



The Bulk Carrier Shipbuilding Market ~ a review of the major issues post 2008

Philip Rogers

Associate Dean ~ Copenhagen Business School

Head of Consultancy ~ ICAP Shipping Ltd

Copenhagen 19th February 2009

© ICAP Shipping International Limited ("ICAP Shipping") 2009.

This information is addressed to ICAP Shipping customers only. While it, and any opinions expressed in it, have been derived from sources believed to be reliable and in good faith they are not to be relied upon as authoritative or taken in substitution for the exercise of your own commercial judgment. This information has no regard to specific investment objectives. Any opinions expressed in it are subject to change without notice and may differ from opinions expressed by other areas of the ICAP group. This information is not, and should not be construed as, an offer or solicitation to sell or buy any product, investment, security or any other financial instrument. ICAP Shipping does not make any representation or warranty, express or implied, as to the accuracy, completeness or correctness of this information. ICAP Shipping does not accept any liability for any loss or damage, howsoever caused, arising from any reliance on any information or views contained in this material. Certain companies in the ICAP Shipping group are authorised and regulated by the Financial Services Authority. For further regulatory information, please see www.icap.com. This information is the intellectual property of ICAP Shipping. ICAP Shipping and the ICAP Shipping logo are trademarks of the ICAP group. All rights reserved. Redistribution is prohibited.

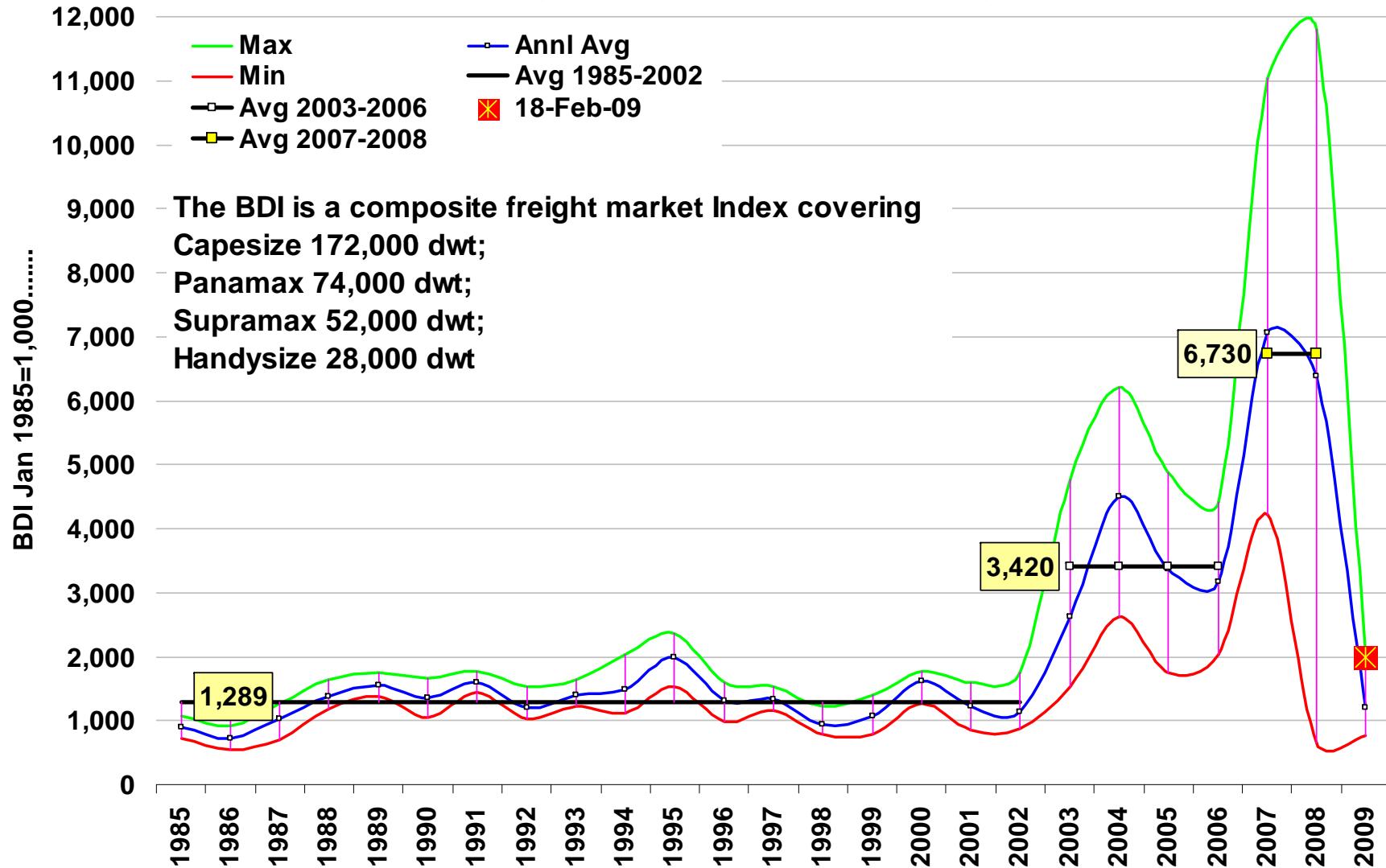
Overview

- Freight market collapse in 2008 led to sharp contraction in demand
- This, in turn, impacted world demand for ships and directly to a sharp slowdown in contracting
- It also left many shipyards in a precarious position – worried about payments, future orders and their own credit finance
- Equally, many shipowners are facing great uncertainty and financial difficulties
- Cancellations and delays have become commonplace
- The whole industry faces a period of difficulty and change

Where is the freight market now?

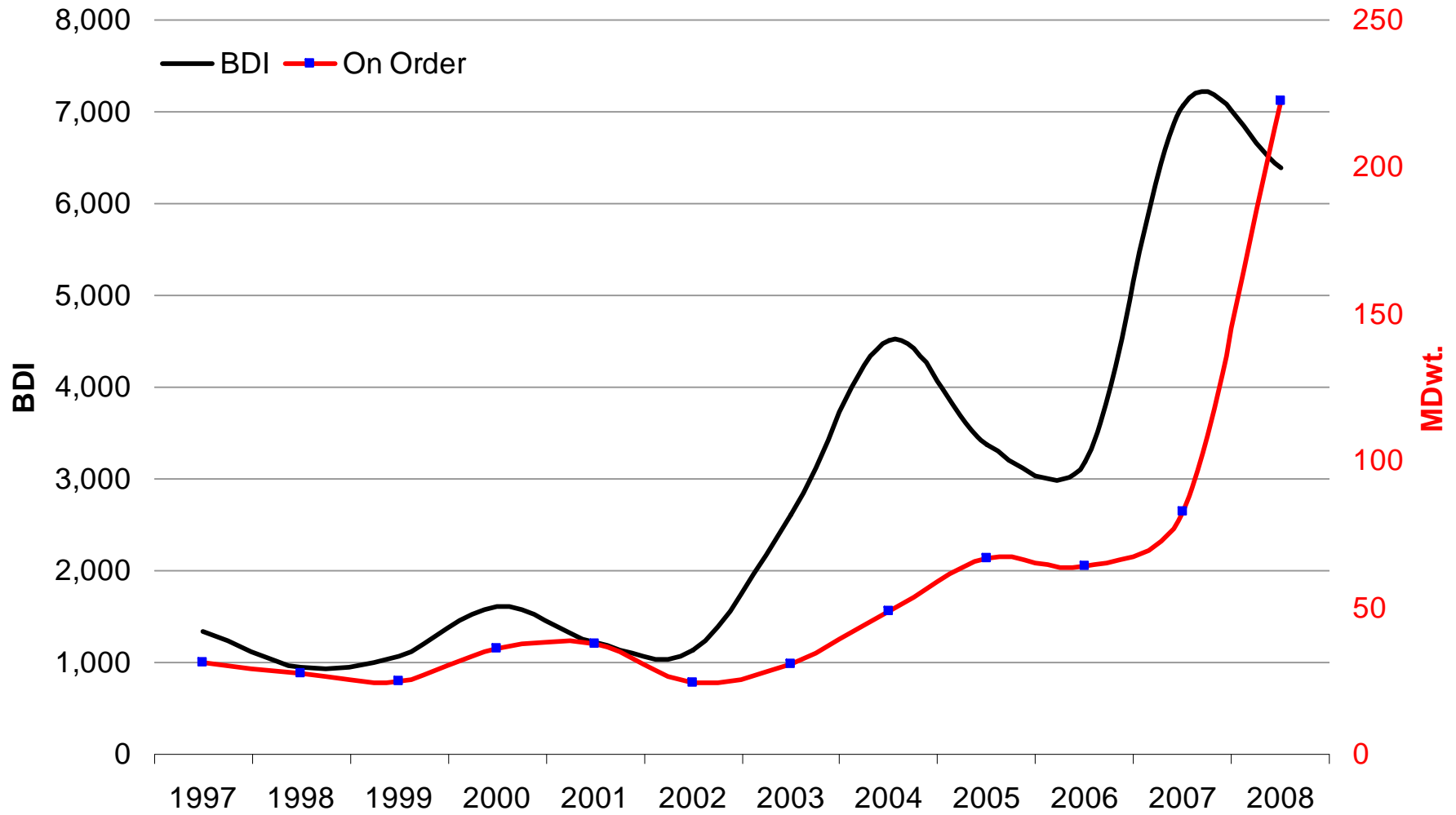
Source: Baltic Exchange

Baltic Dry Index Annual Summary



Orderbook responded to increase in freight market

BDI & Orderbook



Causes of the collapse

How did we get here?

- The current global economic situation is expected to influence owners, charterers and shipyards for the whole of 2009 and possibly significantly beyond that time – however until the middle of 2008 it was only part of the story.
- The fall in the freight market did not occur *solely* because of the economic situation; rather the economic collapse was the final factor that caused an already very serious situation to become even worse.
- Most shipping analysts had warned of a downturn for at least a couple of years previously due to the size of the orderbook yet when it came to it very few expected the freight market not to see some recover *post-Olympics* – even if not to the record heights as seen in May/June.
- It could be argued that many shipowners shared this view but nearly all were caught out by the extent and severity of the fall.

Causes of the 2008 downturn

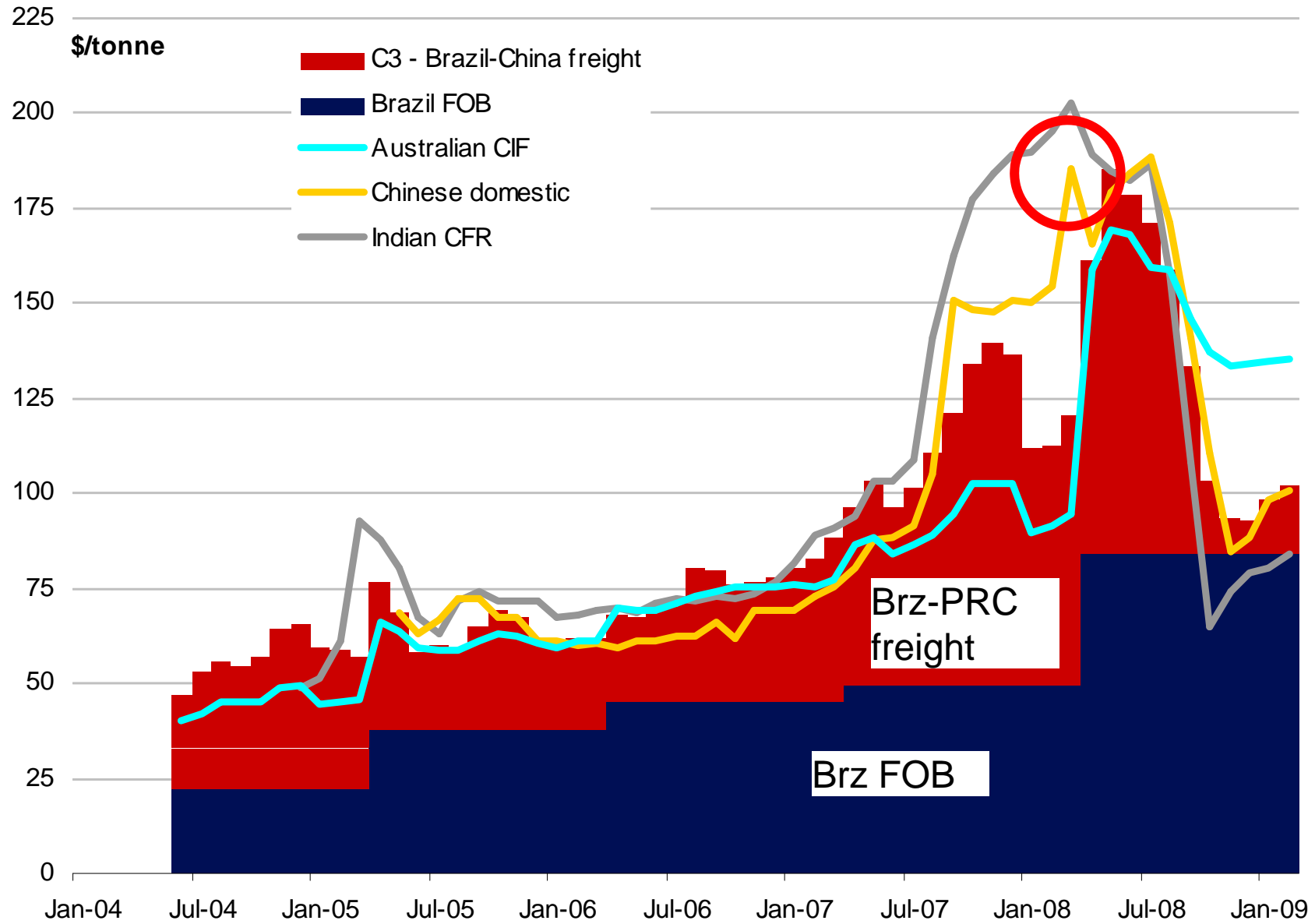
- The *potential* for a downturn had several roots and had been well documented in the public domain:
 - the extra fleet supply from ships being delivered plus extra bulk carriers from tankers converted to VLCCs
 - a complete absence of scrapping of older (or any) bulk carriers
 - a fall in congestion releasing ships on to the market
 - a slowdown – pre-Olympics - in Chinese import demand
- So all of the above were expected and indeed happened yet the rapidity of the fall still was exceptional – as sentiment changed and in certain sectors near panic set in
- Up to that point we had seen record volatility so the June downturn was initially considered not that unusual and simply a market correction – but it was, in fact, far more than that ...

