

PROSPECTS FOR DRY BULK SHIPPING

Dear Professors,

Ladies and Gentlemen,

I would like to thank the Erasmus University for this opportunity to express a shipowner's view of the state of the shipping industry and its prospects.

The year 2000 was reasonably good for bulk carriers and an excellent year for tankers. On the other hand world shipping had previously suffered a depressed freight market for nearly two years, since the beginning of the Asian crisis and probably deserved the respite. To better evaluate the market, it is important to gauge the effects that the Asian crisis had on shipping and whether they are transient or permanent.

Shipping faces a chronic oversupply of ships. The average earnings are insufficient for a high risk business such as this. For nearly a decade shipowners seem to be in a rut. Why do they continue digging themselves in deeper?

Without wishing to digress I will mention some basic shipping observations, call them "Shipping 1.01", which usually escape us in our day to day thinking. Sometimes, going back to basics is the best way forward even for you, graduate students. It may also be time for some lateral thinking.

Shipping is a mature, fundamental service industry, the original old economy business.

The purpose of shipping is to provide safe, cost efficient transport of goods within the parameters of the international transport chain. It is not a speculative opportunity although it has at times been regarded as such. **It is part of a system, and when analyzing it we must think systems.** Although the larger ships are more cost efficient per unit of cargo, all of the ships dimensions are critical in order to enter and be serviced at a port, not only the drafts. Therefore the efficiency of the sea transport leg is closely correlated with geographic parameters and the development of ports and their infrastructure.

For shipping to continue to provide the service required it must be profitable. To encourage a long term view and safe practices, profits must come from ship operation.

To have profits from ship operation we must have a balanced market. This though appears to be an elusive goal these days as we are being bombarded with new and different signals.

Globalization is compressing margins to extract every ounce of efficiency out of ship operation.

Low inflation, disinflation or even outright deflation at times is providing ever cheaper resources.

Currency realignments over the last 3 to 4 years are making nonsense of investments made some time back, whether these investments are in the ships themselves or for their repairs.

We must try to understand these different signals and see how they influence shipping.

Demand parameters

It is important to note that the freight market has a limited middle range in which it responds with elastic criteria. It responds inelastically when the available ships are few and thus the market soars. It is sluggish when there are more than enough ships and the market remains depressed.

Shipowners could take lessons from the oil producers who managed to agree to limit their exports by a very small percentage, say about 5%, substantially increasing oil prices and doubling their total income. This also helps the environment by giving us a strong incentive to be less profligate. If shipowners thought along similar lines and built a few less ships the freight market would be booming. **Maybe fleet consolidation in one form or another is a solution.** Pooling could be an option although I wonder what impact a pool of 30 Panamaxes would have on a fleet of 1.000 such ships. Maybe a pool of Cape size ships, where the numbers are less, could have an impact on the market.

Instead of limiting the supply of ships, shipowners appear intent to build ever more ships which will invariably limit their (each ship's) income. **Ships, at least for the shipowner, are capital assets to be operated profitably, not consumer items to be built ever more cheaply so as to be sold in greater volume to generate profits for others. That is the job of a shipyard.**

Furthermore, in this age of dot coms, we see moves to create data bases of ships searching for cargoes whereas there is no such enthusiasm from charterers to advertise all the cargoes they have contracted to transport. In fact one could say that many times disinformation exists. This is very one sided. Shipowners subscribing to the notion of advertising the positions of all their ships are doing themselves no favor that I can see.

Shipowners ought to have understood by now that the way to shipping profits is through relative scarcity of ships.

I am a dry bulk shipowner and as such most of the examples I will use come from my line of business. The same thinking though, suitably adapted, fits other trades.

TRANSPARENCY NO.1- WORLD TRADE GROWTH 90-98

As the world GDP grows so does world trade. World trade measures goods and services and not necessarily only shipping space. World trade growth is a number that is fairly fictitious for the dry bulk industry although it could be of some use to others.

