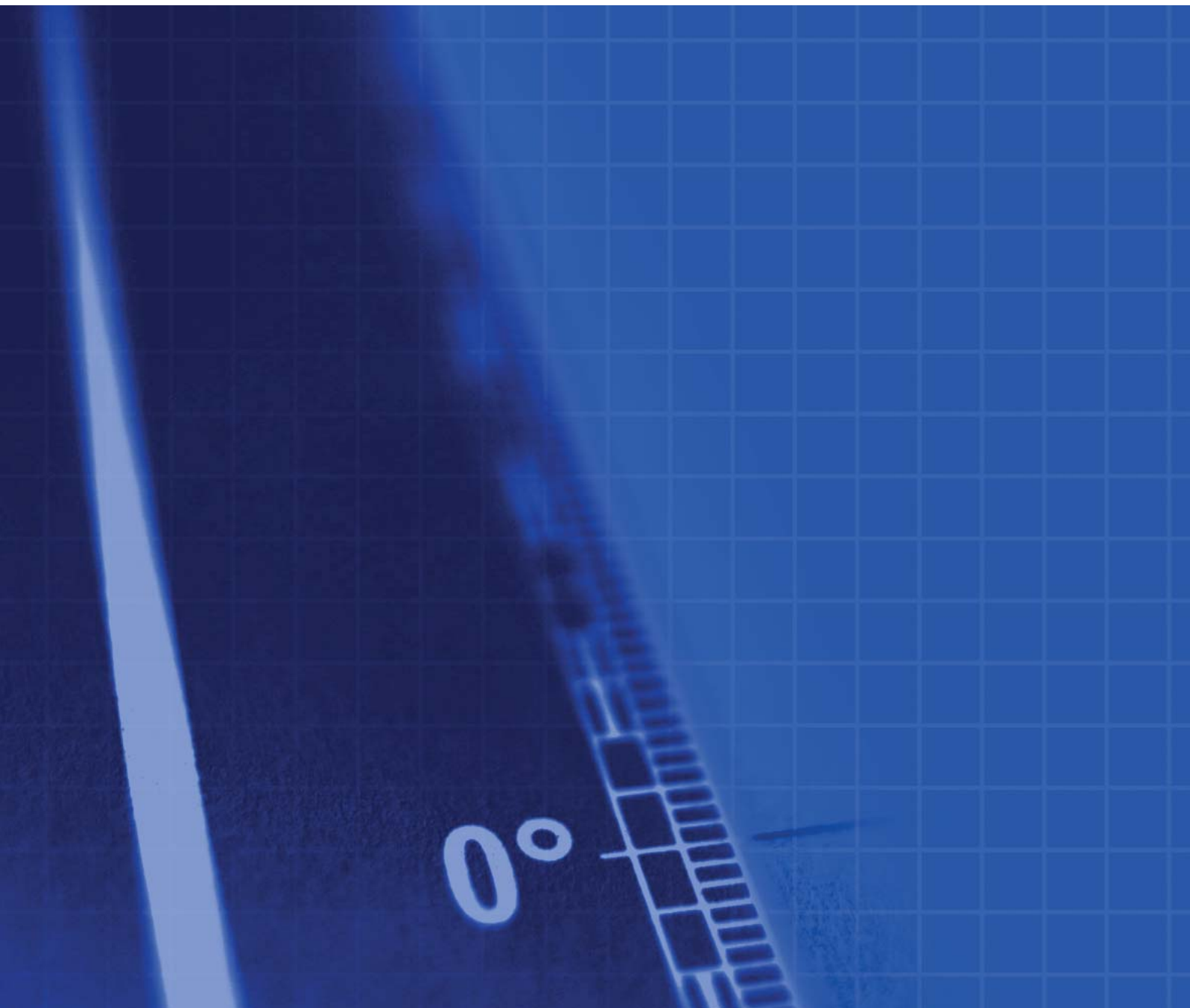


Willis Marine Builders' Risk Review

Summer/Autumn 2005



Willis





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Introduction

This Review is designed to provide you with information relating to the world of shipbuilding. At Willis we try to stay abreast of changes within such specialist industries thereby enabling us to provide valuable services when it comes down to providing what we are best at – Insurance and Insurance related matters.

