second half of 2013. The 3rd quarter was a tribute to Chinese iron ore imports, Brazil taking a large chunk of the same and Cape size ship time charter rates going up from about USD 4,200 per day in the early part of the year to peak at about USD 42,200 on the 25th of September 2013.

**The Supply Side** numbers are finally showing light at the end of the proverbial dark tunnel. A total of 927 dry bulk ships or 63.84 MDWT entered the supply side during 2013. At the same time, owners have recycled as many ships as possible. Scrapping this year has not matched last year's record of 35.97 MDWT with 46 Capesizes, 57 Panamaxs, 55 Supramaxes, 102 Handymaxes and 167 Handysizes scrapped, equivalent to 21.39 MDWT. This has resulted in the global dry bulk fleet strength, at the start of 2014, reaching 735.19 MDWT. 2014 and 2015 have 74.83/45.79 MDWT of brand new ships scheduled for delivery. If we assume annual scrapping of 20 MDWT (it was 21.39 for 2013) and apply a 35% slippage (it was 38% in 2013) in expected annual deliveries, 2014 ends with a world fleet of 763.83 MDWT for a growth rate of just 3.90% over the year. Under the same twin assumptions, 2015 ends with 790.62 MDWT for a growth rate of just 3.51% over the end-year total of 2014.

The tsunami of newbuilding deliveries has finally come to an end! However, ship owners with their tendency towards over exuberance have already started to fatten the order book with ever more number of new building contracts suggesting that the up-cycle will be more 'normal' with the next down cycle starting sometime during 2017/2018 and reaching a trough in 2019, of course, depending on the number of ships ordered when the markets are strong during 2014 to 2016.

The effect of the **Global Financial Crisis** is finally dissipating with the major economies starting on an upward economic growth pattern. As highlighted in earlier parts of this report, the USA has taken the decisive step of commencing QE taper as the Federal Reserve feels confident that the US economy is well enough to stand on its own two feet.

The largest economies within the **EU** block have started to grow with positive economic growth rates being exhibited by the UK, Germany, France and even Spain. The EU is the second largest economy in the world, just a bit smaller than the massive US economy, and an extremely large exporter. Positive growth rates in the EU block would have a substantial impact on the dry



bulk markets with large quantities of raw materials being shipped in and semi-finished/finished goods being shipped out.

**Japan**, the ‘sick man’ of the OECD under Prime Minister Abe, Abenomics and a ‘get out of jail free card’ has managed to kick start this moribund economy. With the yen depreciating from 75 to about 105 to the USD being the ‘get out of jail free’ card, most Japanese corporate have been making record profits, which will be ploughed back into capital assets not just in Japan but including other countries where they have manufacturing units. This should have a multiplier effect with even greater demand for dry bulk commodities to feed the ever growing and hungry manufacturing facilities at Japanese units all over the world. Coal imports into Japan have started to increase as a result of the Japanese population’s distaste for Nuclear energy that has been completely shut down following the Fukushima reactor melt-down post the Tsunami in March 2013.

**India**, the country that always flatters to deceive, may yet prove its support for the Dry Bulk markets as more and more coal fired port based Power Plants come on stream. Reports by the Paris-based International Energy Agency suggest that India could overtake China as the world’s biggest buyer of seaborne coal and increase its annual coal imports to the 300-350 MMT mark before the end of 2016. India's coal imports rose 21% to 152 MMT during 2013 as power producers bought more due to low prices and a domestic shortage and shipments could rise to 170 MMT during 2014. India is the No. 3 importer of coal, behind China and Japan. The US is already exporting record volumes of coal to Asia and Europe because it prefers to use its cheap, cleaner and abundant domestically produced Shale Gas as the energy source of choice. This trend has boosted trade for dry bulk carriers adding to the tonne-mile equation. It therefore appears that King Coal will remain a strong supporter of the Dry Bulk Markets for years to come. With its weak currency and bumper monsoons/crops over 15 consecutive years, India might become a very large exporter of Agricultural products from its smaller, shallower drafted and inefficient ports. This would result in massive congestion and a consequent reduction in effective supply of smaller ships. This would help push the small handy sector in the same way that iron ore is currently pushing the cape size sector.

China, the big mainstay of the dry bulk markets, has struggled with GDP growth figures decreasing quarterly from 8.1% to 7.6% to 7.4% before finally rounding off the year at 7.7% for an annual average of 7.7%. However, China’s economy in 2014 is expected to grow around 7.5 to 8% based on the assumptions of the continuation of modest easing, prudent monetary policy,

increased domestic consumption and an increase in exports due to the strengthening macro economic conditions in the world. The fact that the once-in-a-decade political transition occurred in the middle of a five-year economic plan suggests that there will be no fundamental change in economic policy and economic reforms will continue under the New Leadership.