“Tipping Points”

The collapse in the market occurred because of *all the previous points* but the additional “tipping points” were:

- the lack – post-Olympics – of any discernible recovery in Chinese demand.** A recovery was widely expected by the market and when it failed to emerge impacted sentiment very rapidly which, when combined with the traditional August market slumber, left demand at low levels;
- the fall in commodity prices** – in China as domestic supplies squeezed the delivered cost of imports so consumers switched increasingly to indigenous sources (e.g., iron ore and coke) which put immediate downward pressure on freight rates as not so many cargoes were needed – however the ships to carry these cargoes still existed;
- a global slowdown in steel production** with knock-on effects for many commodities: iron ore, met coal, coke, scrap, etc.

Fall in demand triggered slide in Chinese domestic prices



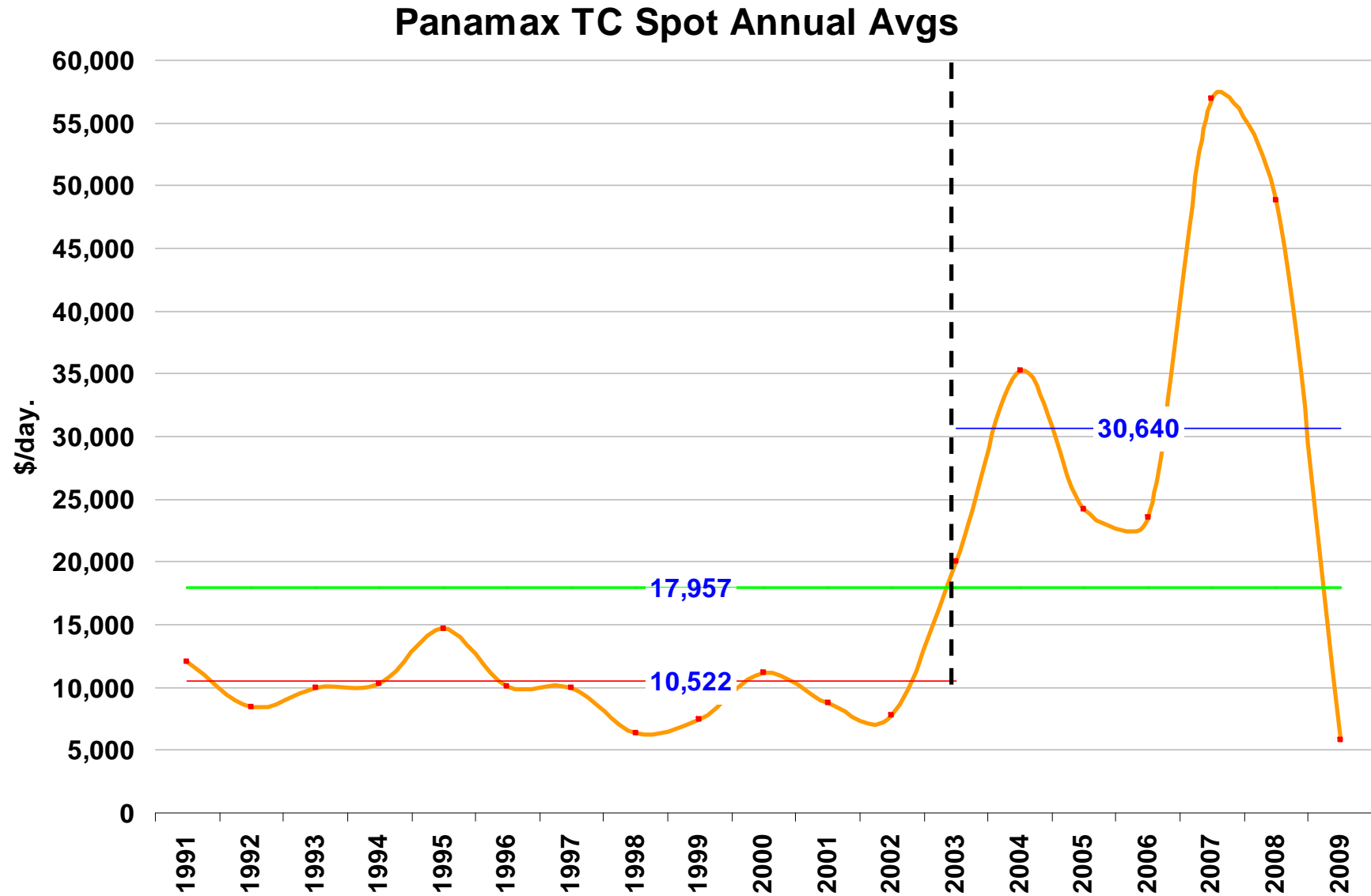
and then came the financial crisis....

- The Lehman Brothers collapse;
- A virtual end to inter-bank lending
- International financial crisis
- High street banks collapsing - note also this included Royal Bank of Scotland – a leading shipping bank
- Governments buying Banks (incl. RBS) to prevent total collapse and lend support
- Issuance of long-term government bonds
- Base rates dropping to zero but not the same situation for borrowers with simple shortage of credit keeping rates high

.....and the rest, as they say, is history

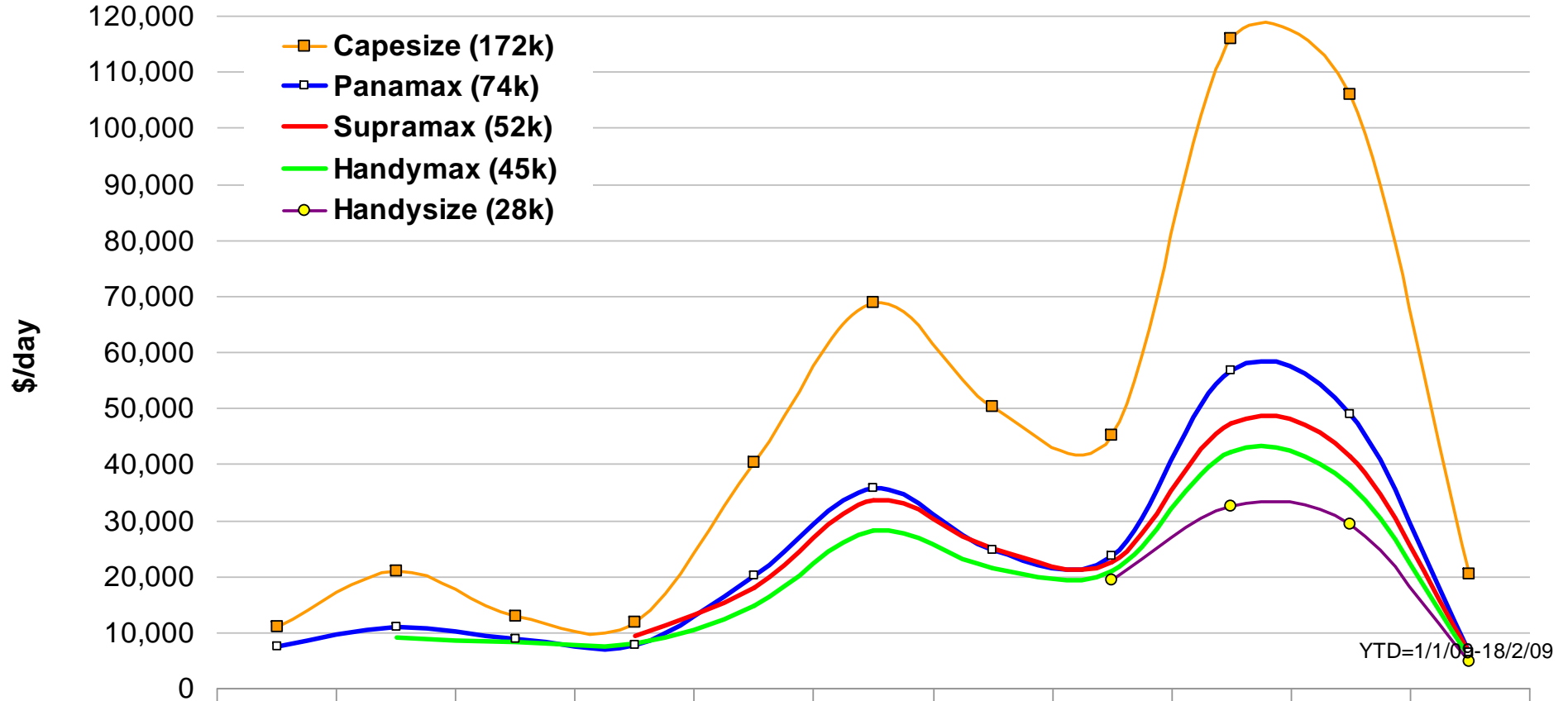
Impact on Freight Market

Panamax rates are representative of the fall...



...but all sizes and sectors were affected

Spot Rate Annual Averages

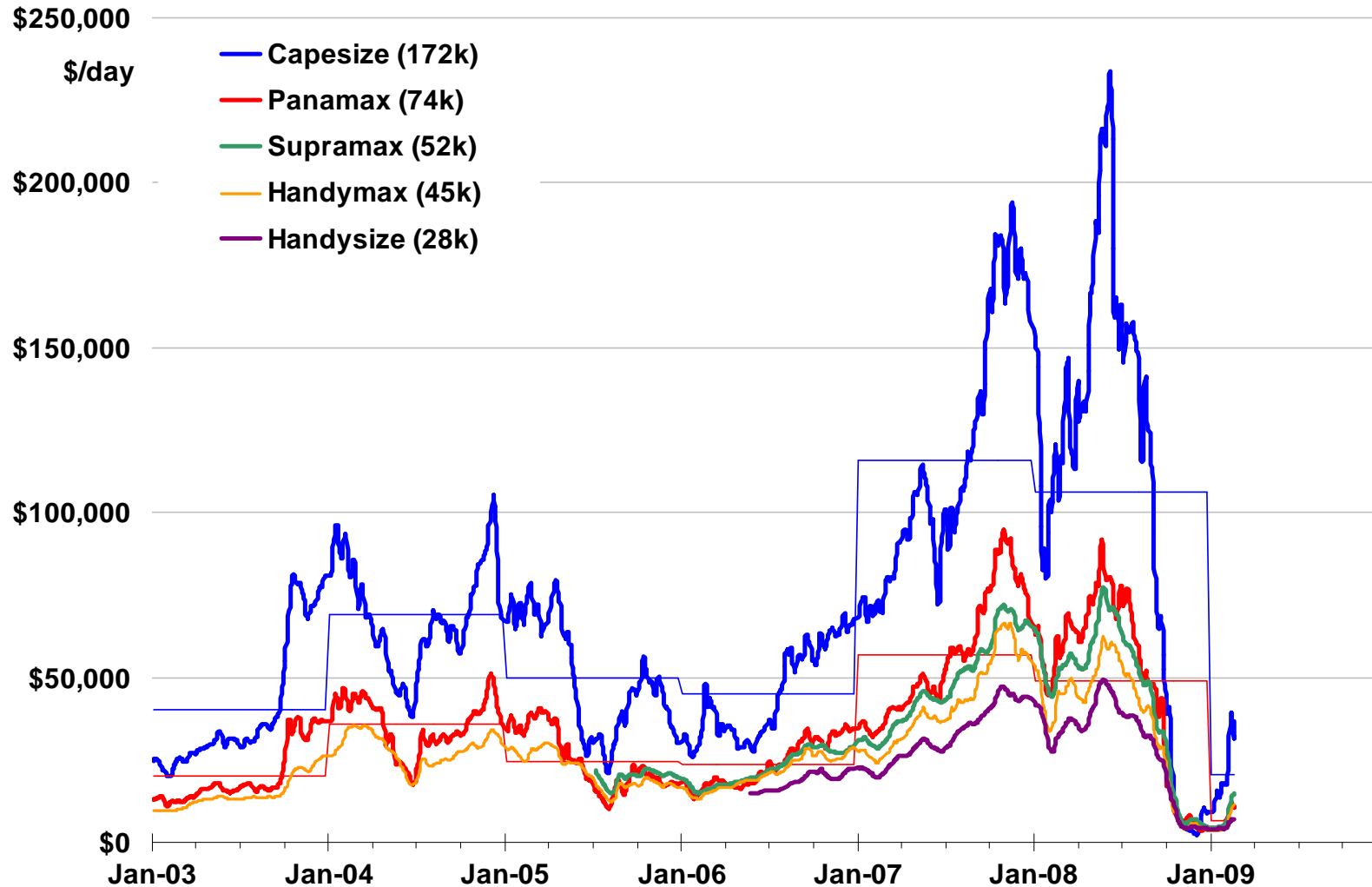


	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009ytd
Capesize (172k)	10,922	20,904	12,950	11,918	40,329	69,002	50,344	45,139	116,031	106,025	20,570
Panamax (74k)	7,422	11,102	8,767	7,725	20,063	35,725	24,802	23,778	56,814	49,014	6,577
Supramax (52k)				9,309	18,073	33,696	25,014	22,619	47,446	41,544	6,589
Handymax (45k)		9,053	8,344	7,978	14,810	28,191	21,420	20,940	42,168	36,241	5,658
Handysize (28k)								19,425	32,447	29,278	4,914

The whole market was volatile so a big fall was initially shrugged off; it was not until later that it was apparent that the turning point had finally been reached

