

# The Great Shipping Boom 2003-8

## Can We Avoid a Great Shipping Slump?

*Fifth City Biennial Meeting  
Martin Stopford, 18-19th November 2008*

### *Synopsis*

After 5 years of super-boom the shipping industry is cash rich; asset values are inflated; and the market outlook is grim. The super-boom occurred because over 5 years record world GNP growth and surging Chinese trade squeezed an already tight market. These conditions are unlikely to be repeated in the next few years. But the industry has a \$0.5 trillion orderbook, representing 47% of the fleet and half is held by European investors. This exceeds likely requirements and when a similar problem occurred in the 1970s it took more than a decade to resolve. The industry cannot influence demand, but it has some control over supply which it should seek to use.

### *1. The Great Shipping Boom 2000 to 2008*

In the last five years the shipping industry has enjoyed one of the most prosperous periods in its history<sup>1</sup>. During the 1990s the average ship generally earned \$10,000/day and never more than \$15,000/day. But since the new millennium started earnings moved from \$24,000/day in 2000 to \$39,000/day in 2004 and \$50,000/day in 2008 (Figure 1). The cash generated during these peaks drove up asset values, increasing the price of a modern Capesize bulk carrier from \$24 million in 2003 to \$165 million 5 years later (Figure 2), making shipping one of the most profitable businesses in the world<sup>2</sup>.

### *2. Why it Happened*

The seeds of the boom were sown in the 1960s when Europe and Japan were globalising their economies creating the demand for large scale bulk and container shipping. Three market peaks in 1967, 1970 and 1973 triggered an *investment bubble* and the problem was made worse by world economic problems as a result of which seaborne trade hardly increased for a decade<sup>3</sup>. The result was a structural imbalance in the supply and demand of shipping capacity which took almost 20 years to clear (Figure 3). With an almost new fleet, it was a decade before scrapping gradually reduced the surplus, and eventually in 1997 demand caught up with supply and, for the first time in a generation, the supply of ships was just sufficient to carry trade.

However the recovery in shipping's prosperity was postponed by the Asia Crisis (1997) and the Dot.com Crisis (2001). So shipping entered the present boom in 2003 with low expectations and investment hardly sufficient to replace remaining ships built in the 1970s bubbles, which were

---

<sup>1</sup> For the year by year account see Chapter 4 of Maritime Economics 3<sup>rd</sup> Edition, Martin Stopford,

<sup>2</sup> For example an investment of \$28 million in a five-year-old Capesize bulker in October 2003 would, by August 2008, have produced a profit of \$195 million. This assumes the Capesize traded spot 2003-8 with \$6,000/day operating expenses, collecting \$121 million freight revenue and sold as a 10 year old ship for \$116 million in August 2008

<sup>3</sup> The oil crisis of 1973 and 1979 plus very high levels of inflation contributed to these problems

approaching 30 years of age<sup>4</sup>. With so little investment, when the world economy moved into a phase of supercharged growth in 2003 (Figure 4) and China trade took off (Figure 5) the conditions for the super-boom were in place. The growth rate of sea trade, the main demand driver for shipping, increased from an average of 3.3% pa to an average of 5% pa in the last 5 years (Figure 6).

### *3. World Economic Angst*

The economic indicators suggest that we are now heading for a period of slower trade growth. The key question is whether it will be a short sharp downturn of the type which occurred in 2001, or something that will last much longer like the recessions of the 1970s and 1980s.

Over the last 40 years the growth of the world economy has been interrupted every seven or eight years by a major recession. When the economy slows, so does sea trade growth - the close match between economic and trade cycles is clear in Figure 4. Today we are entering one of these downturns, driven by the credit crisis and “bubbles” in some industries, particularly in real estate and steel. These will present problems for policy makers (we also have an energy crisis), making it harder to manage the downturn. Finally China, which produced 60% of the growth of imports in the last five years, is facing slower GNP growth, rising costs, falling export volumes and falling construction activity.