China's Iron Ore imports were an astonishing 820.30 MMT in 2013 or 10% higher than the 745.5 MMT in 2012! The November 2013 import figure of 77.84 MMT of iron ore was the highest monthly figure ever! According to various reports, China is expected to import between 850 and 900 MMT of Iron Ore in 2014. This import figure is contingent on import pricing parity versus domestic production and transportation costs. Provisional Chinese steel production for 2013 reached a staggering figure of about 774.57 MMT or about 8.1% higher than the already phenomenal figure of 716.5 MMT in 2012. According to various reports, China's steel production is expected to grow between 4% and 6% to reach a phenomenal 810 MMT of Steel in 2014. Coal represents about 80% of China's energy requirements. Historically, China was self-sufficient in coal, but that is no longer the case. China imported 126 MMT of coal in 2009, 164 MMT in 2010, 182 MMT in 2011, 288.9 MMT in 2012 and a whopping 322.01 MMT in 2013; making it the single largest importer of coal in the world, three years in a row, and displacing Japan from the pole position it had occupied continuously since 1975! Coal imports are expected to grow steadily but are contingent on import pricing parity versus domestic coal production/transportation costs. In a country that currently produces and consumes some 3,800 MMT of Coal per annum, with the figure expected to grow to 4,150 MMT by 2015, even a small change in China's coal imports could have a dramatic impact on the Dry Bulk freight markets.

The BDI started the year at 698 points, but ended the year at 2,277 points just shy of its year high of 2,337 set on the 12th December due to a restocking of iron ore imports into China. It was the international price of iron ore that had fallen to a low of about USD 114 pmt landed in China during June 2013, compared to the cost of domestic production around the USD 135/140 pmt mark, which drove the restocking process in China. This of course led to an inordinate amount of congestion in the Cape size sector in China with the July 2013 import figure of 73.1 MMT of iron ore into China breaking all previous monthly records. This was followed by fresh monthly records in September (74.6) and November (77.8)! Another factor supporting the index was the 322.01 MMT of Coal that China imported during the year from places as far away as the USA and the ton-mile impact of this change from being an exporter to becoming the largest

importer. Finally, it was the scrapping of 21.39 MDWT of dry bulk ships that kept the BDI on life support.

The BDI average for 2012 was 1,206 points the ninth lowest average in BDI history, however, the average BDI of 842 points in the first half of 2013 was the second lowest in BDI history. The pain felt in the first half of 2013 was so intense that we had a spate of bankruptcies with Today Makes Tomorrow, Excel Maritime and STX Pan Ocean making up the 3 largest and most spectacular cases to be reported in the month of June 2013. To give this some perspective, the long term average for the BDI (1985 – 2003) prior to the recent Bull Run was 1,358 points; including the Bull Run period (1985 – 2010) was 2,133 points; and during the Bull Run (2004 – 2010) was 4,265 points.

We had suspected that 2011, 2012 and maybe 2013, would not be so kind, with many entities being forced to the wall due to the pressures being exerted on the freight market. We were, therefore, not surprised by the spate of financial restructuring and bankruptcies that we have seen during 2011 to 2013. With the BDI and rates moving up sharply in the second half of the year for the Cape sector and in Q4 of 2013 for the rest of the other dry bulk sectors, the intense pain felt by the market during 2011 to 2013, should hopefully, be a thing of the past.

The Time Charter Equivalent (TCE) earnings of our Fleet during 2013 averaged USD 7,508 per day per ship which was almost identical to our forecast of USD 7,500. In terms of daily average Operating Expenses (Opex), we were marginally higher than our target of USD 4,500 per day per ship reaching a figure of USD 4,535 per day per ship.

**Market Segmentation/Benchmarking:** During 2013, the Baltic Handy Size Index (28,000 DWT Index Ship) averaged 562 points derived from the average Time Charter (TC) rate of USD 8,179. Compared to that, our Handies (27,427 DWT, 2.1% smaller than the Index Ship) earned USD 7,139 underperforming the BHSI TC rate by 12.72%. Further, the Baltic Supramax Index (BSI) averaged 983 points derived from the average TC rate of USD 10,275. Compared to that, our Supramaxes earned USD 8,928, underperforming the BSI TC rate by 13.11%.

## **THE INDUSTRY OUTLOOK:**

Scrapping was not as strong as in 2012. 167 ships were removed or scrapped whilst 185 ships were added, resulting in an increase of 18 ships or 0.65%, with the world fleet increasing from 2,752 ships to 2,770 ships in our sector (10 – 30,000 DWT) during 2013. The continued weakness of the freight market is the main force driving the acceleration of scrapping rates. It

also helps that scrap steel prices have remained reasonably robust. It is, however, impossible to escape the conclusion that the age profile of ships in our sector will lead to a continued healthy scrapping rate in the future.

### **Comparatively weaker supply of new ships is expected for 2014 and 2015:**

**The Cape sector (90,000+ DWT: 1,856 ships of 321 MDWT at the start of 2014):** 327 ships of 60.5 MDWT or 18.9% of the existing DWT are scheduled for delivery up to end of 2017. In this sector, 256/400 ships of 48/72 MDWT or 14.9/22.4% will be over 20/15 years of age by 2016 and likely to be scrapped during 2014 to 2016.

**The Panamax sector (60 – 90,000 DWT: 2,201 ships of 167 MDWT at the start of 2014):** 752 ships of 54.1 MDWT or 32.5% of the existing DWT are to be delivered up to the end of 2017. The saving grace in the Panamax sector is that 375/743 ships of 26/54 MDWT or 15.8/32.1% of the fleet will be over 20/15 years of age by 2016 and would likely be scrapped during 2014 to 2016.