This report will initially touch on the trends in the Shipbuilding Industry itself looking at market share and the current challenges and future developments within the industry.

Our next segment looks at the current Insurance Market, it's related history and the well publicised losses that it has incurred in recent times.

Lastly we will look at what the future holds and what remedies are available within the insurance field to alleviate the financial burden of the largely increased premiums and deductibles that have been suffered in recent years.



Background

Despite freight rate increases slowing down in some sectors and, in some cases, falling. Recent years have still been very good for most shipowners. With this increased income comes the need for new buildings. Older tonnage can be replaced with new and fleets can increase in size and quality. So the Owners turn to the Shipyards.

Good news perhaps but new buildings are not simply plucked off the shelf and put into the Owners shopping basket! Building a vessel takes time. Slots need to be purchased in anticipation of new orders often before they are even known to be needed.

While undoubtedly pleased overall with the upturn in fortune for the Owners, the reality is that there is a distinct time lag between increased profitability for the Shipowners and that of the Shipyards. Vessels being delivered today may well have been ordered years ago at much deflated prices and before other factors came into play as will be evaluated later in this report.

This is perhaps best illustrated with the example of a Bulk carrier delivered today valued at say US\$75m.

The Owner has no doubt taken advantage of the rising freight rates and could have fixed a daily rate of perhaps US\$55,000 per day over a three year charter period. This would create a gross income of US\$60m and leave the Owner with a very healthy prospect of writing down the value of the vessel to the level of a 20 year old vessel in just three short years with many years of profitable returns ahead and a rather improved balance sheet as well.

So where is the catch? Well the cost of ordering such a vessel in 2003 would have been in the region of US\$35m. Therefore the time lag associated with the vastly increased costs particularly increased labour costs and the price of steel which has shot through the roof means that the Shipyard that built the vessel may well have built it at an overall loss. This leads to one happy Owner and one very disenchanted Shipyard !! It therefore comes as no surprise



Background – continued

that many Shipyards were reporting significant losses while Owners were lining up outside their facilities with fresh orders.

Shipyards prices have been rising in the region of 25-30% in some of the sectors and many of them are now at historical highs. VLCC's have risen from US\$64m in 2002 to around US\$120m this year. LNG's are now over US\$200m with Bulk Carriers around US\$65m and Post-Panamax Containerships growing both in size and price with an 8,000 teu vessel currently priced around US\$130m.

LNG's are still the jewel in the crown for the industry with high demand from the well publicised new buildings for Qatar Gas Transport Co. and 122 vessels due for delivery in 2005.

The other growing area is the emergence of the bigger and bigger Container vessels with sizes now between 7/9,000 teus with a staggering 239 Post-Panamax vessels due for delivery in 2005. LNG's are also on the increase with some now on the order books at 210,000 CBM.

There are 33 VLCC's scheduled for delivery in 2005. This should achieve the IMO's wish for all single hull tankers to be replaced and maintain the rather more balanced sector of the tanker market.

It will take some time for most established Shipyards to emerge from this recent lacklustre performance in terms of their profitability.

As mentioned earlier, the peaking of the freight rates leads to a spike in demand. A shipyard that previously had a 12 month order book could easily now be faced with orders for newbuildings spanning well into the next 2 or 3 years.

Most of the established shipyards in Japan and Korea will pace themselves as best they can. Marketing slots on a 'quarter-by-quarter' basis and not taking further orders when that particular quarter is full allows some shipyards to achieve a marathon pace rather than a quick sprint to fill their order books. This obviously brings pressure to bear upon the global shipbuilding industry as it tries to keep pace with the overall demand.