The relative growth rates are interesting to note. World trade from 1990-1998 grew by 6.5% PA, total dry cargo trade has grown by about 3.4% PA. On the other hand the growth in world dry bulk trade has been no more than 2% PA while the growth of the container trades in the same period was 9.2% PA, having started from a far smaller base. Container ships, having captured a large part of the reefer trade, trades of finished products etc., are now making inroads in the minor dry bulk trades. Even grain is sometimes shipped in containers.

Within the dry bulk trade coal transport grew by 3.8% PA, iron ore trade has grown by 2.1% PA, or close to the average growth of dry bulk trade, the grain trade appears to have contracted by 0.6% PA and other dry bulk trades appear to grow by only 1.3% PA.

From the above it seems that growth in the bulk trades is not uniformly distributed over a wide range of cargoes. Coal seems to grow at a faster rate and particularly coal used as a source of energy.

The world's major bulk commodities are imported mainly by the Far East which absorbs about 54% of the total and by Europe which accounts for another 38% of the total. This explains the freight market collapse in the wake of Asian crisis.

What is more important than the actual volume of tonnage to shipping is the tonne mile aspect of transport and we shall also try to touch on that for each commodity.

Coal is used as a source of energy and in the form of coking coal as an essential element in the production of steel. Coal represents about 28% of all bulk cargoes shipped.

The amount of coal **used**, repeat used not shipped, worldwide appears static, in fact in Europe it has declined by about 34% in the last decade and it only seems to be increasing in Asia where its rate of increase is far smaller than the rate of increase of oil or natural gas (31% vs 53% and 85% respectively). The average distance that coal is transported seem to be decreasing indicating that more is sourced in Asia which is closer to the consuming nations.

TRANSPARENCY NO.2 – WORLD OIL DEMAND DIVIDED BY REAL GDP

I believe that the world's overall use of coal will probably decline as the Kyoto protocols or other environmental agreements are implemented and alternate sources of energy are used more and more. Transport of coal though may increase.

Furthermore as new technology increases the efficiency of electricity generating plants its effect on the use of coal and of course on oil and natural gas will also be negative. The world is becoming more and more energy efficient.

It is important to note that present thermoelectric plants have nearly double the efficiency of the first generation plants still in use in the developing world. That means that any plant being replaced or upgraded will be able to produce more electricity with less coal. This trend is already starting to show up in worldwide coal consumption and will eventually influence the seaborne transport of coal.

Growth projections for the transport of coal are mainly based on the thermoelectric plants scheduled to come on stream and on the fact that coal mining in Europe, Japan and elsewhere is declining and therefore the shipments to these areas are bound to increase to make up the shortfall. I believe that the rate of increase in the shipments of coal will be on a declining trend and may eventually level off.

Steel production is crucial for world growth and iron ore shipments are affected accordingly. It must be remembered though that steel is a recyclable commodity. According to the International Iron and Steel Institute approximately 50% of steel produced is from recycled scrap. 33% of the world's steel is produced by Electric Arc Processes which consume 60% less energy than Basic Oxygen Steelmaking. Over 50% of steel made in Europe, Japan and the U.S.A. use scrap as feedstock. China appears to produce only 25% of its steel from recycled scrap, probably because it is still at an earlier stage of its industrial development.

Iron ore represents about 24% of all bulk cargoes shipped. The average distance it is being transported has increased in the last decade probably due to the greater sourcing of iron ore by China from Brazil.

Grain. Whereas the world population has increased from 4.5 billion people in 1980 to 6 billion people today, an increase of 33%, the seaborne transport of grain has marginally decreased over a period of time possibly due to the higher yields of agricultural commodities because of better farming methods and genetically engineered crops.

Grain represents about 10% of all bulk cargoes shipped and the average distance it is being shipped for remains mainly static.