**The Supramax sector (40 – 60,000 DWT: 2,698 ships of 141.5 MDWT at the start of 2014):** 296 ships of 16 MDWT or 11% of the existing DWT are scheduled for delivery up to the end of 2017. In this sector, 429/741 ships of 19/34 MDWT or 13.5/24.1% will be over 20/15 years of age by 2016 and likely to be scrapped during 2014 to 2016.

**The Handymax sector (30 – 40,000 DWT: 1,467 ships of 50.6 MDWT at the start of 2014):** 388 ships of 14.1 MDWT or 27.9% of the existing DWT are scheduled for delivery up to the end of 2017. In this sector, 264/343 ships of 10/12 MDWT or 18.9/24.1% will be over 20/15 years of age by 2016 and likely to be scrapped during 2014 to 2016.

**The Small Handy sector (10 – 30,000 DWT: 2,770 ships of 55.7 MDWT at the start of 2014):** 135 ships of 2.6 MDWT or 4.7% of the existing DWT are scheduled for delivery up to the end of 2017. In our sector, 930/1,292 ships of 20/27 MDWT or 35.0/49.3% will be over 20/15 years of age by 2016 and likely to be scrapped during 2014 to 2016. With this extremely large overhang of very old ships, the supply dynamics appear to be the strongest in the small handy size sector, the sector in which we operate most of our ships, of the Dry Bulk Tramp Freight market.

When reading the above supply side numbers please keep in mind that the Slippage in delivery for 2008 to 2011 averaged 33%. In 2012 it dropped to 29% and in 2013 it went up to

38%. It is to be seen what these numbers will look like in 2014 and 2015 but we will not be surprised to see it fluctuate inversely with the BDI and availability of finance.

Our **Competitive Position** based on our existing 39 ships-in-the-water plus the 16 ships on order (6X39K + 6X64K bulk carriers plus 4 Cement ships) and the roughly USD 150 million of funds available to buy another 5 to 10 ships, makes us one of the largest players in this sector of the market. With the ownership structure in this sector being extremely fragmented, we are recognized as an established brand name with clients wanting to do business with us first before they take their custom to any of the other smaller, and potentially weaker, players within the sector.

Additionally, our plan to rejuvenate our fleet with younger, larger, better geared and more economical vessels from the market at, what could likely be, historically low levels will enhance our competitive position for years to come compared to our peers, who have probably purchased second hand ships during the past 4 to 5 years at historically high prices.

## **THE ISSUES FACING OUR INDUSTRY:**

With the Freight Markets increasingly more volatile than ever before, most prudent companies that have very little debt on their balance sheets and a lot of cash in their pockets will likely consolidate the industry. This could happen through the judicious purchase of second-hand tonnage or new building ships at historically low prices or via mergers and acquisitions. By whatever means consolidation takes place, it is to be welcomed, as it can only make life a bit better for the remaining participants.

## **SAVING ENERGY AND THE ENVIRONMENT – THE FUTURE OF SHIPPING**

Fuel efficiency has become a major issue for the Maritime industry, both for preservation of the environment and conservation of fuel, the cost of which is at an all- time high.

Ship builders are actively marketing their vessels as ‘eco friendly’ and describing them with speed and consumption figures that have previously never been achieved. While many of the following methods have been incorporated into designs using superior technology available today, and achieving great benefits, the figures being bandied about tend to be somewhat inflated and are more realistic when corrections for variables such as calorific value of fuel, design, scantling draft and ‘sea margins’ are taken into consideration.

Broadly, fuel efficiency of any ship can be improved by:

- A) Reducing the resistance (drag) of the ship, and thereby reducing required propulsive power.
- B) Increasing the mechanical and thermal efficiency of the propulsion and power generating systems on board.
- C) External appendages to harness external energy or recover lost energy.

**A) Components of Ship's resistance and ways of reducing the same:**

A ship's resistance (drag) is made of the following main components.

1. Viscous or frictional forces which act along the surface of the hull.
2. Pressure forces which act perpendicular to the surface of the hull.
3. Energy dissipation through hydrodynamic forces such as cavitation, eddies, turbulence in flow etc.

**1) Viscous or frictional resistance:**

As the ship moves in the interface of two different media (air and water) the above mentioned drag forces are created in both.

For most cargo ships, drag forces created in the air are negligible. However for special purpose high speed craft and naval ships etc. air drag plays an important role. This is similar to a car driving on the road; at speeds of 30-40 kmph the air drag on a car is not significant; but at speeds of 100-120 kmph or higher, air drag is significant and has to be taken into consideration in the design.

Viscous or frictional resistance is influenced by the friction between water and the ship's hull. It is related to the total submerged area of the hull and smoothness of the hull. The usual way of reducing viscous resistance is to improve smoothness by means such as stream lining, improved quality of paints, reduction of marine growth etc. Recently new technologies are being tried out, such as non-stick type coatings with lower wetting properties and introducing an air cushion between the hull and water.

For a given submerged surface area and speed, the ideal shape of the hull to reduce frictional resistance would be infinitely long and thin (like a surf board). However this is not practical considering other limitations such as building facilities, port facilities, maneuvering and stability. Hence optimization of the hull shape is necessary to achieve a balance between various conflicting requirements.