There can be no doubt that new building techniques, modular construction in particular, allied with financial investment in the infrastructure of established Shipyards will help. But many of the major Shipyards are finding it increasingly difficult to grow organically with limited physical room for expansion to meet this increased demand.

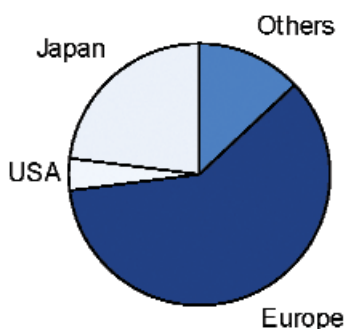
Many of the major shipyards have traditionally housed state-of-the-art repair facilities. In recent years we have however seen that there has been a tendency for the Shipyards to streamline their repair capabilities thus facilitating a greater concentration of shipbuilding activities.



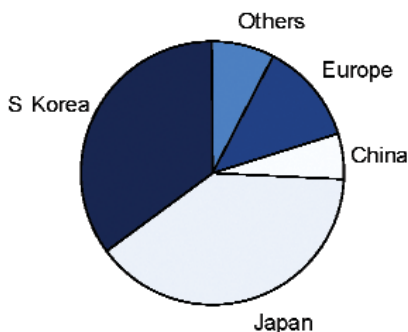
Market Share and Future Trends

As most people will be aware the current gold medallists in terms of Shipbuilding (GT) are South Korea followed closely by Japan.

World's Shipbuilding Countries (GT) (1960)



World's Shipbuilding Areas (GT) (2000)



Not bad going for South Korea that had a market share of only around 5% in 1980!

Times are again on the move though. South Korea has had this huge market growth but there can be no doubt that China is waiting in the wings. It's share in 2000 was around 5% – just like South Korea 25 years ago !!

Based upon Compensated Gross Tons (CGT) the actual figures in Summer 2004 showed South Korea with a market share of the world order book of approximately 10 million tons, Japan 6 million tons and China just over 3.3 million tons.

It is clear however that considerable investment is being made in China which is providing some relief to the burden of the additional capacity needed to keep up with increased demand :-

- In just the first half of 2005 China Shipbuilding Corp (CSIC) are getting ready to construct a new shipyard in the country. It already has interests in Dalian New Shipbuilding, Dalian Shipyard and Bohai Shipbuilding Heavy Industries. The latest facility will apparently be achieved via an investment of around US\$300m and will be located just beside Shanhaiguan Shipyard.
- Medium-sized provincial shipbuilder Jiangsu Yangzijiang is planning to build a new shipyard on the Yangtze River directly opposite it's current facility with a drydock 96 meters wide and close to 500 metres long. They could be building boxships beyond 4,000 teu by 2008.
- New Century Shipbuilding which constructs tankers, bulk carriers and containerships is also said to be considering building another huge dry dock to take advantage of repeat orders.
- Titan Oil will also be entering the shipbuilding business. In December, 2004 it disclosed that it is building a huge shipbuilding and repair facility at Quanzhou in Fujian Province. They plan to have three dry docks with up to 300,000 DWT capacity.
- Southern Shipbuilding group CSSC intends to have the world's largest shipyard on ChangXing Island when the facility is finished in 2015. It will consist of at least seven dry docks and be capable of building ships of over 300,000 dwt.
- Bohai Shipbuilding Heavy Industries (part of CSSC) has commenced work on an enormous dry dock 500 metres long by 107 metres wide to build both VLCCs and VLOCs. It is hoped that it will be ready by the end of 2007.