It may be that with the recent BSE scare and the European initiatives more grain and meal will have to be transported to make up for the animal bonemeal that has been banned by the European commission. On the other hand, the slaughter of hundreds of thousands of animals because of the "Foot and Mouth" disease may, at the end of the day, actually reduce imports. We will have to see how this develops.

The minor bulk commodities represent about 38% of the total bulk trade. The average distances that they are transported is very much smaller, about half those of the major commodities therefore their influence is much less.

TRANSPARENCY NO.3 – FACTORS AFFECTING DEMAND IN BULK COMMODITIES

Energy efficiency, recycling, intensive farming practices etc., have reduced the amount of raw materials needed per unit of world growth or industrial activity. Technology has been good to the world, not to shipowners.

Supply of ships

In the fifteen years from 1983 to 2000 newbuilding deliveries averaged approximately 3.8% of the dry bulk fleet per annum fluctuating between 8.2% in 1985 to 1.0% in 1994. Scrapping in the same period averaged approximately 2.3% PA fluctuating between 5.5% in 1986 to 0.2% in 1989.

As is to be expected whenever we had an increase in newbuilding deliveries greater than the increase in industrial production, the freight market suffered and conversely whenever industrial production increased more than the fleet deliveries the freight market was more buoyant. The larger the disparity the greater the fluctuations.

When comparing charter rates it is important to remember that over the last ten years the IMF deflator for industrial countries is approximately 30%. Thus a BFI of 1300 in 2000 was roughly equivalent to a BFI of 1000 in 1990. In fact the most profitable years for bulk carriers, on the basis of real earnings adjusted for inflation, were 1988 and 1989. 1995 was about as good as 1984. 1998 and 1999, which are thankfully behind us, were probably worse than 1986. 2000, with its mini boom, was below average.

This earnings performance is not very encouraging. We must be doing something wrong. But what?

Competitive ships will lay up only rarely. Uncompetitive ships or older ships needing substantial upgrading during a freight market slump will, in all probability, be scrapped. On the other hand, in times of good freight markets, owners usually undertake more extensive repairs so as to continue trading their ships. The continuous compression of repair costs expressed in U.S.Dollars, because of the currency readjustments after the Asian financial crisis, have made repairs even cheaper thus altering the parameters used for repairs versus scrapping.

It comes, of course, as no surprise that years of high scrapping rates coincide with poor freight markets. Poor freight markets are always preceded by over-ordering of ships. **It only takes a small reduction in the fleet to redress the market imbalance** but during market downturns instead of seeing attempts by shipowners to reduce the influx of new tonnage, which would have been the rational decision in any other industry, we seem to witness quite the opposite.

During 2000 alone, just after the greatest market downturn of this decade, orders for for 150 more bulk carriers were placed totaling about 15 million tons deadweight representing 5.3 of the fleet when a backlog of newbuildings representing 15% of the world's fleet was already scheduled for delivery. The total bulk carrier fleet on order now stands at over 665 ships totaling 43.7 million tdw or about 15.7% of the total fleet.

Each new order pushes recovery a little further away. There is, I am afraid, a certain degree of “irrational exuberance” in the expectations of some shipowners.... Let’s hope it does not abort the current freight market stabilization and throw us into another slump.

From a high of 283.49 million tdw in February 1998 the total bulk carrier and combination carrier fleet dropped to 281.70 million tdw in the spring of 1999 only to increase by 3.9% to 292.84 million tdw now.

The freight market only recently was telling us that shipping was overtonnaged, yet shipowners ordered ever more ships. Shipowners seem to project forever growth rates for the world economies only seen in 1999-2000 even though growth cycles have been analysed by economists ad nauseam.

Is this a manifestation of shipowners’ ever bullish nature or is there some logic to it?