## **2) Pressure or wave resistance through water:**

When a ship moves in water, the flow pattern around the ship creates a high pressure zone immediately forward of the ship and another high pressure zone near the aft (or back) end. These high pressure zones give rise to wave patterns at the bow (front) and stern (back). The ship transfers some of its energy to create these wave patterns. This is called the wave resistance and it increases rapidly with an increase in speed.

The normal solution lies in modifying the wave pattern distribution by the shape of the hull, to negate one wave with the other. However, this method limits the vessel to operate within a particular speed range. At speeds outside this range wave resistance increases considerably.

The bulbous bow on high speed ships, such as container ships and passenger ships, where wave resistance is a major component of the total resistance is normally designed with this consideration in mind and is an attempt to optimize the pressure wave pattern around the hull. On the other hand, for slow moving ships such as bulk carriers and tankers the purpose of a bulbous bow is to avoid excessive loss due to eddies.

## **3) Resistance due to eddies, cavitation, turbulence in flow etc.:**

Whenever obstructions are introduced in the smooth flow of water (streamlines are interrupted), eddies are created. All appendages and fittings on the hull (rudder, propeller, stabilizing fins, bilge keels, anodes, etc.) are potential causes for the loss of power through formation of eddies, cavitation and turbulence etc. Similarly any abrupt changes in flow caused by openings in the shell such as sea chests, overboard discharges etc., also contribute to this type of resistance. Even protruding and rough discontinuities caused by welding deposits at joints of hull plates add to resistance.

These days modern shipyards use new technology to get smooth even welds on the hull surface. Bilge keels are laid along the lines of flow determined by model tests, anodes are being replaced by impressed current systems, and other appendages are designed to avoid break down in flow lines.

## **B) Increasing the mechanical/thermal efficiency of the propulsion/power plant onboard:**

### **1) Increasing the propulsive efficiency:**

The ideal propeller for max efficiency would have the lowest possible revolutions (rpm), the largest possible diameter, the lowest possible pitch, the minimum blade area ratio and the

minimum possible number of blades. These features are impractical to implement fully as they conflict with other requirements. The main engine would be much larger if the same power is to be obtained at reduced rpm, and the torsional strength of the shafting would need to be increased. Similarly the draft would have to be increased to accommodate a larger diameter propeller, but at reduced drafts such as in ballast or in partly loaded conditions, the propeller would not be fully immersed. If the number of blades is reduced, or blade areas are minimized the propeller material would be over stressed.

However these days there is a conscious shift in the policy of ship designers to go for larger main engines with reduced rpm, coupled to larger diameter propellers. This trend is seen in all the new 'eco' designs that are being marketed in recent times. These are undoubtedly more energy efficient, under the given specific conditions, but their long term effectiveness under adverse conditions is not yet proven.

## **2) Increasing the thermal and mechanical efficiency of the power plant (main propulsion engine):**

Generally the thermo mechanical efficiency of the Internal Combustion (IC) engines installed onboard is in the region of about 35%. So there is a feeling amongst the designers that scope exists to bring about considerable improvements in improving the thermo mechanical efficiency on the ships. Until late 1970s, Specific Fuel Oil Consumption (SFOC) figures for main propulsion plants used to be about 218-225 g/KW/Hr. This has now been reduced by more than 20%, and the current norm is about 174-180 g/KW/Hr, and in 2014 we expect to go below 160 g/KW/hr Several efforts are still being made in this field and new technologies are being developed on a regular basis. These developments can be categorized broadly into following groups:

### **2.1 Improving combustion in engines:**

Recently engine makers have done a lot of research and the basic design of combustion systems has been modernized and updated on most new models of produced recently. There is some conflict in requirements as Nitrogen Oxide (NO<sub>x</sub>) emissions have also to be controlled. Most engine makers have balanced their designs to meet Regulatory requirement regarding NO<sub>x</sub> as well as optimizing the SFOC for the engine. New technologies adopted are

2.1.1 Cam-less electronic control of combustion process: This helps in optimizing the engine performance over a wide range of loads and speeds.



2.1.2 Increasing the efficiency of turbo charger: New designs of turbo chargers with higher loading capabilities and operating at much higher speeds (compared to traditional turbochargers) are being developed to increase the combustion efficiency in the engine.

## **2.2 Load management devices:**

This consists of equipment to control the load on electrical power generators by optimizing the operation of pumps and other auxiliary equipment. Computer controlled devices are being installed on the ships to monitor the varying loads on pumps/other equipment, and accordingly change their output to meet the exact load requirements. This technology involves the use of electronically controlled load sensors and devices such as frequency changers which will change the rpm of the pumps and thereby the output of the pumps to suit the load. This is useful for ships which operate in different environmental conditions and have largely varying requirements for cooling, ventilation, lubrication etc. The technology is expensive and so is the equipment to install and maintain, and the benefits are marginal. An engine shaft driven alternator is one such device to boost the fuel efficiency. This device gives an SFOC of about 178-185 g/KW/Hr as compared with medium speed generator engines which drive alternators with SFOC in the range of 200-210g/KW/Hr. (This has already been implemented on our new built vessels where we were involved at the design stage.)

## **2.3 Waste heat recovery systems:**

Recently some new technologies have been promoted which aim to improve the waste heat recovery from the downstream exhaust of the engines and other combustion equipment. Proposal of exhaust gas recirculation, hot water calorifiers operating on incinerator exhaust, improvements in FW generating systems, fuel oil heating systems etc. are all parts of the efforts directed to improving waste heat recovery.