### *4. China's next steps*

The China story is slowly unravelling. China's role in the super-boom started when in the 1990s the Chinese government reformed the banking system, allowed property ownership, encouraged infrastructure development and opened the economy to inward investment. The result was more spectacular than anyone expected. China's imports surged from 200 million tons in 1998 to a billion tons in 2008 (see previous Figure 5), accounting for 60 per cent of the growth in seaborne trade during this period. For shipping the focus was on the container and bulk businesses.

The container business carried most of the manufactured exports<sup>5</sup>. Total export volumes trebled from 150 million tons to 400 million tons, but containerised exports grew much faster, increasing at 25% per annum on the US and Europe Trades. This created the conditions for exceptional growth of bulk and General Cargo but in the last year the growth rate of exports has slumped (Figure 7). This reflects the falling demand in export markets and the loss of competitiveness by some Chinese manufacturers, especially in southern China.

The bulk carrier shipping boom was driven by Chinese steel production. Until the late 1990s Chinese steel production had edged up slowly, reaching around 12 million tons a month in 2002. By 2008 it had peaked at 47 million tons a month (Figure 8). In the last three years, however, production surged ahead of “base” demand and in the first quarter of 2008 real estate demand slowed. Unfortunately this coincided with a record surge in construction activity (Figure 9) and when prices stopped rising, buyers pulled out and the market went into a downward spiral, causing a sharp fall-off in demand for iron-ore and steel. Over the last three months China's steel production has dropped by over 15% with more cuts on the way.

---

<sup>4</sup> See Figure 15 which shows scrapping of 27 m dwt in 1999 and deliveries of 39 m dwt, so the fleet only grew by 12 m dwt.

<sup>5</sup> The availability of fast reliable container services played a big part in the speed of development. Compare with the problems the Japanese faced in the 1960s struggling with the old cargo liner system

Looking ahead, the great expansion of Chinese steel capacity is probably over. Rationalisation will probably reduce production to a more stable level possibly 20% or more below the recent peak. That would be very bad for the dry bulk business which is geared up for growth. On the container side Chinese exports are becoming more expensive. The RMB is drifting upwards and the labour contract law, plus material cost inflation have reduce the competitiveness of domestic manufacturers. The Government's policy is to encourage domestic consumption.

### *5. Investment Overload*

In 2003 the shipping and shipbuilding industries were unprepared for the surge in ship demand. The orderbook was 15% of the fleet; the fleet was hardly growing; and the shipyards had no expansion plans. However the response, driven by record earnings, was very rapid and the record of orders placed over the last three years looks uncomfortably like the big brother of the investment bubble which caused problems in 1970s (Figure 10).

Newbuilding prices have doubled (Figure 11) and this is reflected in second hand prices which have increased even more, especially for dry cargo vessels such as Capesize bulk carriers. The sums being invested in new ships was enormous - \$233 billion in 2007 and \$104 billion to August 2008 (Figure 1 2). Europe still dominates investment with Greece and Germany accounting for a quarter of investment in new ships and Europe as a whole for half (Figure 13). Just to complete the picture the orderbook is now 47% of the fleet compared with 15% at the beginning of the boom (Figure 14).

A distinctive feature of this shipbuilding boom is that the capacity expansion was undertaken at very short notice. The shipyards only started considering expansion in 2004 and the new berths became available for sale in 2006. As a result, despite all the orders, shipyard production has grown slowly at around five to seven per cent per annum in the last few years. The big surge of output comes in the next three years, with scheduled output jumping from 80 m dwt in 2007 to 180 m dwt in 2010 (Figure 15), though there are doubts about whether all of this will be achieved.

This delivery schedule is the industry's most pressing issue at the moment for two reasons. *Firstly* in view of the economic outlook investors in some market segments, especially the big end of the bulk carrier market must now be wondering whether those decisions made in the heady conditions of 2006 and 2007 still make economic sense and whether the finance will be available to pay for them. *Secondly* on the supply side there may be difficulties building so many ships to contract. The speed with which new capacity has been developed raises questions about the technical performance of start up facilities; the supply of management and skilled labour; and the availability of pre delivery finance. For some of the new capacity these issues will prove very difficult. Looking ahead, if everything is delivered on time the fleet will grow at over 10 per cent per annum. But nobody knows whether investors will want to cancel orders in large numbers and if they do how binding the shipyard contracts will prove to be.