Without great analysis the reasons put forward are that newbuildings now are cheap and that there is profit to be made in the form of an asset play. The thinking goes that ordering a ship cheaply in a less than good market, may eventually make sense since it will be delivered when the market is better... **If every one thought this way then there would be permanent, over-ordering, overtonnaging and consequently a continuous freight market depression. The freight market recovery would only come when all shipping companies would no longer be in a position to order any more ships!!!**

To assist these courageous asset players, owners of older ships are kindly expected to help bring about equilibrium by scrapping their ships so that the new ones can make a living!!!

This cannot be rational behaviors. It gives the impression that the shipping market signals are being grossly misinterpreted. After all shipping profits will only come from a healthy freight market.

But we must ask ourselves: are present ship values cheap because of low demand for newbuildings or have we witnessed a long term readjustment of currency values which makes and will probably continue to make newbuildings appear cheap in terms of U.S.Dollars?

To my mind this basic parameter of currency values must be thought through.

TRANSPARENCY NO.4 – TIME CHARTER INDEX EXPRESSED IN USD, DM AND CURRENCY WEIGHTED AT 65% IN USD

The effect of currency on ship investment decisions

When I first started learning physics in school, the teacher told us that when we sit in a train we think the earth is moving. If we stand on the ground we see the train moving. If we sit somewhere in space we see both moving. Things are relative.

When we talk about shipping I always feel like the man on the train. We all talk dollars simply because we mostly account in them. Bankers urge you to do it as a matter of prudence thus matching your debt to your income stream. **But is this prudence or folly?**

In the projection you will see the Maritime Research Time Charter Index (MRTC) for the years 1980 to date expressed in U.S.Dollars, in Deutsche Marks and Currency Weighted to represent 65% U.S.Dollars. It is interesting to note their patterns and similarities.

For the man accounting in Deutsche Marks 1984 was a boom year and 1992 was far worse a year than 1998, 1995 was pretty much average. We haven't seen rates as good as today's since 1989.

For all of us who account in dollars the slump of the '80's lasted from '82 to mid '87, therefore '84 was a bad year and '95 was a great year with Gulf/Japan peaking at USD 37.20/ton FIO. The market today is averagely good.

Who is right? Probably neither. As can be seen by the Currency Weighted curve the market has had pretty average fluctuations in nominal values for the last 20 years except for the periods that the dollar has been abnormally strong i.e. 1984/85 and 1998/2000.

Why do we account in dollars?

Probably because we are used to it, though it makes very little sense.

About 90% of all dry bulk ships are built in the Far East where the local cost is either in Japanese YEN, Korean WON or Chinese RENMIMBI. Therefore the replacement cost of the asset has very little to do with the dollar other than it was the chosen medium for the transaction.

Repairs, spare parts etc., are also mostly sourced outside the United States and other dollar areas.

Insurance, since it represents reparation of damages, may also be considered to have little real dollar cost.

We do not hire any American crews so surely crewing cannot represent a dollar cost particularly for those companies using national crews. Most shipping companies now use Asian crews thereby further tilting shipping in that direction.

Dry Bulk Shipping appears to be greatly influenced by Asian production, Asian currencies and Asian costs. Why not then an Asian currency?

In my opinion, using the dollar as the reference currency distorts dry bulk shipping finances. It is like trying to explain the motion of the planets using earth as the center of our planetary system simply because we live here and are used to it. Ptolemy thought the universe geocentric and his analysis of the motions of the planets was very complicated. Copernicus later proved it heliocentric and his explanation was far simpler and still valid.

The American economy imports only marginal amounts of coal and iron ore. It also generates little demand for grain imports. The economies of Europe and the Far East are far more important for dry bulk shipping as they account for approximately 92% of the imports of raw materials.

The dollar is always stronger when the American economy is stronger relative to those of the rest of the world. It therefore follows that the dollar should always be stronger when the dry bulk freight market is weak, **and it is.**

TRANSPARENCY NO.5 – COMPARATIVE COST OF PANAMAX B/C BUILT IN JAPAN IN USD AND YEN

When the dollar is strong, newbuilding prices expressed in dollars look more competitive. Shipyards, much like all other manufacturing industries are increasing their productivity through standardization, automation, robotics and better management systems. The evolution of the average trade optimized ship designs also improves their trading characteristics as can be seen from the 225 m LOA Panamax type bulk carrier which evolved from a 65.000 tdw ship in 1980 to a 75.000 tdw ship now while their cost of production went down. Ships of better characteristics were always being built by some shipyards or owners, but not in any significant numbers.