### **C) External aids / devices which will pump in additional energy or recover lost energy:**

Since the fuel crunch began a few years ago, there have been increased efforts to fit such devices on ships, either at NB stage or as retrofits. Such devices can be categorized broadly into two groups. One group will recover the lost energy from the water flow and convert it to useful energy thereby improving the energy efficiency, and the other group will harness energy from external sources and feed it to the ships' propulsion system.

#### **1) Devices which recover lost energy from water flow and convert this into useful energy:**

Recently lot of research has been done in this field and several devices have been promoted under this category. They claim fuel savings in the range of 0.5% to 7%. depending upon the complexity of the device and scope of improvement in the initial design. Many of these are patented devices and are expensive due to copy right. Some prominent devices being marketed are as follows:

#### 1.1 Ducts:

In addition to pushing the water in an aft direction, the propeller of a ship also gives the water a swirling effect due to the effect of the pitch. Hence beyond a certain point increased pitch reduces the propeller efficiency. Ducts are fitted either forward of the propeller such as the Mewis duct (Patented), to direct the water flow in a desired way and recover the energy lost by swirl effect of the propeller; or around the propeller in the form of shrouds or nozzles of various designs. These ducts also generate hydrodynamic thrust. At low speeds generally this additional thrust gives considerable advantage, but at high speeds the additional drag created by the duct itself reduces its performance considerably. Fuel efficiency claims range from 3% to 7% generally.

#### 1.2 Fixed or dynamic fins:

These are attached to the hull in the flow stream forward of the propeller. These also serve the same purpose as the ducts by directing the flow and generating hydrodynamic thrust. Action and effects are somewhat similar to the ducts mounted forward of the propeller.

#### 1.3 Fixed or moving fins mounted on the propeller boss cap:

These fins recover the energy lost in the vortex cavitation of the propeller and also counter the swirl effect in the flow. These are possible to fit at NB stage easily but can be retrofitted after analysis and minor modifications as needed.

#### 1.4 Contra-rotating propellers:

In some special purpose ships such as high speed shallow draft small crafts, contra-rotating propellers are mounted on the same shaft to maximize the power absorption with limited diameter of the propeller and use the swirl effect of one propeller to boost the efficiency of the other. But technology involved is very complex and application is restricted to special purpose ships only.

#### 1.5 Rudder mounted devices:

Devices such as bulb on the rudder, split profile (below and above the shaft centerline level) are used to recover the swirl energy from the water flow and produce hydrodynamic thrust.

These devices are generally fitted at NB stage only as it would involve redesign of the rudder with possible effect on steering gear capacity.

**2) Devices which absorb external energy and feed it to ship's propulsion system:**

The technology involved is still in an experimental stage and not implemented on a commercial scale. The benefits claimed are also dependent on external sources from where the energy is absorbed and are not predictable. Under ideal conditions savings in fuel to the extent of 30% have been claimed. It will be some years before this form of energy saving device becomes commercially feasible. The research involves following two alternatives:

**2.1 Solar panels:**

Solar panels have been mounted on certain ships to absorb solar energy and convert it to electrical energy which is then fed to the ship's power system.

**2.2 Wind turbines:**

The experiments involved setting up wind turbines, similar to the ones installed on land in wind energy farms. These would convert wind energy into electrical energy which is fed to ship's power grid.

**3) Sails:**

Installations that have been experimented with are in the form of collapsible sails fitted to the ship which can be rigged up or folded down with hydraulic computer controlled mechanism depending upon the prevailing conditions and ship's requirement. Some experiments have also involved flying wind sails (like giant kites) which are attached to the ship by ropes and transfer the wind energy directly to the ship.

With very few exceptions, most of the measures mentioned above can only be implemented on ships in the design stage, before building. Modern technological advancements and computer generated graphics can accurately calculate wave forms, hull resistance and create the ideal hull form and simulated model tests can fashion the ideal propeller, place suitable ducts and fins.

Draft and trim optimisation is an option available to passenger and container vessels which unlike bulk carrier and tankers are not always loaded to their marks.

Improved paint schemes and sailing at optimized drafts are the few measures that can be adopted on existing vessels. The cost of research and analysis involved in fitting of appendages

makes their usage unattractive. Hull form changing can be a very expensive proposition but in the case of large container vessels bulbous bows are being modified, the owners having come to the conclusion that slowing down their vessels is here to stay.

A fuel optimisation method that appeals to most charterers is reduced speed operation. This is very effective if applied correctly. Unfortunately, most main engines have their peak efficiency level at close to the designed Maximum Continuous Rating (MCR) revolutions. While operating below this level results in fuel saving, it also reduces efficiency, increases unwanted emissions and may accelerate wearing out of the machinery. This method of reduction of consumption needs to be applied with proper evaluation of all the affected parameters.

**Operating Costs** of our Company remained steady in 2013. Most components have remained at their previous levels. Crew wages however increased and are expected to increase further in the years to come for us as well as the Industry. Younger ships are naturally less expensive to operate and maintain, and the cost of stores and spares are proportionately less. Most quality operators have taken advantage of the current situation to rejuvenate their fleets by disposing of older ships. We expect this trend, of improving our efficiency and saving costs, through fleet rejuvenation, to continue.