Market Share and Future Trends – continued

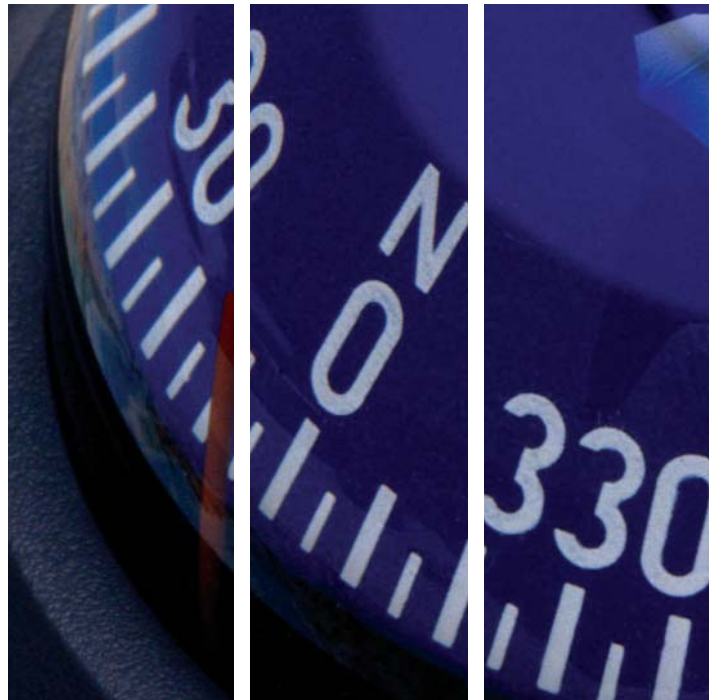
While indigenously financed investment in China is obviously a significant factor in its growth it is also attracting investment from its competitors in Korea.

- Korea's Samsung Group have had talks with China Shipping Group (CSG) about building a new ship construction complex in China itself. While talks are still at an early stage (June, 2005) it is alleged that they will be building boxships, tankers and LNG vessels.
- Along similar lines, Daewoo Shipbuilding of Korea is reported to be investing US\$100m on a hull-block factory in Yantai, Shandong Province. It has also been reported that Daewoo Shipbuilding plans to construct a huge new yard and, if approved by the Chinese Central Government, will be investing up to US\$15 billion.
- Samsung Heavy Industries who are Korea's third major shipbuilder is also planning to build a block factory in the Province of Shandong. Samsung was the first Korean shipbuilding company to build a block fabrication factory in Ningbo six years ago but that plant is no longer able to meet Samsung's demand.

Despite the obvious additional cost of around US\$70,000 to transport the blocks back to Korea it is still more economic to have them made in China.

China's economy is still growing at a high speed and, as can be seen from the above, so are its shipbuilding interests. Most pundits are forecasting that China will be the world's biggest shipbuilder within the next 10 years or so.

In the meantime they will be playing a somewhat supportive role as their own facilities grow and develop over the next decade.



European Shipbuilding

European Shipyards have long been unable to compete in the more active areas of the commercial shipbuilding market. In fact there are only orders for 6 LNG's in Europe for 2005 compared with 116 for the rest of the market.

The European yards have focussed on the more inherently complicated, higher value ships such as Cruiseships and Mega Yachts along with the specialist area of Military vessels.

There has also been a trend within Military shipbuilding whereby countries from other continents send their teams into the European yards to watch the first in a series of vessels being constructed then return to their own country to build the remainder. This exportation of skills has been provided on a number of occasions in recent years.

The idea of exporting this type of knowledge and allowing the interfacing of some European Countries on Combined Military Shipbuilding was unheard of until recently.

Some debate continues as to whether Germany, France, the UK and others will perhaps combine their resources either through mergers, acquisitions or perhaps joint ventures to create a Marine version of the Aviation Group – EADS. This has however been denied as recently as July, 2005 and perhaps will remain on the drawing board for a lot longer than anticipated if not forever.

The following table shows how there is a strong presence of Military shipbuilding across Europe that is often mixed with Commercial vessels as well.