In a world of low inflation, in fact deflation in both Japan and China, the cost of production in local currency, which has come down over time, will invariably be further compressed. Considering that there is surplus shipbuilding capacity, the competition between Japan, Korea and now China to obtain orders for their shipyards will help reduce their profit margins and therefore prices in local currencies even further, **provided we don't rush to order more ships.**

As can be expected shipyards will try to charge what the market can bear, they too like windfall profits. You can see how prices in local currencies surged in 1989, 1990 and 1991 as well as 1995 when the freight market looked stronger, only to fall back down when shipowners' enthusiasm evaporated.

The freight market and therefore ship earnings, signal that shipping is usually overtonnaged, therefore we should not be tempted to order more ships unless there is a very good reason **and there is no good reason.** By ordering new ships now shipowners are **not** actually buying a cheaper ship, **they are instead playing the currency markers using ships as the medium rather than the usual financial tools.**

A few decades ago the usual medium for international shipping transactions was the Pound Sterling. Now it is the Dollar. In my opinion the YEN is the better currency to judge shipping sector profitability primarily because dry bulk shipping appears to have greater Far East content. For us Europeans it may be that the now beleaguered EURO will prove to be a better currency for international dry bulk shipping and may in turn help give good interpretation of market signals for shipping investments.

A note on ship design and construction

As patterns of trade change, so does the design of the ships themselves. Going forward ships will grow ever larger and will increasingly be designed for easier cargo handling, putting more rectangular modules into a shape that must have smooth lines. Ships' consumption will once again be a major issue as the price of oil will continue to escalate.

Ships' size and dimensions will change to maximize the benefits from port infrastructure developments. Over the last fifteen years we have seen the fall in preference of the handy size ships of 10-30.000 tdw and the shrinkage of this fleet. We have also seen other size brackets fall from preference, showing substantially greater inactivity now.

Ships must be built for at least a 25 year life span as it is very difficult otherwise to amortise their values and generate profits from their operation. 25 years is a long time. By the time the ship will be retired your children will be sitting in this room.

Once again these days shipyards and classification societies are promoting Minimum Scantling, Short Life, Asset Play type ships, built much like disposable tableware, good for limited use only. Despite intricate calculations demonstrating the profitability of such ships they have proved to be bad investments mainly because their cost of upkeep and repairs was underestimated in the calculations and the resale value of these ships was overestimated. I expect that similar ships built to such standards in the future will also prove to be bad investments.

Ships trade in an abrasive and corrosive environment and need substantial safety margins to compensate for the intervals between programmed, effective maintenance usually carried out during drydocking. Furthermore second hand buyers are no longer as gullible.

It follows that ships should be constructed robustly and be suitable for the trade envisaged if they are to have a chance to make money.

Some constructive thoughts

Shipowners must concentrate on making profits from operating ships which after all is their core business. It may perhaps also be appropriate that their preferred unit of accounting be more closely related to the areas which influence dry bulk shipping most in order to give a more relevant picture of profitability as, for example, **versus asset renewal costs.**

We cannot move to the future driving through a rear view mirror.

I would like to caution you, once again, to the fact **that we live in a world of advancing knowledge and technology which is of great benefit to mankind.** This greater knowledge and technology though, either in the form of genetically engineered crops, improved farming methods, increased efficiency of plant and equipment, recycling or whatever, **will probably continue reducing the need for transport of raw materials per unit of industrial production or wealth creation,** we must therefore be careful not to get carried away with our projections.