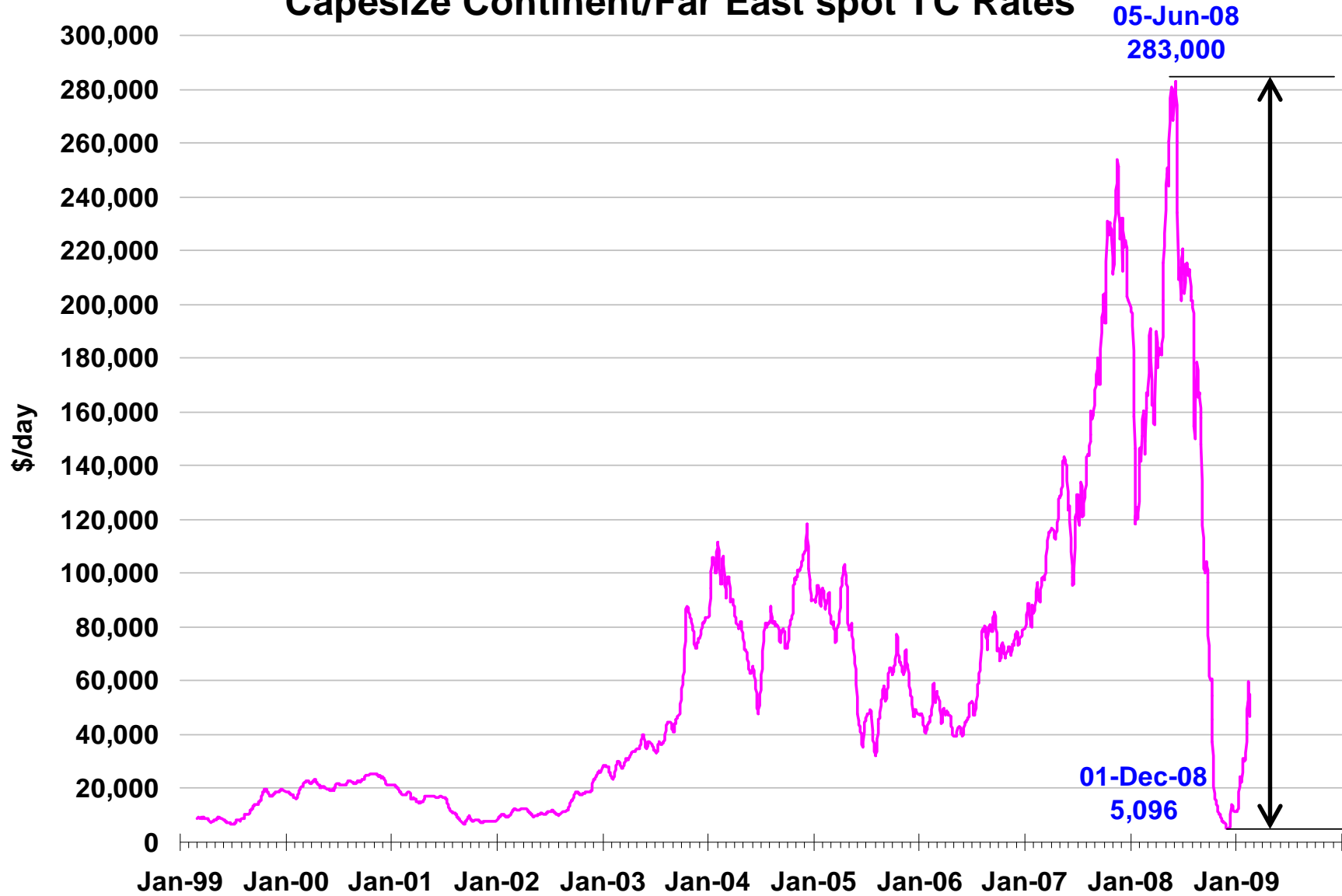
Source: Baltic Exchange

Average Basket TC Rates



98% fall in earnings just six months

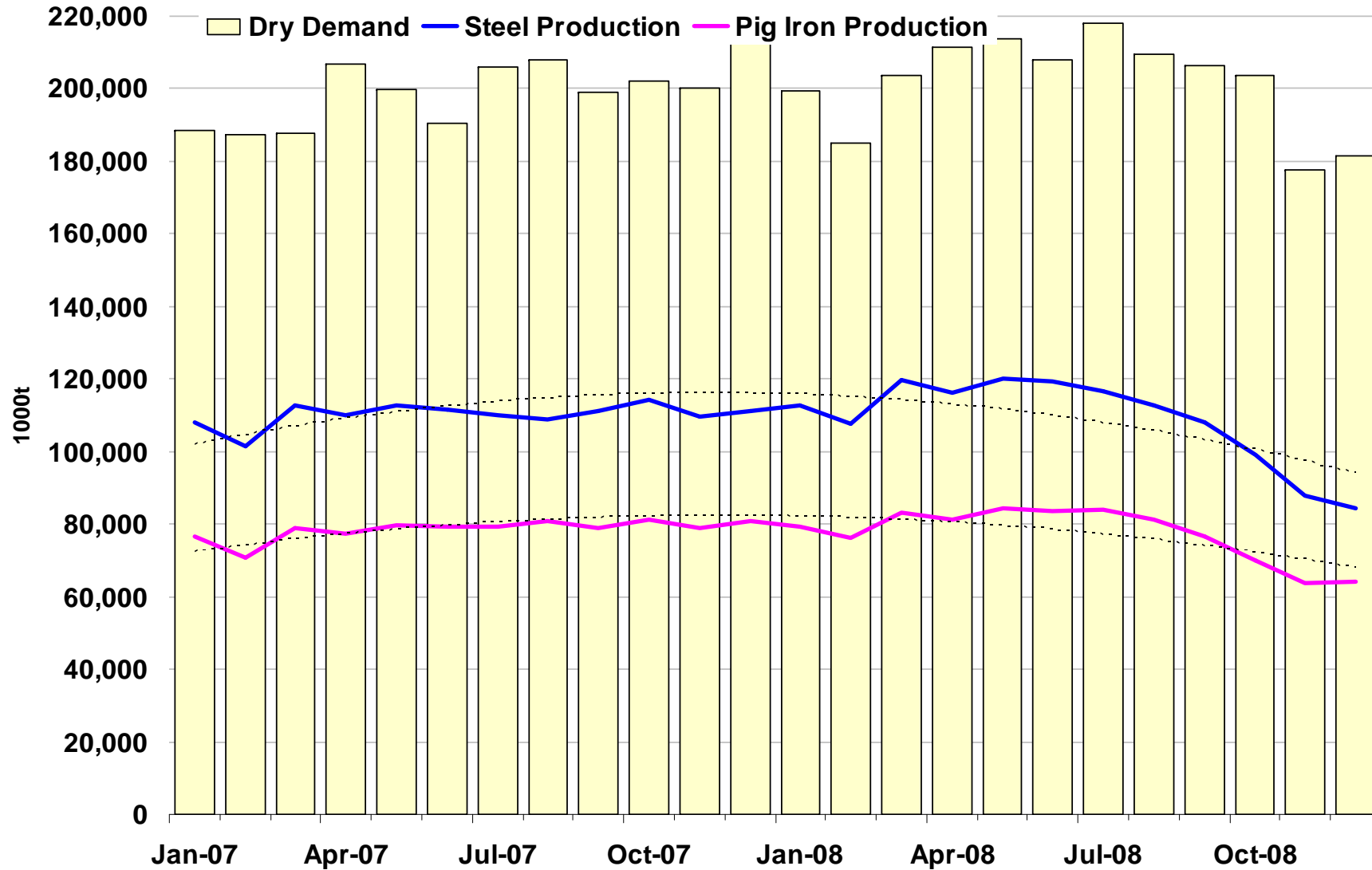
Capesize Continent/Far East spot TC Rates



Demand Changes

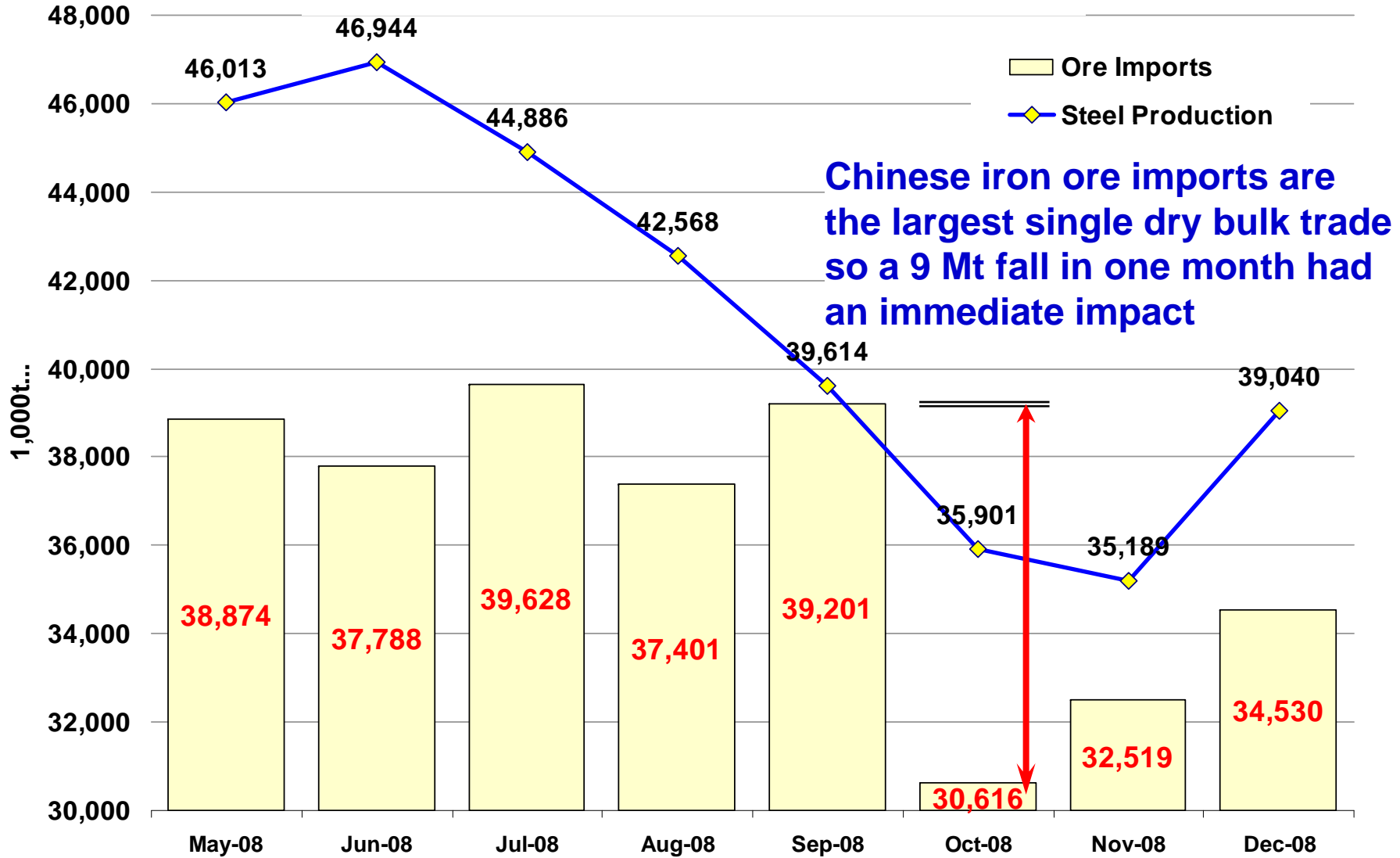
Demand downturn led by steel

Steel Production & Seaborne Trade



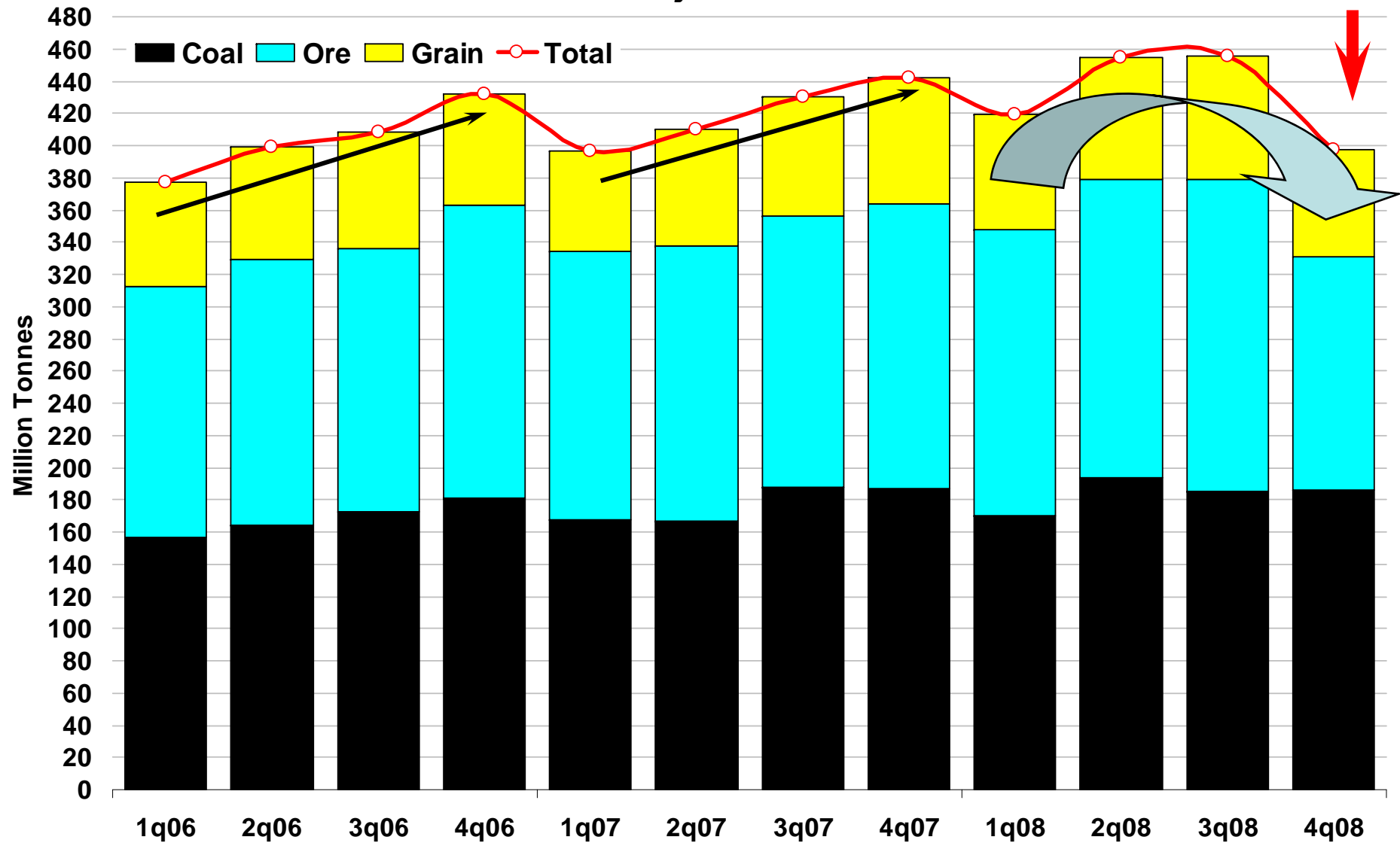
Chinese demand collapsed by 9 Mt in October