The requirement for experienced senior personnel continues to remain a serious issue. The shortage is due to reasonable employment available ashore and in the offshore industry - a much safer environment. Technological advancements on board modern ships both in navigation systems and machinery operations demand highly trained officers which only serve to exacerbate the situation.

**The Protection & Indemnity (“P&I”) insurers, or ‘P&I Clubs’** as they are known in the industry, continue to face head-winds on two fronts – increase in claims and lack of investment income. The insurers’ difficulties were compounded by the “churn effect”, with several shipowners replacing their old vessels with new young & modern ones paying lower rates. As a result, all Clubs belonging to the International Group of P&I Clubs imposed a ‘general increase’, i.e. a fixed percentage increase in premium for the new policy year commencing 20th February 2013. As reported earlier, the P&I insurance is unique and unavoidable as it provides almost limitless cover with top-quality claims-handling service for any situation that could arise from owning/operating ships. As such, the increases, though burdensome, is understandable.

For all the reasons cited above, our average operating costs per day per ship for 2013 was marginally higher than the previous year; whilst we do not have figures for the industry norm, we expect we would have done better than others based on past experience.

**International Maritime Organization (IMO) conventions** are constantly updated to match demands for enhanced steps to protect the environment. Marine Environment Protection Committee of IMO recently approved major changes to MARPOL (Annex VI) regulations to reduce harmful air emissions from ships. Special sea areas for controlled discharges from ships have been increased. Rule requirements for carriage of certain bulk cargoes have become stricter. The Bulk Cargo Code (BC Code) has been replaced by the new International Maritime Solid Bulk Cargo code (IMSBC code). More countries are insisting on stringent ballast water management practices on board ships. As a result of initiatives from the International Labor Organization (ILO), working and living conditions of crewmembers on board are receiving increased importance. In order to formalize this and ensure uniform compliance, (ILO) has adopted the Maritime Labour Convention 2006 (MLC 2006). A Maritime Labour Certificate (MLC) and a Declaration of Maritime Labour Compliance (DMLC) will be required on board to ensure compliance with the Convention for all ships above 500 tons in international trade. These certificates are to be obtained from the Flag state and their recognized organizations after thorough verification and surveys on board each vessel. The MLC 2006 has attained the required number of member state ratifications in August 2012. All ships were required to meet the compliance requirement and have valid certificate for compliance with MLC convention before 20 August 2013. Since many flag states, including Thailand, have not fully complied with the MLC requirements, a grace period of one year expiring on 19 August 2014 has been agreed by ILO for all ships to be fully compliant. The Company is working closely with the Flag authorities and recognized organizations to have all its vessels certified well before the compliance dead line. Focus on the environment is becoming even more important. It is no longer just fashionable to say we are “Going Green”; organizations world-over are being pushed by their stakeholders to become more environment-conscious, guided by compliance with the newer regulations. The various measures adopted voluntarily by the Company to reduce its Carbon footprint has been explained in our Sustainability Report in the 2013 Annual Report; besides, there are specific IMO Conventions and regulations mandated by individual countries, to control the emission of Sulphur dioxide, Nitrogen oxides, Halons and CFCs from our ships which contribute to Green House Gases. These regulations are expected to become more

stringent in the coming years. In addition, certain states in the USA are likely to require ships calling their ports to use shore power which is greener than the power generated on board ships. 'Bonnet' technology is another concept, presently available only in certain ports, which can receive the exhaust gas from ships for treatment before discharging into the atmosphere. These measures are still evolving and there will likely be operational problems; besides, these will most likely result in additional expenses for the ship owners/operators. To formalize the Company's commitment towards preserving and conserving environment and to reduce carbon footprint, the Company has obtained ISO 14001:2004 certification from Class NK of Japan. The ISO 14001:2004 provides a framework for a holistic and strategic approach to the Company's environmental policy, plans and actions, and will demonstrate that the Company is an environmentally responsible organization. PSL vessels have implemented "Ship Energy Efficiency Management Plan" (SEEMP) required by MARPOL Annex VI regulations from January 2013. Vessels have also fully implemented the more stringent garbage disposal regulations required by MARPOL Annex V which came into force from January 2013.

**Maritime Training Center:** As previously reported, the Company set up a full-fledged Maritime Training Center at its Head Office in Bangkok in March 2008. The PSL Training Center includes a state-of-the-art Bridge Navigation Simulator for training of maritime personnel. Vessel-type specific Bridge Navigation Simulator recreates the actual maneuvering characteristics of the ship and its bridge controls as it enters a specific major port and provides ideal conditions in which to train Officers in hands-on practices for effective bridge teamwork and competence in ship-handling and navigation. This is a significant step taken by the Company to train and equip its Officers and Crew to take better care of themselves and their ships, all with a view to ensuring safety of the crew, cargo and the ship by preventing accidents, thus also helping to preserve the environment. In the current scenario of a worldwide shortage of trained personnel, and the rapid promotions that is a natural result of such a shortage, this is a major step to provide specialized training that would otherwise have been acquired 'on the job'.