Business Focus on European Shipbuilders

Company	Country	Commercial	Naval
Aker Yards Group	Norway	*	
Alstom SA	France	*	*
BAE Systems plc	UK		*
Damen Shipyards Group	Netherlands	*	
DCN Group	France		*
Fincantieri Spa	Italy	*	*
Izar	Spain	*	*
Odense Steel Shipyard Ltd	Denmark	*	
ThyssenKrupp	Germany	*	*
VT Group plc	UK	*	*

The USA maintains it's Jones Act driven market with military shipbuilding also a key factor in it's survival. In June this year Todd Shipyards reported full year net profits of US\$9m which were impacted favourably by the high volume of navy and submarine work.

With limited exceptions the USA shipbuilders build USA flagged and operated vessels. They simply cannot compete in terms of cost with the rest of the world for commercial buildings. The Gulf Coast remains somewhat vibrant however with vessel and rig construction for the offshore oil industry being a core focus.

The Insurance Market

Long gone are the days of the Joint Construction Risk Agreement which governed many insurers, particularly in London as regards the minimum rating levels that would be provided by Insurers. It is worth pointing out however that in September, 1980 the following rates were suggested to be the Minimum :

Vessels without main propelling machinery
(barges for example)
0.40% plus 0.04% per month.

Conventional vessels not designated in any other
category such as Rigs, Dredgers, Pipelaying Barges etc.
0.50% plus 0.05% per month.

Passenger Vessels, Ferries, Container Ships,
Yachts, Hovercraft
0.60% plus 0.06% per month up to 0.80%/0.08%

Warships, Liquid Gas Carriers, Liquid Sulphur Carriers
and those with refrigeration, pressure or similar
machinery designed for the carriage of a specific cargo
*These had to be referred to the Joint Construction Risks
Committee.*

Credits could be provided where loss records at any particular shipyard was favourable ranging from a discount of 5% up to 20%.

Commercial pressures and economic factors both in terms of the insurance industry itself as well as the shipbuilders allied with a rather more globalised insurance market and political pressure from bodies requiring a more open and competitive market have resulted in more independent decisions being made by the Insurers.

Such globalisation of the insurance markets can be seen by the increasing influence of the Scandinavian insurers of Gard and Gerling along with Axa and Groupama in France and St. Paul and AIG in USA.

Korean and other Asian markets are also stepping forward on Builders Risk policies in countries outside their own country of domicile thereby providing some relief to the current capacity crunch.

The core coverage for the Shipyards will always be the physical damage coverage. Such coverage is readily available on most Institute and International Clauses and will usually include War and Strikes coverage. It is important to point out that these War and Strikes clauses usually include Terrorism thereby obviating the need to purchase such coverage separately.

(i) Ancillary/Additional Coverages

1. Guarantee

Post delivery a twelve month Guarantee is often provided by the Shipyard to the Owner. Such Guarantees can be extended to include paint guarantee. Underwriters are still willing to provide coverage for such matters although, as mentioned earlier, premiums are now reaching such levels as to perhaps make the purchase of insurance coverage protecting such Guarantees rather uneconomical.

2. Delay-In-Delivery

This is an area that, over the years, has caused some significant losses. It can take many shapes and sizes and can be linked to anything from delay caused by an otherwise insured peril to perhaps delay caused by faulty workmanship or some other cause.

It is fair to say that while the Builders Risk Underwriting community is rather small when compared to other, more mainstream coverages such as operational Hull risks, the number of Underwriters willing to consider Delay-In-Delivery is getting even smaller.

Such coverage is generally only available to the established shipyards with a proven track record and, as with Guarantee Insurance is becoming prohibitively expensive.

The Insurance Market – continued

3. Cargo/Transit Interests

With the advent of vessels being built in perhaps more than one location and being assembled in another, the issue of full Cargo/Transit coverage needs to be addressed. It is however still generally considered to be a natural adjunct to the Builders Risk and can usually be included within the overall premium/rate being charged for the Builders Risk dependent upon exposed values..