China Steel Production & Iron Ore Imports



4th Quarter 2009 Slump contrary to seasonal trend

Selected Major Bulk Trades

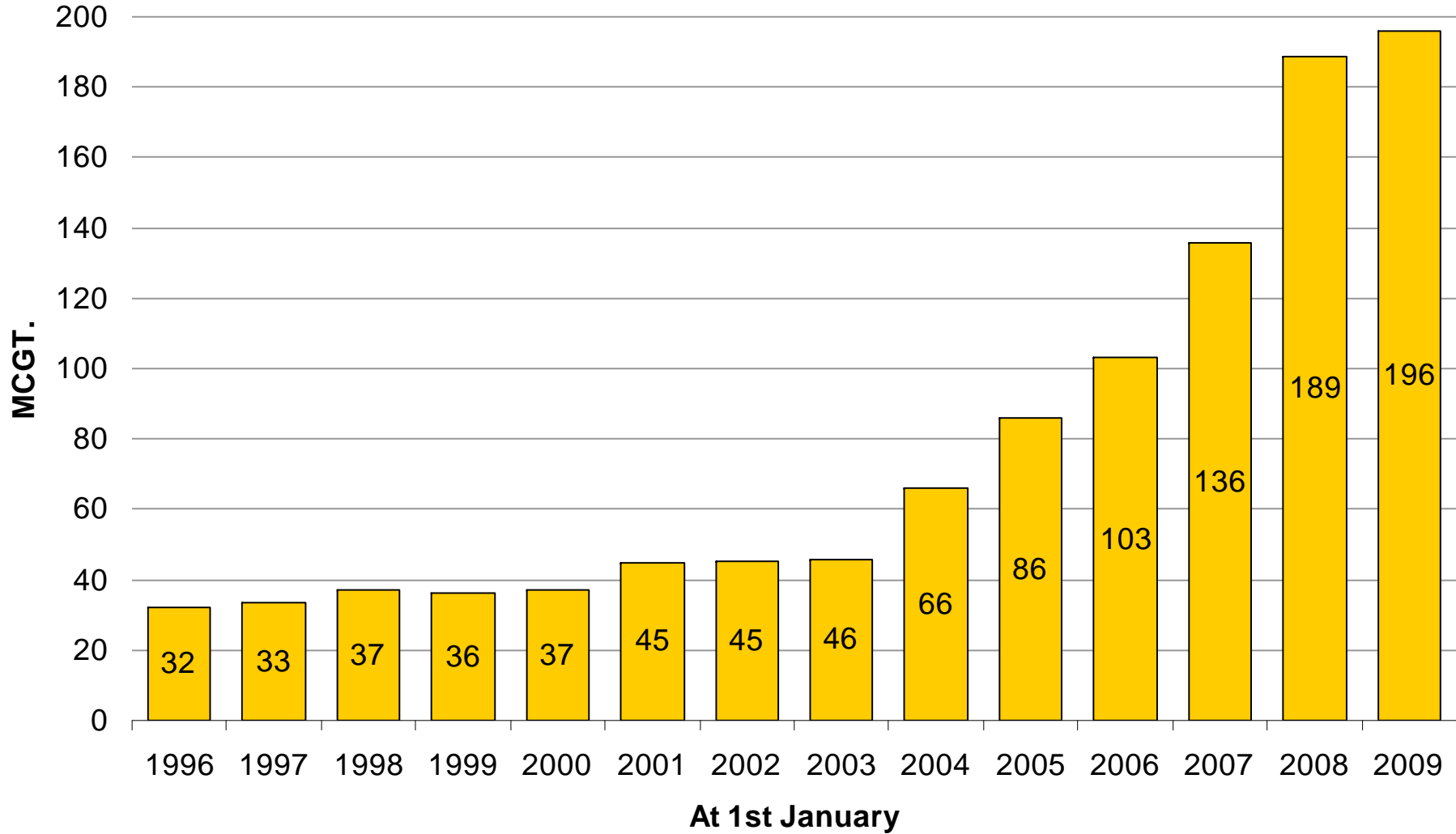


Fleet Developments

with grateful appreciation to Clarkson Research Services for the use of fleet data

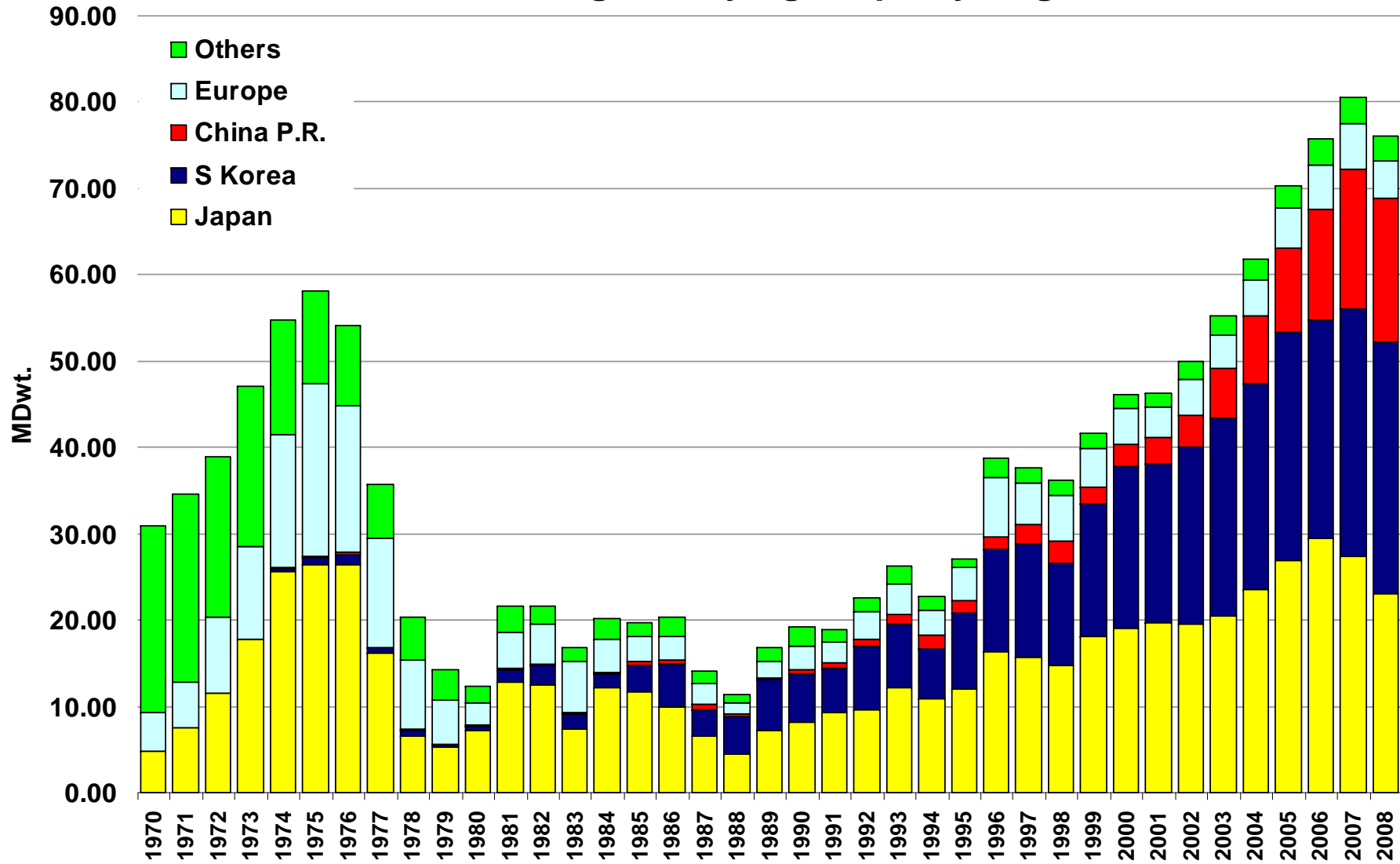
Orderbook is at world record levels

World Shipyard Orderbook (All Types)



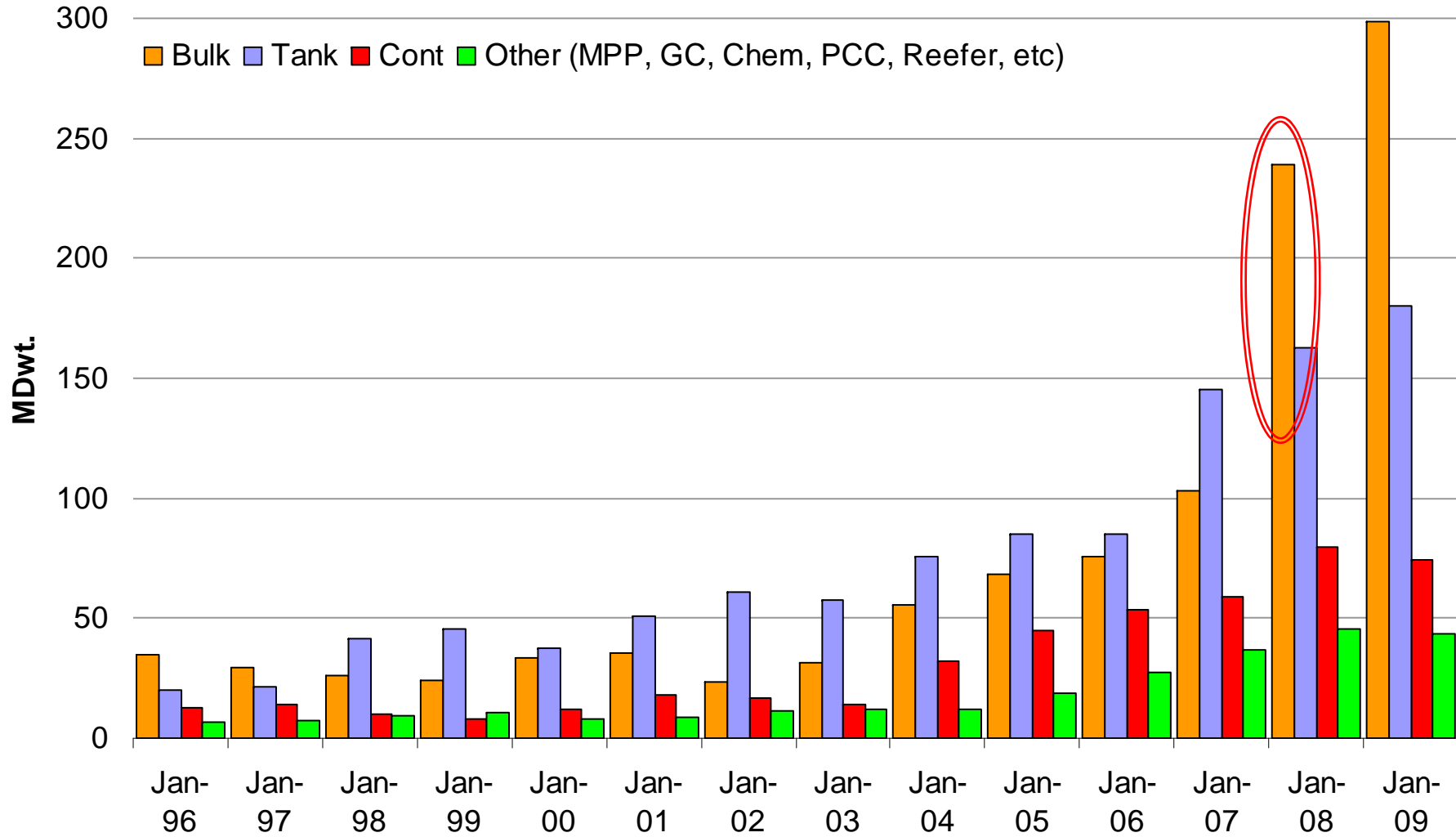
Rapid expansion in deliveries of all cargo types in past 2 decades

Deliveries of Cargo Carrying Ships by Region



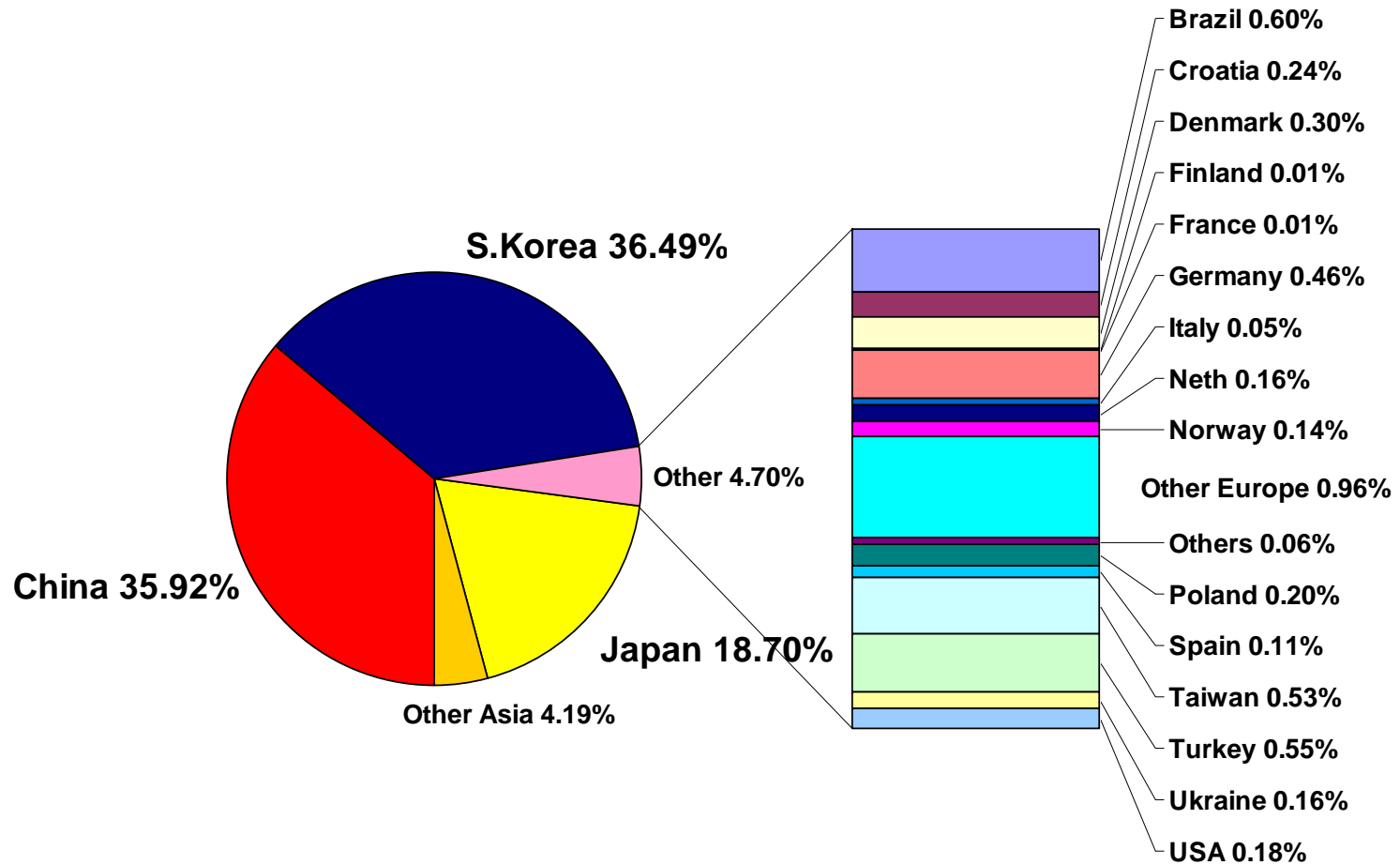
In 2008 Bulk orders overtake Tankers for first time in 10 years