The pegging of the Asian currencies to the U.S.Dollar in the mid '90's created inevitable distortions to their economies. This caused the crisis of 1997/1998. These Asian currencies now float and have a better correlation.

Analysing the lasting effects of the Asian financial crisis I have come to the conclusion that because of the devaluation of the Far Eastern currencies versus the U.S.Dollar, which I think will last for some time pending Japan's recovery, **the prices of newbuildings expressed in U.S.Dollars have come down to a new, lower, level** influencing the prices of second hand ships. **They also place a new, lower ceiling on the potential earnings of all ships through investment decisions based on Return on Asset estimations of profitability.**

In fact the Asian financial crisis might be considered as the catalyst for a quantum step down in the valuation and earnings of ships, as well as repair costs. The presently prevailing steel renewal prices in China are about U.S.Dollars 0.90/ton as compared to U.S.Dollars 1.50/ton in 1997, about U.S.Dollars 3.50/ton in Greece and over U.S.Dollars 5.50/ton in W.Europe in the mid 90's.

Globalisation and the compression of prices and profit margins worldwide is of substantial benefit to the consumers who will be able to enjoy more for less, if they have jobs and therefore money to spend. World trade could increase faster for a while as the economies adjust to these productivity gains. What we must keep in mind though is the fact that all gains in industrial production will invariably have a ceiling as described by World Environmental Controls. **For world trade to exist the world, as we know it, must continue to exist.** Environmental considerations are very important.

We should also remember that **since the World War II trade optimized ship designs can be and are being built on a production line basis.** It took about 50 days to build a Liberty ship and less than a week to assemble it back in 1943. It takes between two to three months to build a bulk carrier now.

The world will unfortunately never be without enough ships for any length of time.

Shipbuilding is a capital intensive business, comparatively few man hours are generated by building ships.

The greatest proportion of a ship's cost is in the stern where the machinery, accommodation, electronics etc.,are concentrated. This is also the part of the ship that has the greatest life expectancy. **It makes very little sense to me, from either a financial or a safety point of view, to build the rest of the hull of the ship for less than a 25 year life expectancy taking into consideration her intended service. After all the amortization costs will be less.**

The longer the life of a ship, the more care and attention it must have. **Repairs are labor intensive. It makes more sense to promote shipyard employment through maintenance and repairs than through scrapping and building marginally more efficient new ships.**

Furthermore by building stronger ships we do not waste substantial parts of still useful assets. **It may even be environmentally friendlier.**

A point that should be considered is the actual **number of ships**. Over time the average size of ships has been increasing. As a consequence the actual **number** of ships is increasing at a smaller rate than the **deadweight**. At end December 1998 the total number of dry bulk and combination carriers was 5.684 ships totalling 281.9 million tons deadweight whereas now there are 5.691 ships totalling 292.8 million tons deadweight. In other words the world's dry bulk capable fleet increased in the period by 7 ships or 0.12% but by 10.9 million tons deadweight or 3.87%.

In general, ships load as much cargo as is available or can be loaded given the ships particulars and the draft parameters of each port. On the other hand **a possible under utilization of ships' deadweight would probably have a greater impact on the market since the number of ships is not increasing that rapidly**. For each cargo there should be a suitable ship as cargoes cannot be split in any which way

Based on scrapping data to date it is reasonable to assume that barring design obsolescence, one should reasonably expect to renew a large proportion of the dry bulk fleet as it becomes 25 years old and has to pass its 5th Special Survey, particularly Panamax and Cape Size bulk carriers. It could be though that, with low steel renewal costs substantial steel renewals could be justified in an average freight market, therefore some ships may pass their 5th Special Survey and continue trading safely. Therefore we could see ships being scrapped when they become somewhere between 25 and 30 years old. That being the case the dry bulk carrier fleet will probably have to be renewed over time to the extent of 3.3-4.0% PA on the average to substitute the carrying capacity of the ships that will be decommissioned. **To this we should add whatever may be required for any increase in world dry bulk seaborne trade to be able to maintain a reasonable freight market.**

TRANSPARENCY NO.6 – SCRAPPING RATE VS FREIGHT MARKET LEVEL

Scrapping and the freight market are inversely proportional. When the freight market goes up, scrapping goes down and vice versa.