4. Liability "Top-Up"

The often imposed limitation in terms of the third-party liability limit being the vessels final value may need to be increased to a pre-agreed level by the parties and this side of the market remains somewhat receptive to larger limits being provided at relatively minor increases in premium.

5. Products Liability

This is an often overlooked aspect of Shipbuilding. In a relatively recent case held in a US Court a P & I Club successfully filed a suit against a Shipyard for their allegedly poor construction (lengthening) of a vessel which subsequently sunk. Although the Club represented the Cargo interests on board, the result went against the Yard despite the work being performed many years prior to the loss occurring.

Most Shipyards tend to believe that post guaranty (usually) 12 months after delivery they have no ongoing liability as regards any defects in the construction and consequently shy away from buying Products Liability insurance or perhaps, in the case of pure Repair, do not buy coverage beyond the usual 6 months or so coverage provided by most shiprepair policies. This may certainly be a quickly changing area and perhaps a must buy for many shipyards especially those constructing vessels navigating globally.

6. Package Policies/Builders Risk Covers

Underwriters generally prefer to insure a Shipyard for all vessels being constructed or perhaps starting construction during an annual period. Declarations are then made in respect of each vessel at pre-arranged rates thereby

capturing all of that particular Shipyard's business and avoiding any adverse selection.

These covers can often be extended to include Physical damage coverage protection not just for the vessels being constructed but also for the equipment and buildings/general infrastructure within the Shipyard. Add to that Third Party Liability coverage for any shiprepairing operations and you will have a rather comprehensive Package policy which should enjoy the benefits of lower overall premiums due to the nature of the 'bulk-buying'.

This can often be the most economical way of insuring Builders Risks but the policy needs very careful construction so as to make sure that full coverage is being afforded to the Shipyard. Generally offshore energy related risks would be insured separately to the Marine exposures.

(ii) The Insurers

Values up to around US\$25,000,000 can often be placed within the local markets dependant upon which country the Shipyard is located. But once global capacity is required then the terms are provided by a only a relatively small group of class leading Underwriters.

A number of insurers have pulled out of the Builders Risk arena in the last few years the most notable of which perhaps being the previous Chairman of London's Joint Hull Committee, Simon Beale of the Amlin Syndicate at Lloyds. It was at the 2003 IUMI Conference in Seville, Spain that he and other participants made clear reference to the then spate of Builders Risk losses versus the premium income in the same period.

What remains are the principal London leaders consisting primarily of :

Wellington Syndicate
O'Farrell Syndicate
Atrium Syndicate

The Insurance Market – continued

Catlin Syndicate
Royal and Sun Alliance Company
Axis Speciality Group
Allianz
Aspen

The emergence of the new Thomas (Creechurch) Syndicate, with its well seasoned Underwriter Steve Gargrave and the return of Michael Bennett at Mitsui's Syndicate will certainly add to the capacity and leadership in the market but neither will be keen to reverse the trend of rising premiums and deductibles. Gerling and Gard remain a key force in Skandinavia with Axa and Groupama in France.

With values of some vessels now exceeding US\$200m and specialist Military builds that can easily reach values of several US\$Billion it is hard to avoid these specialist Underwriters and their current stance.

Rates/Deductibles

Over the last few years Rates and Deductibles have risen very steeply. Even shipyards with loss-free claims records are facing substantial rises in premiums and deductibles as well as, in some cases, reduction in the actual coverage being provided.

While there is no centralised database to provide details of the increases there are some typical examples of rate increases that illustrate the overall change in the market.

In 2002 a well established shipyard with a good loss history could well have been paying a premium based upon a rate of 0.20% on Final Contract value with 0.02% per month. In 2005 this is likely to have increased by a factor of 3 or 4 taking the rate up to 0.60%/0.06% or 0.80%/0.08% respectively.