### *What happens next?*

This is a very difficult situation for the shipping industry. After five years of apparently insatiable demand for sea transport, suddenly and dramatically, the picture has changed. The world economy is heading into a most unpleasant recession; and China which created so much of the demand for bulk carriers and container ships is moving into a phase in its development which will generate less trade growth on both accounts. So the 5% per annum growth of seaborne trade achieved in the last five years is unlikely to be achieved in the next few years.

Meanwhile shipping investors, especially in Europe, have invested \$0.5 trillion in new ships, which if built to schedule, will expand transport capacity by around 10% per annum. As mentioned above, there are doubts about whether some of the shipbuilding capacity is able to deliver on the commitments made.

What we do not know is the length, depth and general severity of the downturn. During the similar situation in the early 1970s everything got built the industry was unlucky on the demand side. Things developed badly and it took 17 years to clear up the aftermath of that particular investment bubble.

At a time when governments are struggling to moderate the effects of the problems in the financial system, is it reasonable to ask whether the shipping industry as a whole should not be looking seriously at ways to manage this problem.

Of course that raises many issues. Precisely how it plays out depends on how the interested parties, shipowners, shipbuilders, shipbrokers and bankers conduct themselves. The one certainty is that the skills of statesmanship needed to navigate the difficult seas ahead will be much more demanding than anything we have experienced in the last five years.

Martin Stopford  
19 November 2008

1710 Words

**This paper was produced for general interest and discussion. Its content was not subject to any audit or validation procedures and it may contain errors. It should not in any circumstances be taken by participants or any other readers as a substitute for their own properly devised and executed research.**

Figure 1: The Great Shipping Boom 2000-08

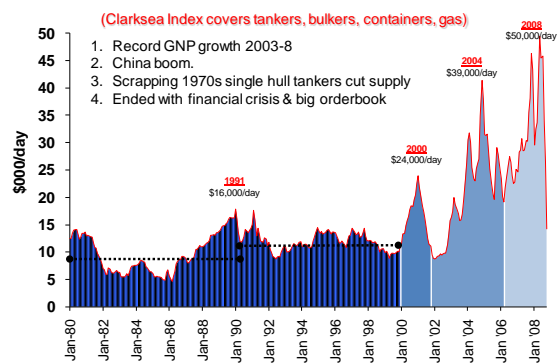


Figure 2: Ship Prices (VLCC & Capesize)

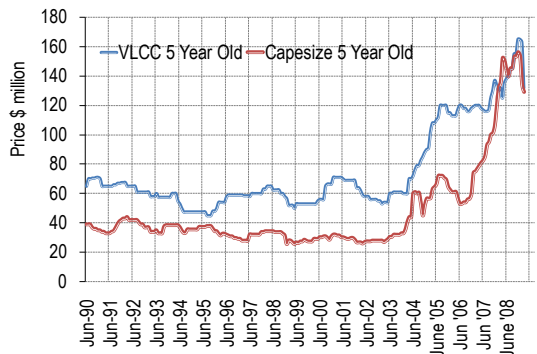


Figure 3: Structural Imbalance

- The 20 year recession arose from major dislocation of demand and supply:-
- Phase 1: Trade and fleet tightly balanced in the 1960s
- Phase 2: Dislocation of supply and demand 1973-1997
- Phase 3: Tight balance since 1997