The average scrapping rate from 1983 to 2000 was only 2.3% of the bulk fleet per annum. With the ageing of the fleet it could be that the average scrapping rate may increase over time closer to 3.7% of the fleet per annum to adjust to better ship maintenance practices.

In the period from 1987 to 1996, when the market was generally healthy, the average scrapping rate was 1.6% PA. A higher scrapping rate always indicates softer freight markets. In the first half of 1999 the scrapping rate was 4.8% PA, indicative of a poor market. In the second half it was 2.2% PA, about average, as the market improved in 2000 it was about 1.5% PA once again the sign of a healthy market. This market though I believe will change as ever more newbuildings are being delivered because of overoptimistic ordering of ships and with the world economy headed for a slowdown.

A further 8.8% of the fleet is due for delivery in 2001. World growth is probably going to be about 3.6%. Under the circumstances 5.2% of the fleet will probably have to be inactive to compensate. Remember that the average scrapping rate, indicative of an average market, in the past has been approximately 2.3% PA. In the years to come, as the age of older tonnage increases the scrapping rate may average somewhere between 3.3% and 4.0% without signifying adverse market conditions. In any case the presently projected difference between the fleet surplus to the potential demand indicates that the freight market will most probably weaken.

We must remember that if, in order to balance supply with demand, we have to imply a greater scrapping rate, what we are in fact saying is that we are looking forward to a weaker freight market.

Conclusion

Shipping is a high risk business. The profits it should generate must be commensurate with the risks involved. **They are not.**

We must strive for a healthy market. The timing of newbuilding deliveries in this context is crucial.

It is perhaps more realistic for ship financiers to lend less aggressively for newbuildings thus helping to stem overordering.

To protect their shipping investments shipowners and bankers should build less new ships. **Second hand ship transactions do not add new tonnage on the market, they recycle existing ships among shipowners.**

Building marginally more efficient ships of similar specifications to existing tonnage adds little value to the world's transport system and shipping. It only generates work for shipyards and the economies of the countries in which they are located.

Shipowners rarely really profit from building more similar ships if they are surplus to demand. Other than increasing turnover, they just create a bigger fleet of less profitable units and their asset exposure is greater. **Every new ship delivered either pushes the market down a notch or prolongs the slump a few days further.**

Shipowners should base their decision to order ships on well filtered market signals. **Shipyards can and will build us as many ships as we care to sign up for.**

Don't get me wrong, I am not a Luddite. I am a naval architect, I was trained to like to build ships, ships that add value to the world's transport chain not just conventional replacements which force the scrapping of existing similar tonnage.

Restraint in newbuilding orders improves shipowners' balance sheets. The fewer orders we place, the healthier the freight market. Competition will help shipyards improve their specifications and compress costs further so as to secure orders much like other manufacturers do, therefore why rush to order now? **Order later and hedge intelligently.**

Fleet profitability must be a shipowner's first priority, ordering ships can come later.

Thank you.

George A.Gratsos

ERASMUS UNIVERSITY 19th April 2001

Sources:

IMF, OECD, DREWRY, R.S.PLATOU, SSY, HOWE ROBINSON, FAO, IISI, BP AMOCO

TRANSPARENCY NO.2

WORLD OIL DEMAND DIVIDED BY REAL GDP

TRANSPARENCY NO.3

FACTORS AFFECTING DEMAND IN BULK COMMODITIES

TRANSPARENCY NO.4

CHARTER INDEXES IN USD, DM AND CW

TRANSPARENCY NO.5

**COMPARATIVE COST OF PANAMAX BULK CARRIER
BUILT IN JAPAN IN USD AND YEN**

TRANSPARENCY NO.6