World Orderbook by Type



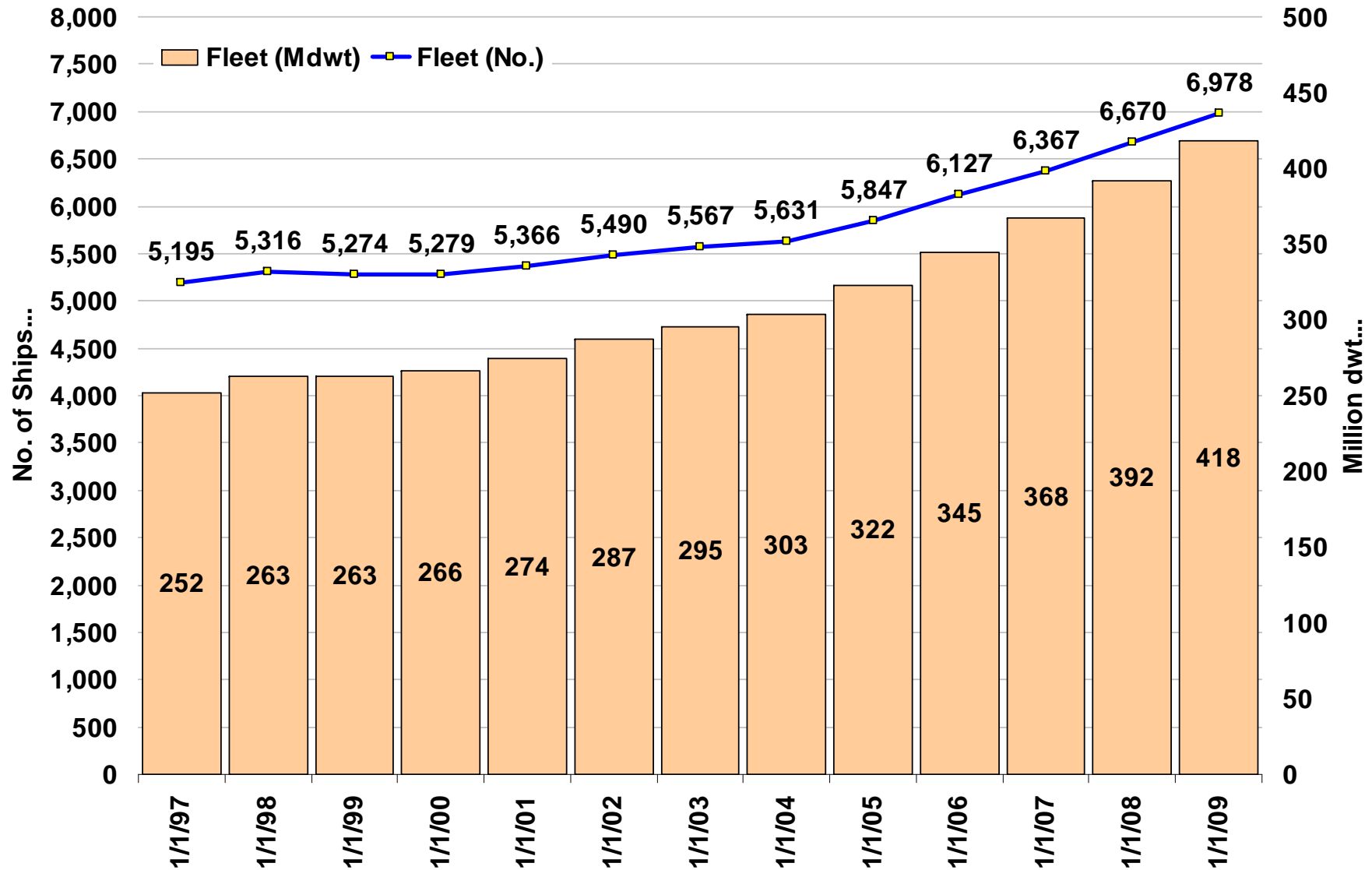
China takes lead in orderbook

World Cargo Carrying Orderbook by Country ~ MDwt



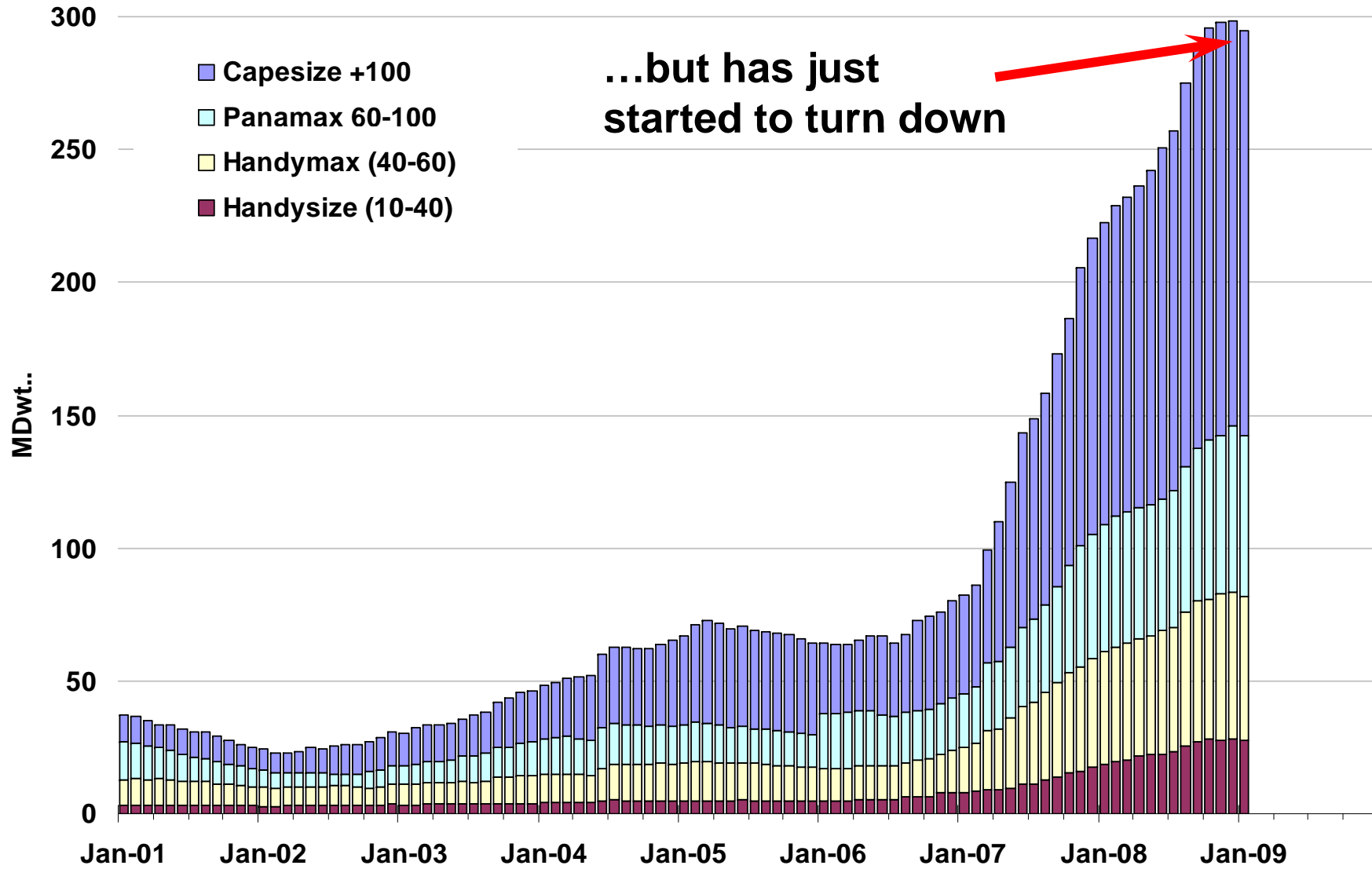
Over 100 Mdwat added in past five years

The Growth of the Bulk Carrier Fleet



The orderbook had grown relentlessly...

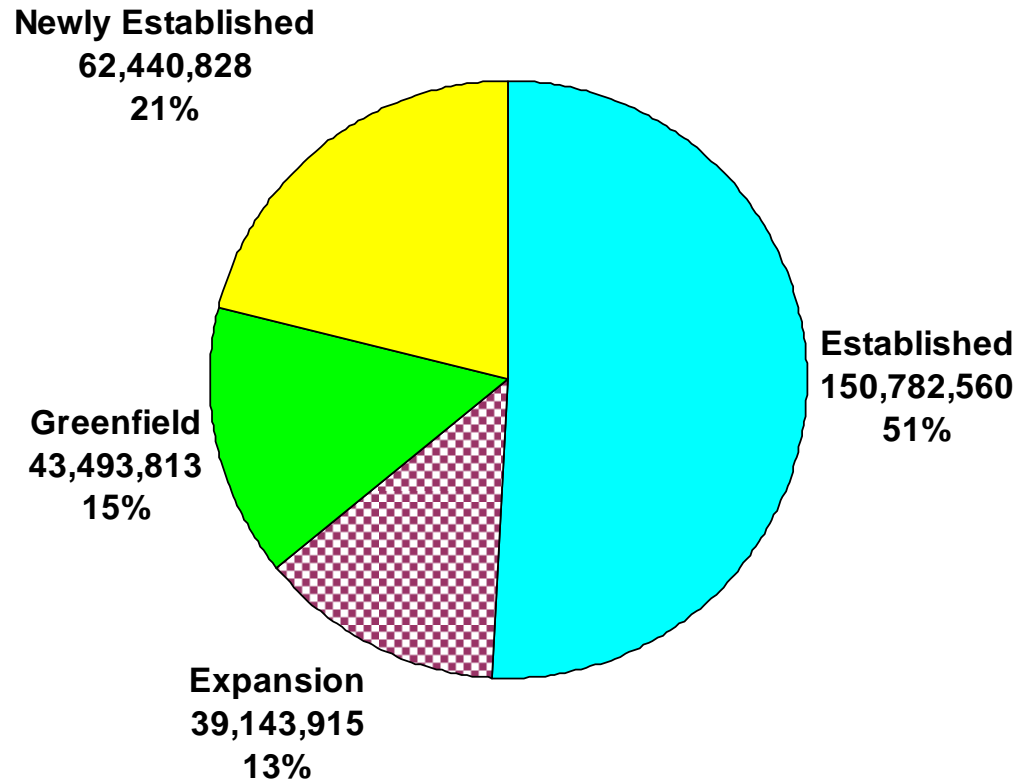
Dry Bulk Order Book



At year end just half of orders at established yards

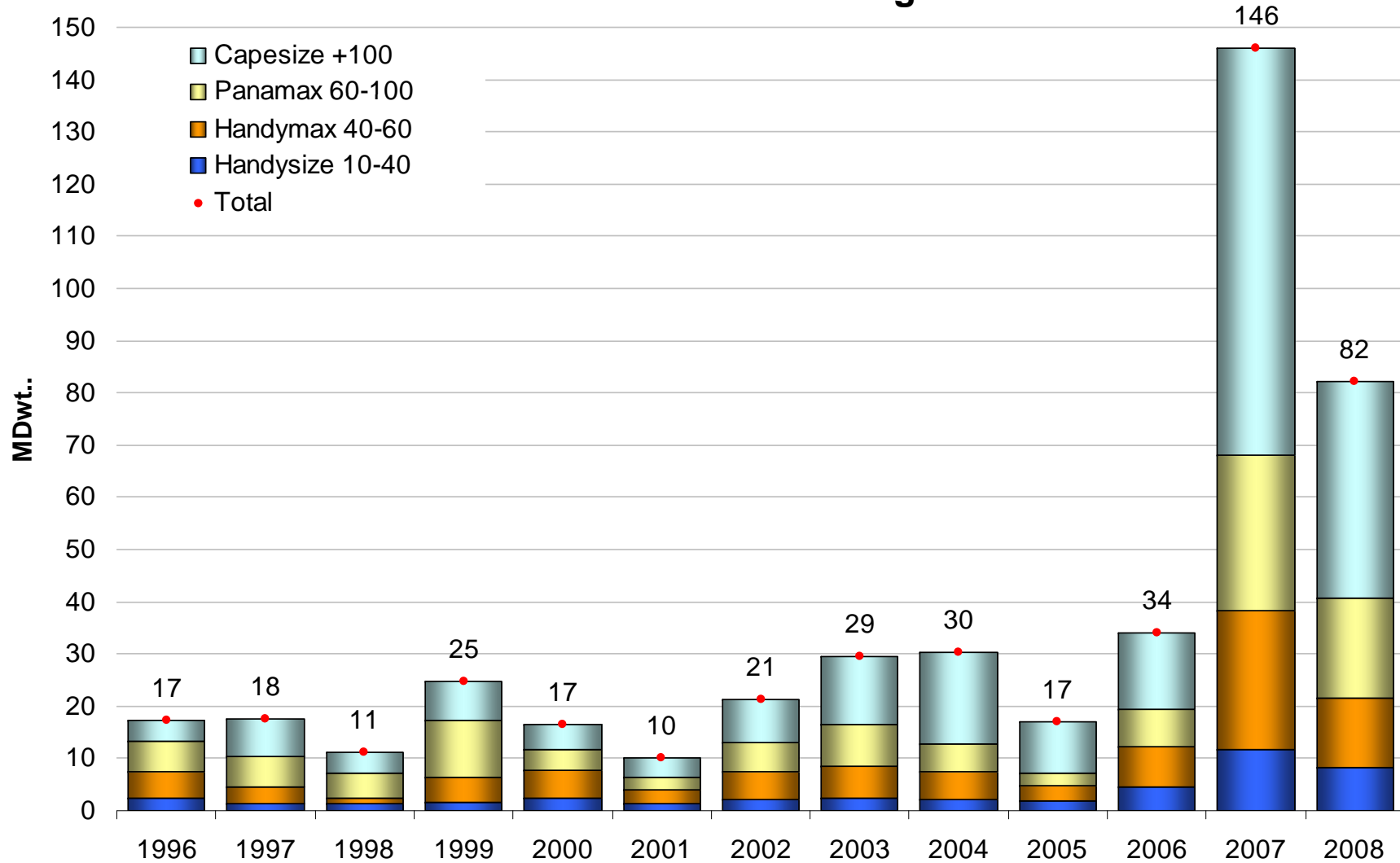
Bulk Carrier dwt Orderbook @ Shipyards by Status