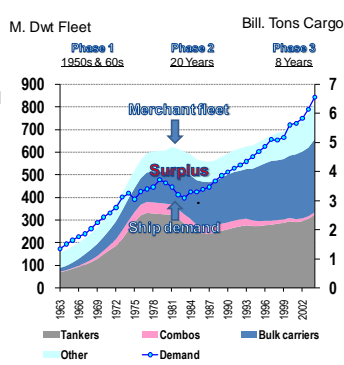


Figure 4: World Economy 5 Years of growth

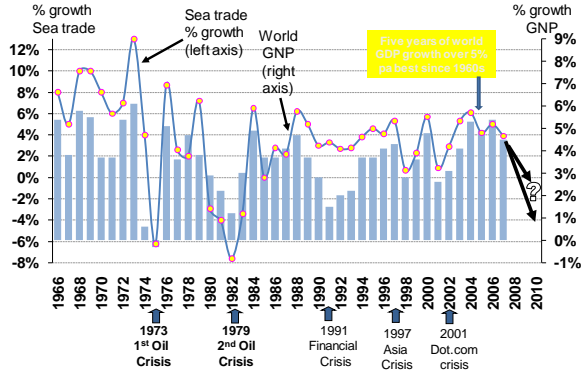


Figure 5: China Trade Boom

- The developing Chinese economy added 1 billion tonnes of f cargo
- Between 2000 and 2008 China created 60% of the growth of sea trade
- No plans were made to supply the shipping capacity or material supplies for such a big increase

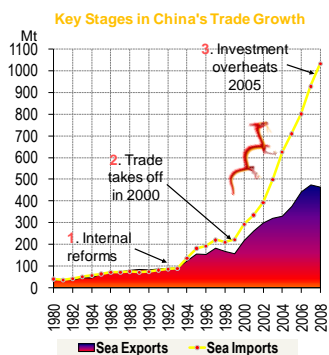


Figure 6: Sea Trade Grew Above Trend

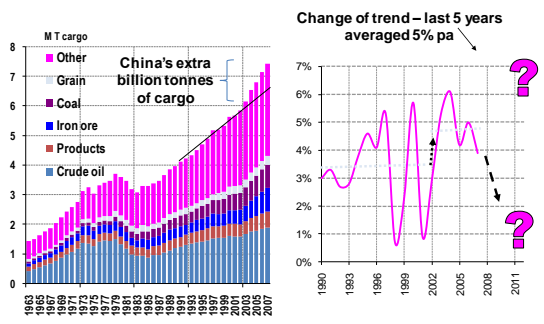
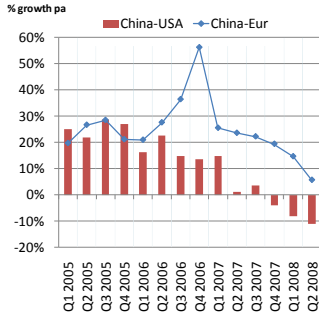
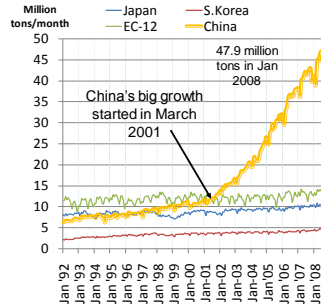


Figure 7 China Container Exports Slump



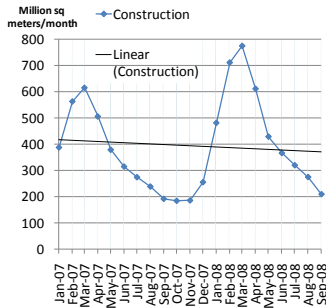
- China container exports started to fall in the early quarters of 2007
- The US trade is the hardest hit so far
- But Europe trade is also falling

Figure 8 China, Europe & Japan Steel Production



- China produced 47 mill tons steel in Mar 2008
- But the rate of growth dropped sharply by 9% in September 2008
- Nobody quite sure where capacity will settle

Figure 9 China Construction Activity



- China construction surged early 2008
- The trend at the moment is edging down at around 400 million square meters a month
- This suggests steel demand from the construction industry has stabilised