**Maritime Resource Management (MRM):** MRM is a training program for ship's officers, engineers, pilots and shore-based personnel. The aim is to increase knowledge about human capabilities and limitations and to reinforce positive attitudes towards safety and teamwork. MRM is generally accepted to be one of the most efficient means of improving crew cooperation and minimizing the risk of accidents caused by human errors as well as failures in effective teamwork and resource management. The MRM course is authorized and licensed by

The Swedish Club, a member of the International Group of P&I Clubs, and one of the few insurers providing Hull as well as P&I insurance covers. Apart from the MRM courses, the PSL Training Center has classrooms, Video-Based Training (VBT) and Computer based training (CBT) for the ship staff. Courses include MRM, Bridge Team Management (BTM), Bridge Team Competency (BTC), Officer Of the Watch (OOW), Chief Mate Course (CMC), Command Course (Command), Shipboard Safety Course (SSC), Maritime Professional Briefing (MPB), Maritime English training (divided into 5 course levels) programs for safety and efficient ship operations of deck and engine departments. The Training Center also conducts lectures on VTS (Vessel Traffic Separation) & SMCP (Standard Marine Communication Phrases) within the BTM and MRM courses, with the aim of developing our officers' communication skills in communicating with a VTS officer using standard maritime phrases in various simulations. The courses are upgraded regularly and provide a solid foundation to the Company's training activities and enable our Officers and Engineers to keep abreast of the latest developments in ship operations.

The PSL Training Center liaises very closely with the Technical Department in order to identify the training needs of officers and crew and special training courses are designed to suit them. In this manner, new training courses were introduced for Engineer officers ("Engine Room Management and Competency Enhancement" - "EMC" for Senior Engineers, and "Engineer on Watch" - "EOW" for Junior Engineers); future plans include courses on "stern tube sealing systems" and "ships' cargo gears with special focus on hydraulic", and "Shipboard Safety for Ratings"(SSR) for crew. The PSL Training Center has certain basic (but important) equipment such as a turbocharger and a purifier for practical training to accompany class-room theoretical courses. These will augment the Bridge Simulator (which is essentially for Deck Officers) and enable the Training Centre to address the requirements of both Deck and Engine officers & crew. Considering the fact that the new vessels acquired (and on order) are fitted with more fuel efficient modern engines using advanced electronic controls and technology, the Company's senior engineers, Electrical Officers and shore-based Technical Superintendents are put through the engine-maker's specific training courses designed to better understand the operation and for effective trouble-shooting. Junior engineers are in turn trained at the Company's Training Center and by trickle-down method on board ships.

The use of "Electronic Chart Display and Information System" (ECDIS) is becoming mandatory for new ships built from July 2013. Many new vessels are already equipped with

ECDIS. For existing vessels, ECDIS will become mandatory from 2018. ECDIS requires special generic training as well as specific training for each manufacturer's equipment. Navigating officers using ECDIS need to be suitably trained and certified before they can use it as a primary means for navigation.

With every other technical advance in navigation, such as radar, AIS and GPS, officers have gained an additional navigational aid. With mandatory ECDIS, on the other hand, a navigational aid will be taken away from them – the paper chart. ECDIS has to work and officers have to know how to work it. Any operational error could have disastrous consequence.

PSL is committed to ensure that navigating officers working on board vessels fitted with ECDIS are fully conversant with the equipment prior joining the vessel. Officers are given generic ECDIS training at approved institutes. They are also required to undergo maker specific familiarization training by the ECDIS manufacturer. Realizing the fact that certification alone does not make an officer fully familiar and confident to use ECDIS, PSL Training Centre has equipped itself and developed ECDIS training course. After attending approved ECDIS training course, officers are required to undergo further ECDIS familiarization course at our in-house facility.

**The scourge of piracy**, predominantly originating from Somalia, but now spread to the whole of Arabian Sea/Indian Ocean, continues to be a cause for great concern, even though 2013 saw no pirate activity in this region. The entire ocean area from India to Africa and between Gulf of Oman and Madagascar remains a breach area by London war risks insurers.

In most cases, the added costs of protecting vessels and the additional insurance premium is directly or indirectly passed on to cargo interests, but the effect on crew morale is most visibly seen in declining officer and crew availability and a waning interest in a sea going career.

Although the shipping industry has been afflicted by piracy for centuries, it assumed a totally new dimension in recent times ever since the Somalis turned it into a lucrative commercial enterprise. The swashbuckling pirate of the past is tame compared with today's heavily armed criminals scouring the expanse of ocean from Somalia to India for vulnerable vessels to hijack. It is important to note that Piracy is a commercial venture. Pirates are not really interested in the cargo. They just want the ransom money and use the crew as bargaining power. Of course, if the cargo is valuable they get a little more leverage to extract an even bigger booty.

The pirates now possess a number of fishing boats and dhows which are being used as 'mother-ships'. These provide the pirates with a degree of camouflage at sea, but more



importantly, allow them to operate at much greater distances from the shore. They can carry greater supplies of fuel, food and water, and these vessels are far more seaworthy than the Somali skiffs designed for fishing in coastal waters and calmer seas.

No pirate attacks were reported in 2013 in the Somali basin as opposed to 35 incidents in the previous year. There has been no confirmed reports of suspicious activity in the Horn of Africa High Risk Area during the year under review.

The recent decline in pirate successes is not to be taken lightly. The industry is fearful of possible revamping of the pirates' tactics to counter the protective measures now being employed by most vessels transiting the dangerous areas.