“Newly established” means they have built at least one ship



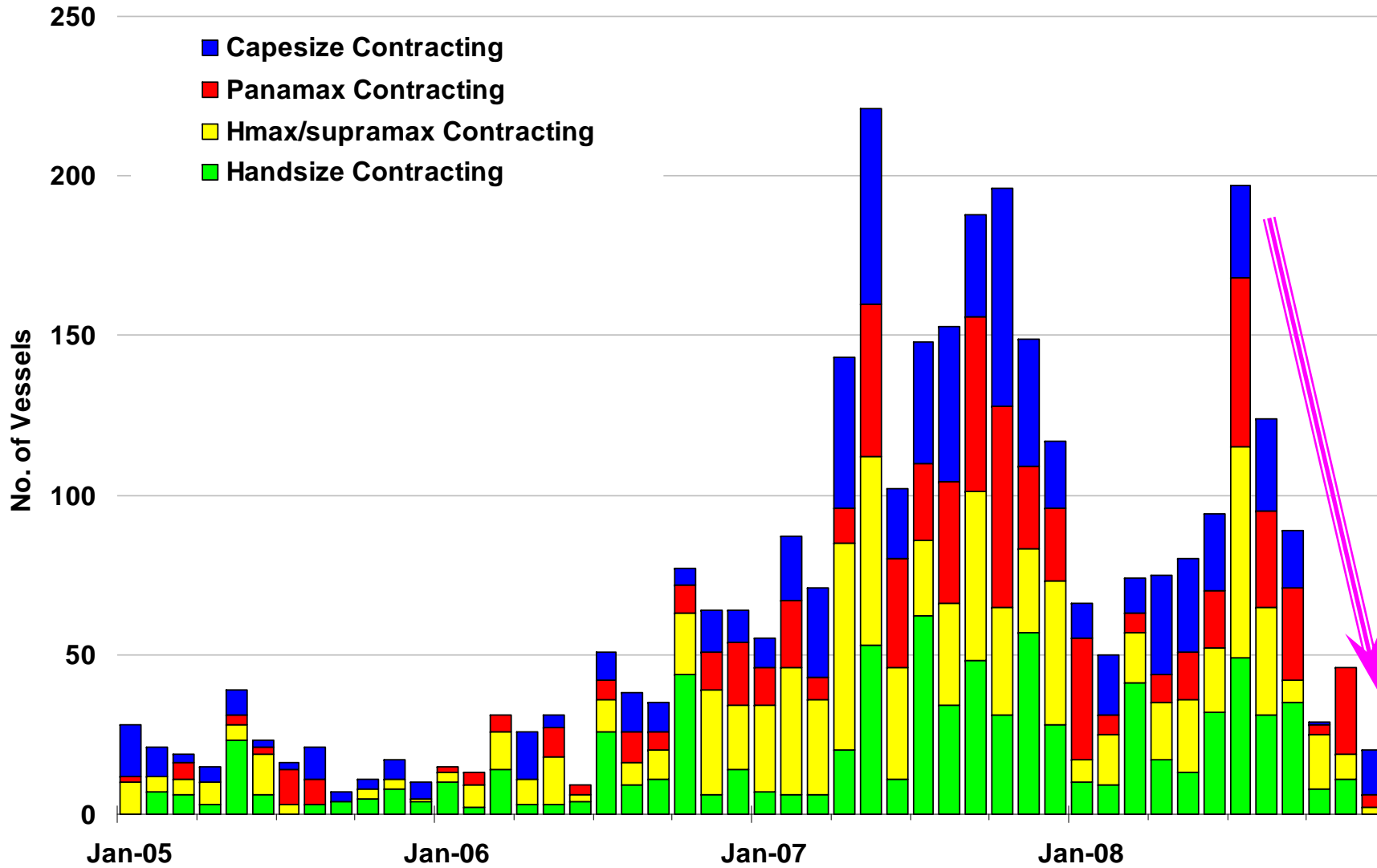
Even though many shipowners were aware of looming overcapacity risk heavy ordering still continued in 2008

Bulk Carrier Contracting



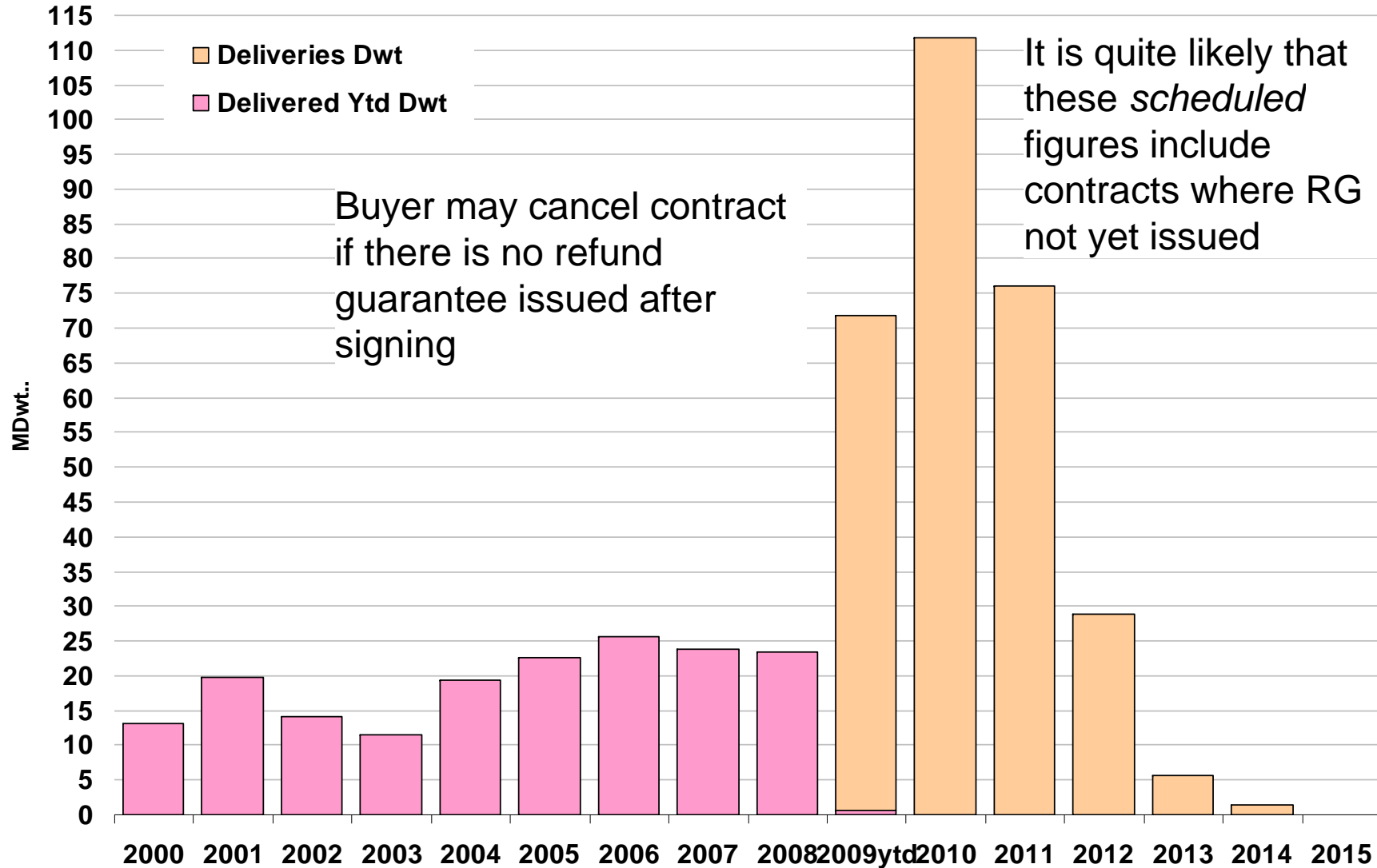
Sharp slowdown in contracting since mid-2008

Dry Bulk Carrier Contracting



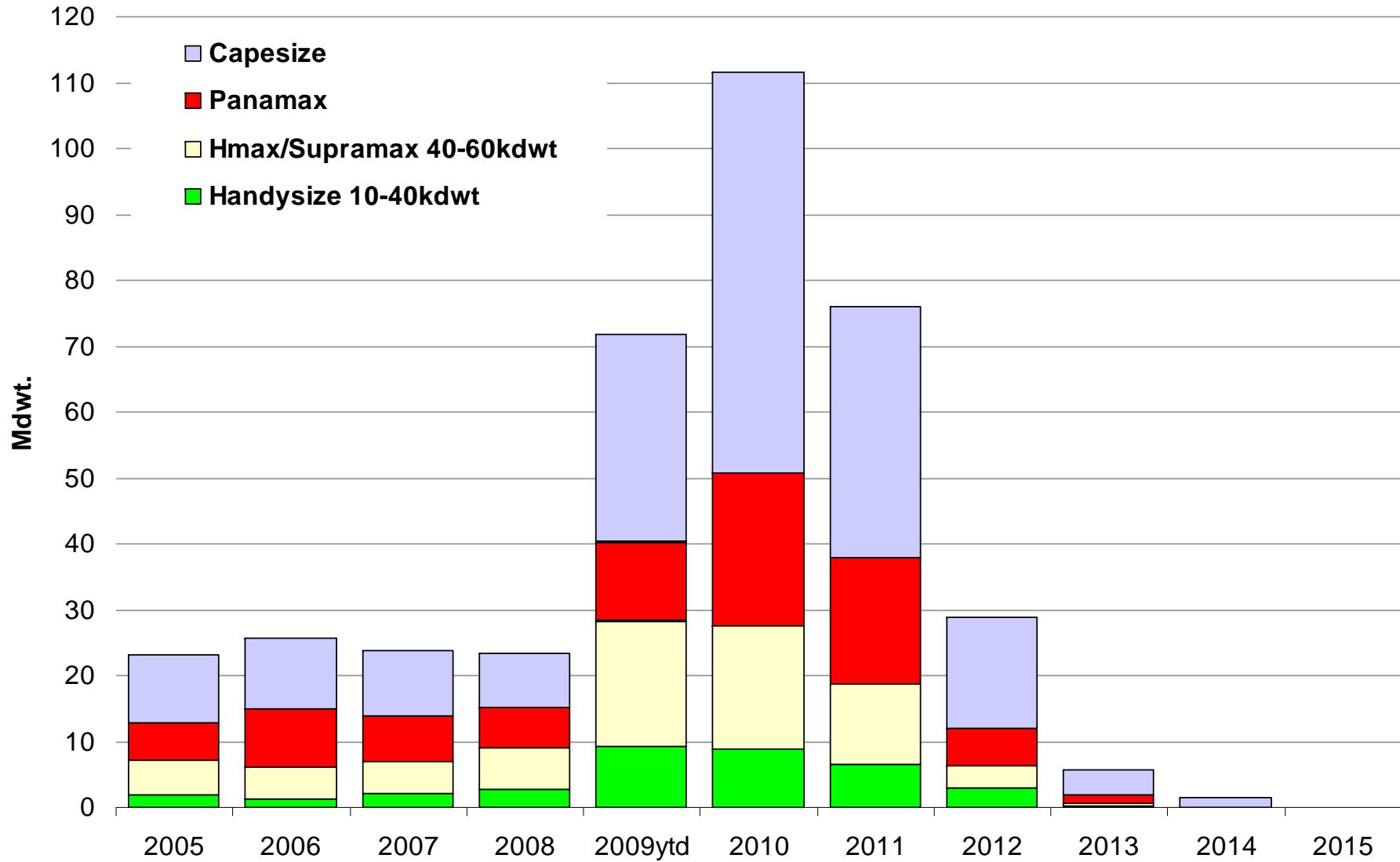
Latest OB shows bulk of deliveries in next 3 years

Bulk Carrier Orderbook at 1-Jan-09



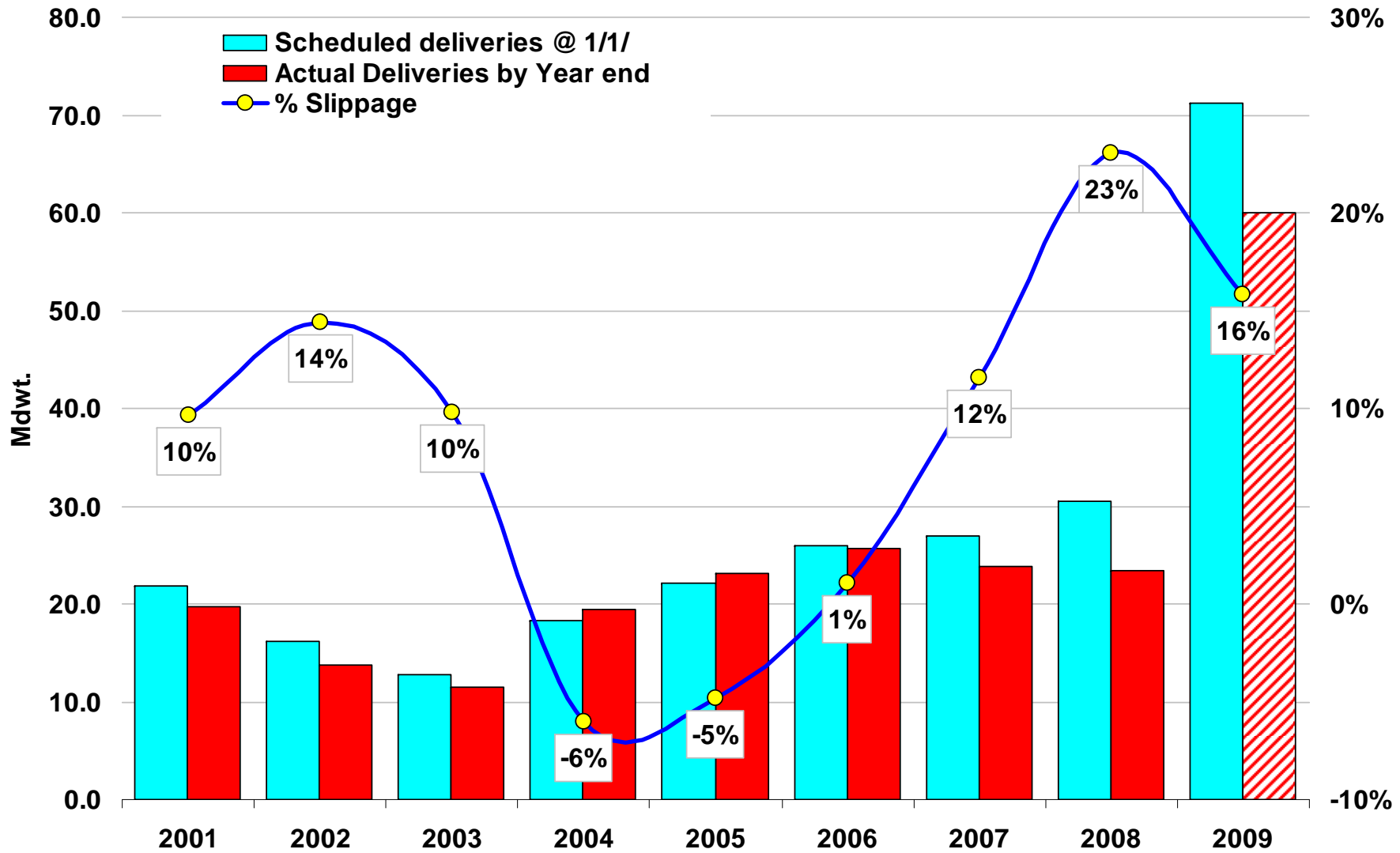
Record deliveries scheduled in all sectors