Figure 10: 2003-8 Ship Investment Bubble

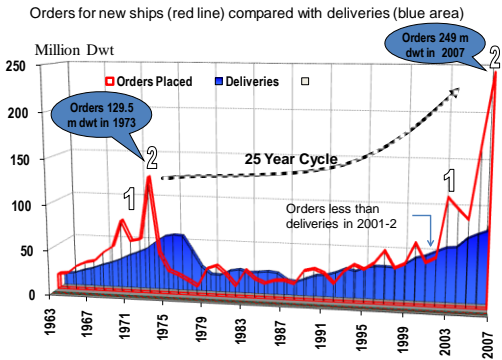
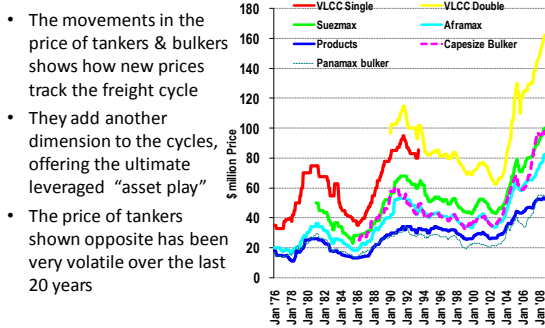
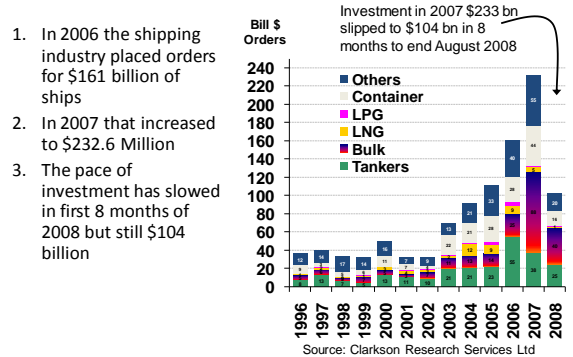


Figure 11: Shipbuilding Price Cycles



- The movements in the price of tankers & bulkers shows how new prices track the freight cycle
- They add another dimension to the cycles, offering the ultimate leveraged "asset play"
- The price of tankers shown opposite has been very volatile over the last 20 years

Figure 12 Investment In New Ships



1. In 2006 the shipping industry placed orders for \$161 billion of ships
2. In 2007 that increased to \$232.6 Million
3. The pace of investment has slowed in first 8 months of 2008 but still \$104 billion

Investment in 2007 \$233 bn slipped to \$104 bn in 8 months to end August 2008

Source: Clarkson Research Services Ltd

Figure 13: Order-book by Country

- The chart shows the new orders placed by country in 2008 to end August
- Europe accounts for 51%, Asia 26% and M. East 6%
- The big issue is how they will respond to the crisis and the interplay with the shipyards

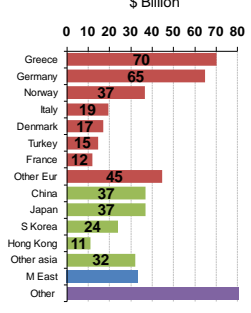
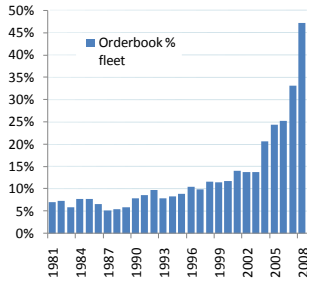


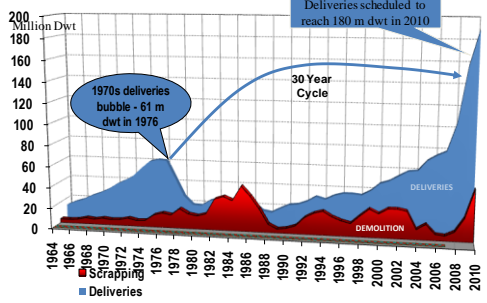
Figure 14: Merchant Order-book as % Fleet

- In 2003 the order-book was 15% of the fleet, about enough to expand the fleet by 3% pa



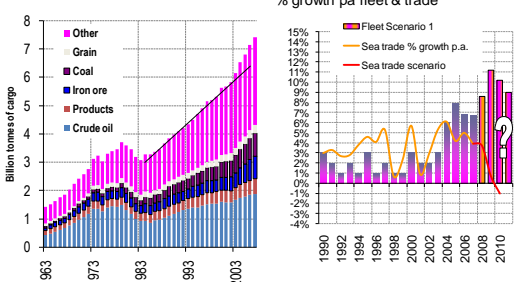
Source: Clarkson Research Services Ltd

Figure 15: Deliveries Based on Orderbook



By the early 2000s the replacement of ships built in the 1970s bubble could no longer be put off. As the old ships were removed supply tightened

Figure 16 The World Trade & World Fleet



Scenario1: delivery on time Scenario 2: 15-22% slip 1 year & 5% cancelled