Apart from the Somali pirates and their attacks in the Arabian Sea/Indian Ocean, Nigeria and its offshore oil installations in the Gulf of Guinea continues to be vulnerable to pirate attacks. Recent months have seen an alarming increase in this region. The primary difference between the two is that Nigeria has an elected Government with clear policies to deter piracy in its waters and that helps localize the menace and also control/handle it.

## **JOINT VENTURES:**

The status of our joint-venture investments is as follows:

- **Southern LPG Pvt Ltd. (SLPG):** The process of closing down this entity is nearly complete. We have completed the sale of all the major assets in this company with full receipt of sale proceeds and we shall now close this Company in an orderly manner.
- **International Seaports (Haldia) Pvt Ltd:** This is now our only operational investment in Ports in the Haldia Dock Complex (about 22.4% of the total capital) under our port projects investments. This JV continues to operate very well and we have to-date received total dividends of USD 2.15 million, which works out to about 106% of our original Investment made in years 2002-2003. We find strategic value in this investment and hope to increase our shareholding at an opportune time in the future.

## **IN CONCLUSION:**

**Demand:** The environment for 2014 is going to be much better than what we have experienced in the 2011 to 2013 period but will be accompanied with extreme volatility. The EU, USA, Japan and China all seem to indicate much higher economic growth rates going forward. Commodity prices, however, are expected to stay low due to the intense growth in mining capacity during the closing stages of 2013 as well as the fresh growth that is slated to come on stream during 2014. As a result, price arbitrage between cheap imports and expensive domestic production would allow China to increase its iron ore and coal imports to fresh record levels as indicated elsewhere in this report. The various coal fired port based power plants that are coming on stream strongly indicate that India could soon be the largest importer of coal in the world, overtaking China with about 300 to 350 MMT annual imports by 2016. As a result, DNB Markets in one of their recent reports have indicated that annual tonne-mile growth for the period 2014 to 2016 would average between 10 and 11%.

**Supply:** Due to the favourable freight markets of the past (2004 to 2008) most ship-owners have kept their older ships operating beyond their useful economic lives. Under normal freight market conditions, approximately 16.63% (122.28 MDWT) of the existing world fleet that would be over 20 years of age during the next 3 years, should head for the breakers yards, and would only be constrained by the available scrapping capacity.

With respect to the approximately 20% by DWT of new ships (146.89 MDWT) scheduled to be delivered to the end of 2017, the lack of availability of funding coupled with delays in deliveries at ship yards would subject them to a slippage of about 35% especially when you look at the slippage in 2013 that averaged 38%.

The supply side would come into balance with the demand side of the equation sometime during 2014. We think that 2013 would therefore be remembered as the very last year of an extremely challenging environment for bulk shipping.

**Financing:** Fund raising will continue to be the biggest challenge that ship-owners will have to face during 2014. As can be seen, most of the traditional ship finance banks are actually unloading their portfolios in part or in whole and some are permanently exiting the field altogether. However, nontraditional lenders have, and will continue to come, to the rescue of ship owners. Local banks that have a corporate lending relationship with any large conglomerate will step up to the plate and fund such conglomerates' shipping divisions/companies. The cost may be slightly higher than the traditional shipping banks due to the lack of knowledge and

understanding of the business by these nontraditional banks, but funding has, and will be, available from them to their local corporate clients.

Then there are the equity and debt capital markets where we have seen very large sums being raised, at times by people who have still to have a single ship in the water. The way these markets function continues to amaze us! But they have been there in the past and, most certainly, will be likely sources of funding in the future. The problem with such sources is that they are always much more expensive than the traditional bank lending that comprises the majority of the funding requirements of ship owners. And they can open or shut down very quickly depending on the experience that the current debt/equity issues have had in the market. After the bankruptcy of STX Pan Ocean and the wiping out of the approximately USD 1 billion of publicly traded bonds and the decimating of their equity, investors at least in South Korea, will most certainly not rush to embrace any such shipping related debt or equity issues in the immediate future.

Securitization of future cash flows could be another avenue to raise funds however this would largely depend on the quality and credit worthiness of the forward cash flow generating entity i.e. the charterers. In most cases, given the rash of bankruptcies that have plagued our industry over the most recent past 5 years characterized by counter party renegotiations and or outright defaults this would be nigh impossible or at such a high cost that it would not be workable. This source, as a result, would remain dormant.

At the end of the day, in an industry that is highly capital intensive, characterized by high leverage and has wildly swinging cycles with the traditional ship lending banks currently shunning the industry, only the very strong, publicly listed, cash rich and non-speculative ship owners will attract any/all the funding that is available in the market. The smaller, non listed ship owners will be hung out to dry and will have to basically use much more of their own cash to get any business done.

**Concluding Remark:** Considering all the above, we are taking advantage of the opportunities that the Dry Bulk Markets has thrown our way. We hope to deliver to all our stakeholders the promise of this potential. This will in no small measure be due to the very dedicated and hardworking professionals that make up the office, as well as, the floating staff at PSL.

Please be informed accordingly.

Yours sincerely,  
Precious Shipping Public Company Limited

---

Khalid Moinuddin Hashim  
Managing Director

---

Khushroo Kali Wadia  
Director