BC Deliveries/Orderbook



More slippage in 2008 than previously - set to continue

Bulk Carrier Scheduled/Actual Deliveries 1Yr Ahead



Major Shipbuilders



ODENSE Yard, Denmark



Universal's Tsu yard



CSSC yard at Waigaoqiao

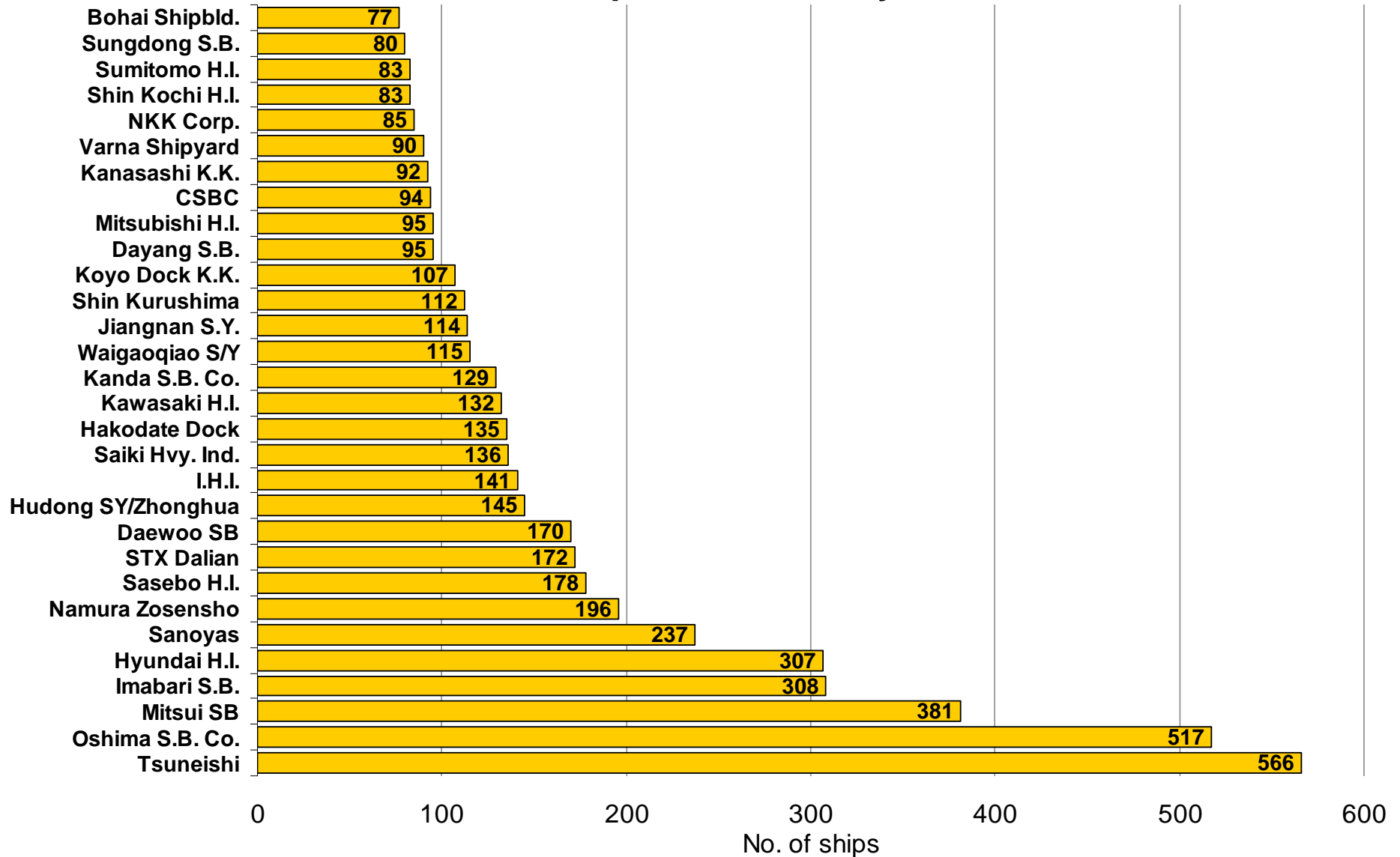


Block assembly at HHI



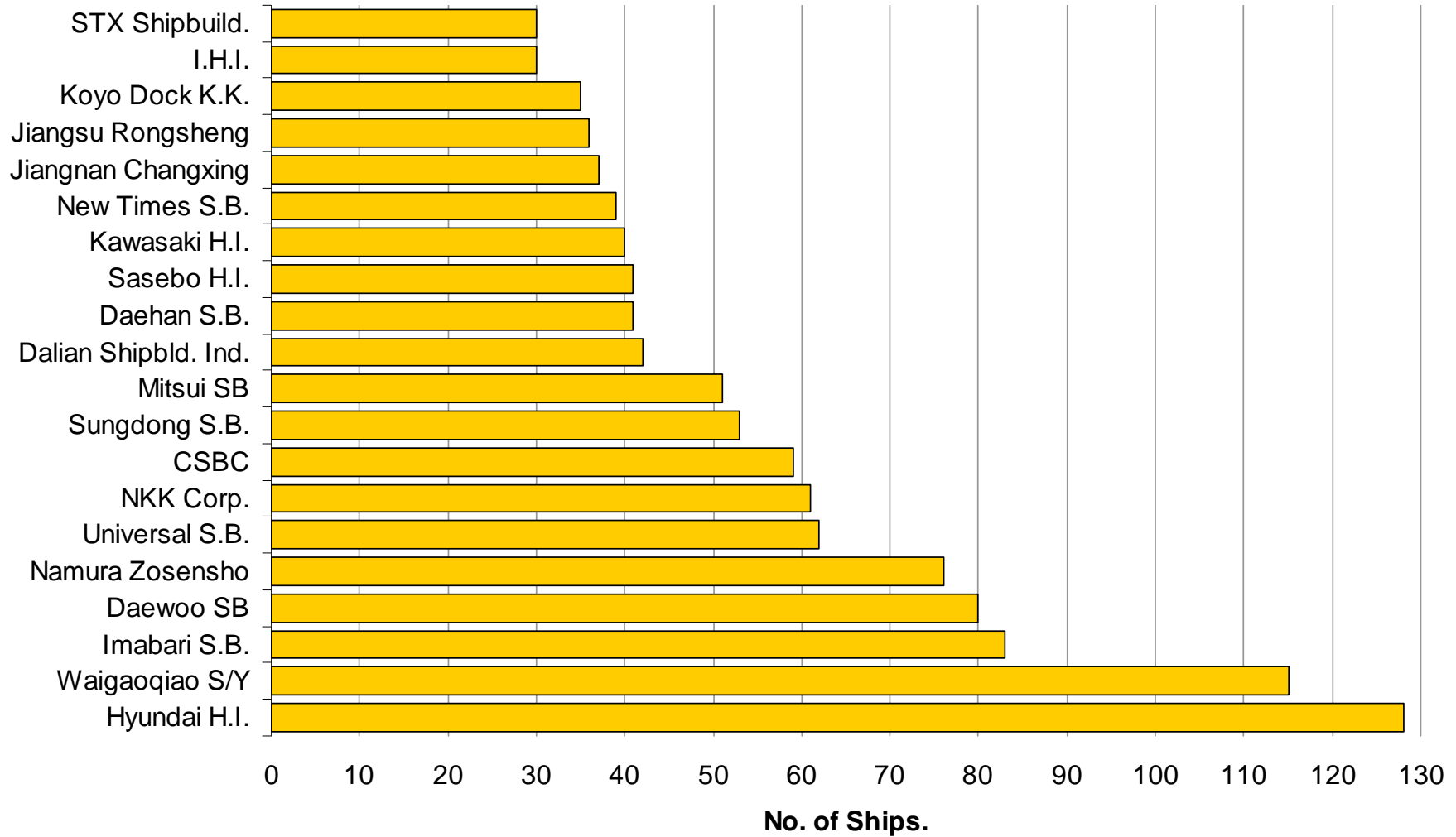
Japanese builders dominate historically

All Bulk Carriers: top 30 builders by number built

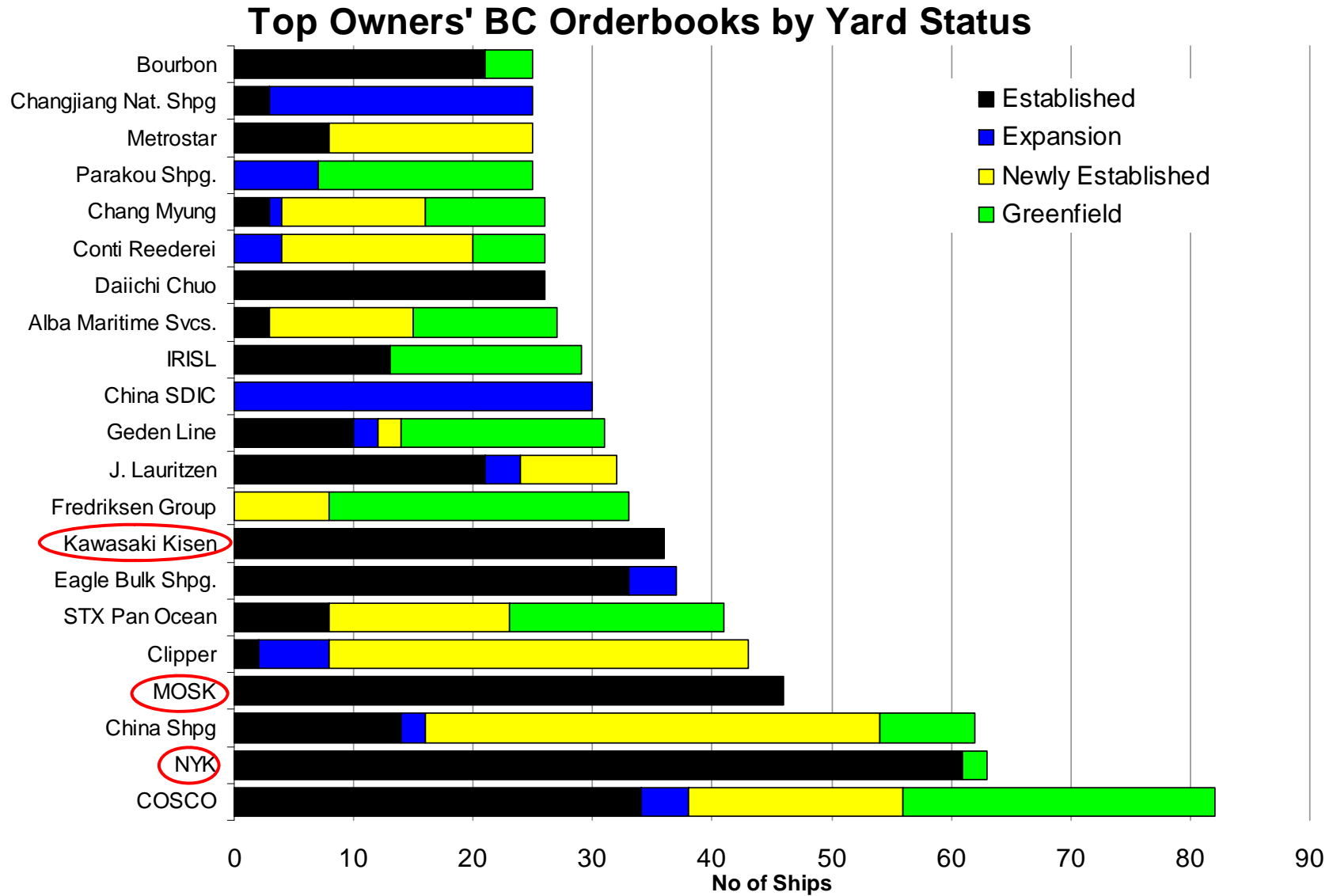


Capes: Korean, Chinese and Japanese builders dominate

Top 20 Capesize Shipbuilders

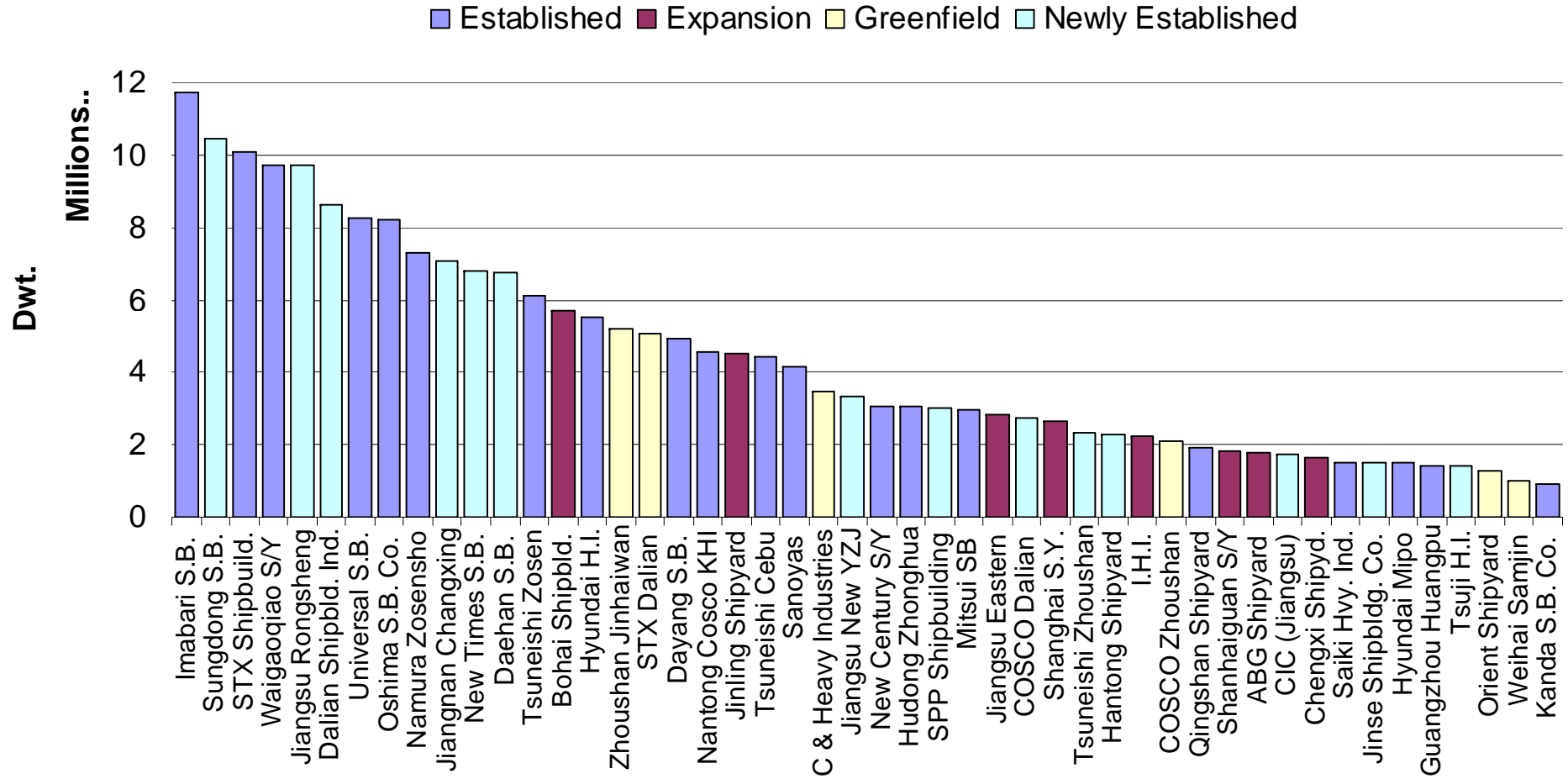