Similarly deductibles may well have risen from US\$100,000/US\$250,000 to US\$1,000,000/US\$2,500,000 in the same period.

No doubt many readers will have suffered similar dramatic rises in costs although base rates in some parts of the world have suffered more than others.

Some Asian Shipyards and particularly those in Korea approach Builders Risk differently both from a purchasing and rating perspective. Some Shipyards only buy Builders Risks post launch or float-out with other insurers taking the risk (if at all) in the local or Non-Marine markets while the risk is on-land.

South Korean rates can be up to half those charged in the rest of the world principally due to their sheer size and commensurate purchasing power. Once you put all of these factors together you will find rates are being charged that appear far more aggressive than single project rates quoted in Europe for example.

Well we have looked at the Shipbuilding industry, it's need for more insurance, the insurance markets and their capacity. But what has caused the rates to leap upward like a salmon returning to its birthplace! Well, simply put, it's the losses. It is a spike in the graph that has caused this unfortunate and perhaps somewhat disproportionate response from the Underwriters.

Let's examine these losses a little more closely :

Recent Major Building Risk Losses (October 2002 - January 2004)

Diamond Princess	\$310m (including \$60m Owner's interest)
Ulysees Yacht	\$ 25m
Costa Fortuna	\$ 20m
Westerdam	\$ 75m
Typhoon Maemi	\$ 50m
Riyadh Yacht	\$ 30m
Pride of America	\$228m
TOTAL	\$738m

The Insurance Market – continued

Quite a tally! Around US\$700m in losses during a period of less than 18 months.

At the previously mentioned conference in Seville in September, 2004 an annual premium figure for Builders Risks was suggested to be approximately US\$100m globally.

It doesn't take a Rocket Scientist to see that an annualised loss figure of approximately US\$500m versus a premium of US\$100m needs to be addressed but by How Much and for How Long?

The increased use of Underwriters new Risk Assessment Survey and reporting format called JH143 has certainly helped analyse potential problems and has generally been well received as a Risk management tool by the better shipyards. No doubt this has also helped reduce or eliminate some of the losses of the past.

In addition to the conventional shipbuilding exposures, Shipyards are seeking innovative insurance solutions to respond to the ever increasing financial risks that they are facing.

The use of Non-Marine in conjunction with the Marine Insurers in larger, more complex risks is certainly something that is helping the cause along with ensuring a more global panel of insurers.





The Future

History teaches us that insurance is a cyclical beast. While this is true it can be less predictable and more far reaching when it is a relatively small market insuring some very high limits at times.

With the cost of steel, technology, hardware, engines rising so are the premiums. No doubt Underwriters would rightly argue that losses will increase proportionately in terms of their value but perhaps the spike on the graph has now been passed or at least reduced to a rather more predictable and ultimately acceptable level.

With premiums now up to five times higher than they were a few short years ago. Underwriters must now consider that they are gaining a good return on their incomes. To put this into proportion even if we go back to the exceptional late 2002/early 2004 losses Underwriters would now be making a good profit overall.

With a relative period of stability Underwriters will surely come under some increasing pressure in 2006 to take their foot of the pedal and bring some stability back to the rates and deductibles.

Hurricane Katrina

While ready to go to print with this report the tragic events along the Gulf Coast of the USA occurred. It is still too early to tell the true extent, in insurance terms, of the losses that occurred as a result of Hurricane Katrina but it will certainly permeate throughout all lines of insurance in the future to some degree or another. Initial reports indicate that significant Builders Risk losses do not seem to feature heavily amongst the casualties although there has been extensive damage to the insured Property (other than vessels being built) at the Shipyards in the area although we would hope that this does not have an undue influence on the actual Builders Risk rates.

Perhaps Insurers will look at the huge increases in premiums and deductibles within the Builders Risk sector itself over the last few years and turn their attention towards other lines of insurance rather than use a brush which proves to be too broad. Only time will tell!

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