Compare NYK, MOSK & Kawasaki with Chinese owners



The bulk of orders at top yards seems likely to be delivered

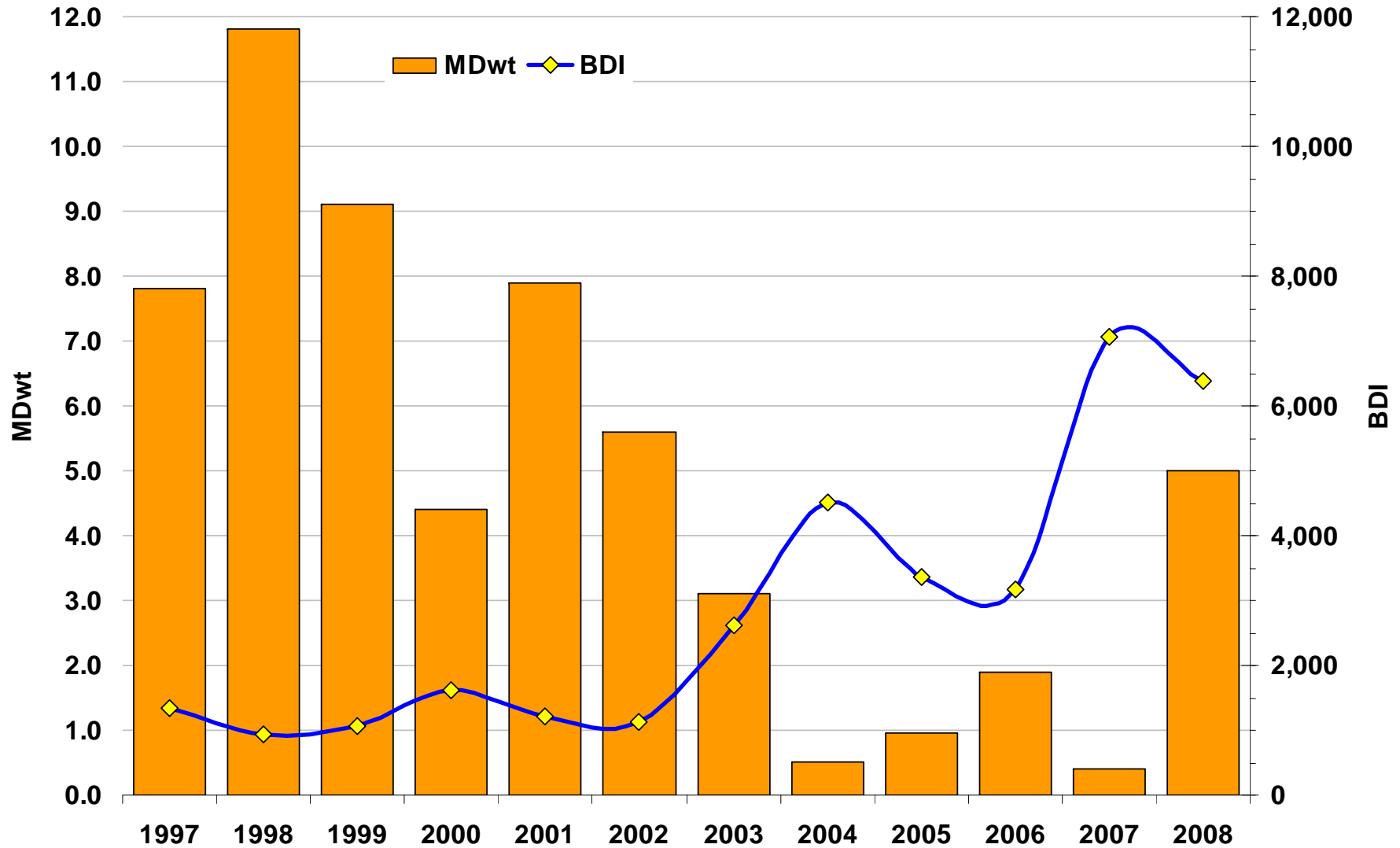
Bulk Carriers on order at top 50 yards by yard status



Impact on Ship Prices and Demolition Rates

As BDI has now fallen scrapping will increase sharply

Bulk Carrier Removals from the Fleet v. BDI

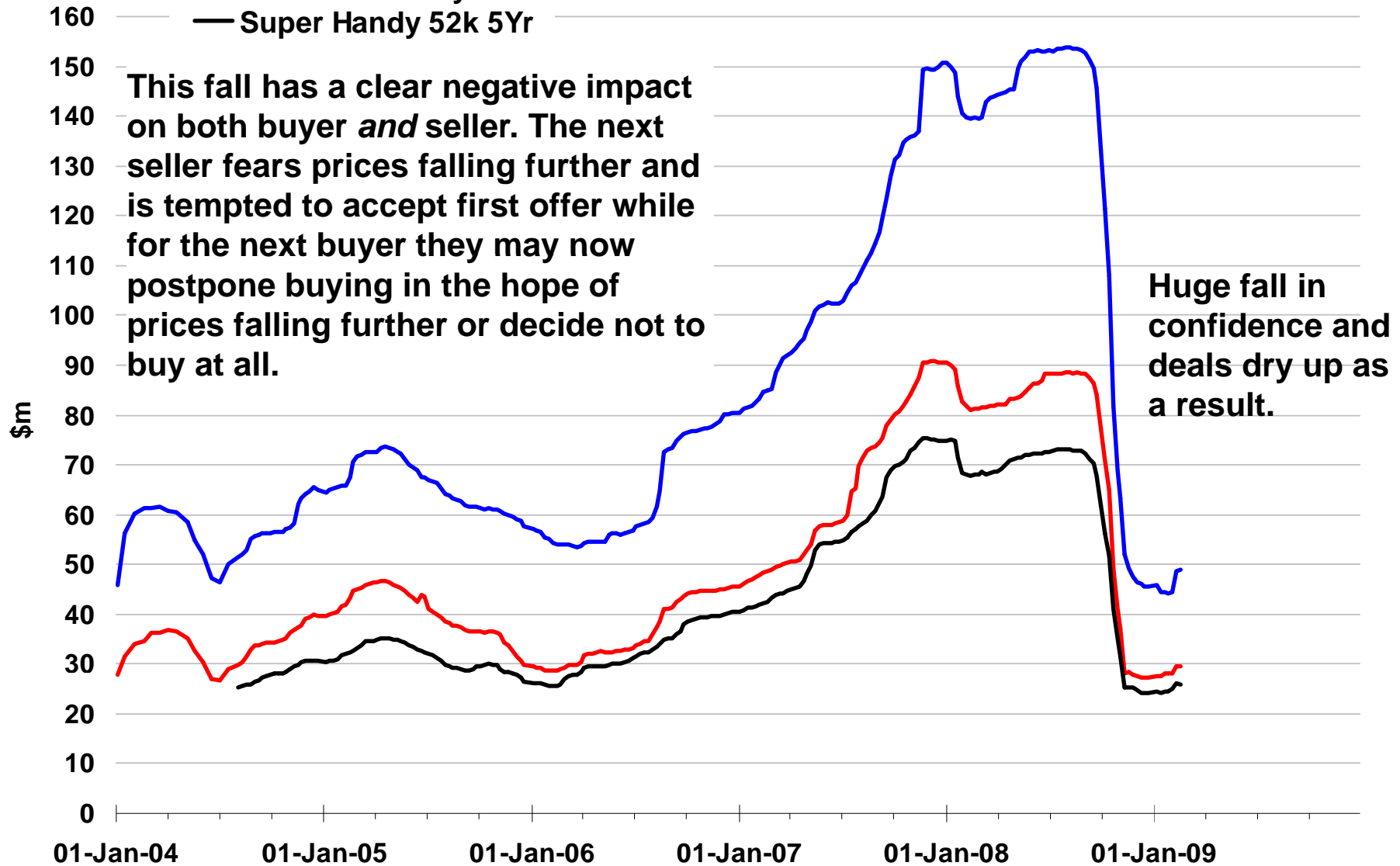


Dramatic fall in second-hand prices...

Source: Baltic

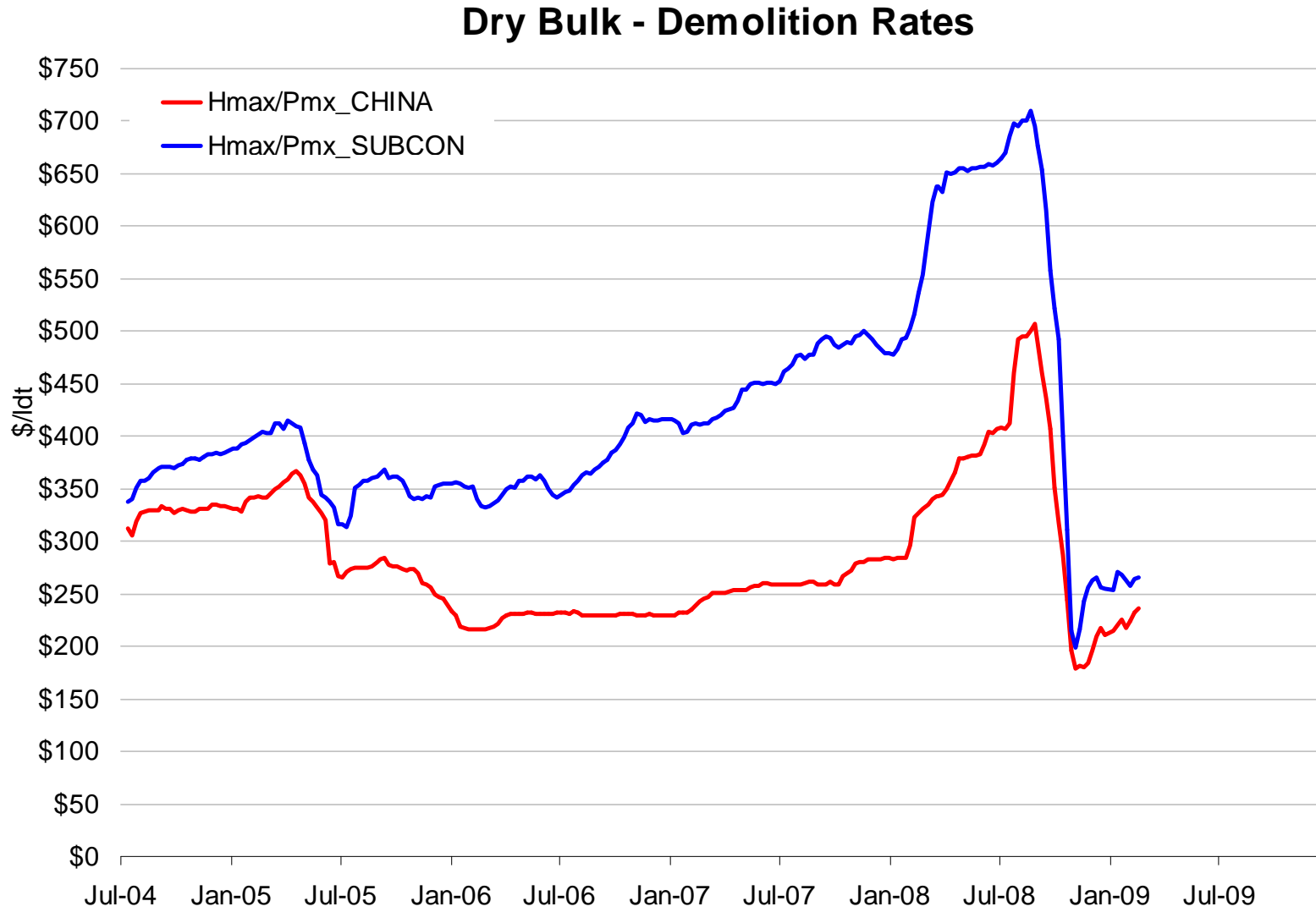
- Cape 172k Max 5Yr
- Pmx 74k Max 5yr
- Super Handy 52k 5Yr

Secondhand Prices



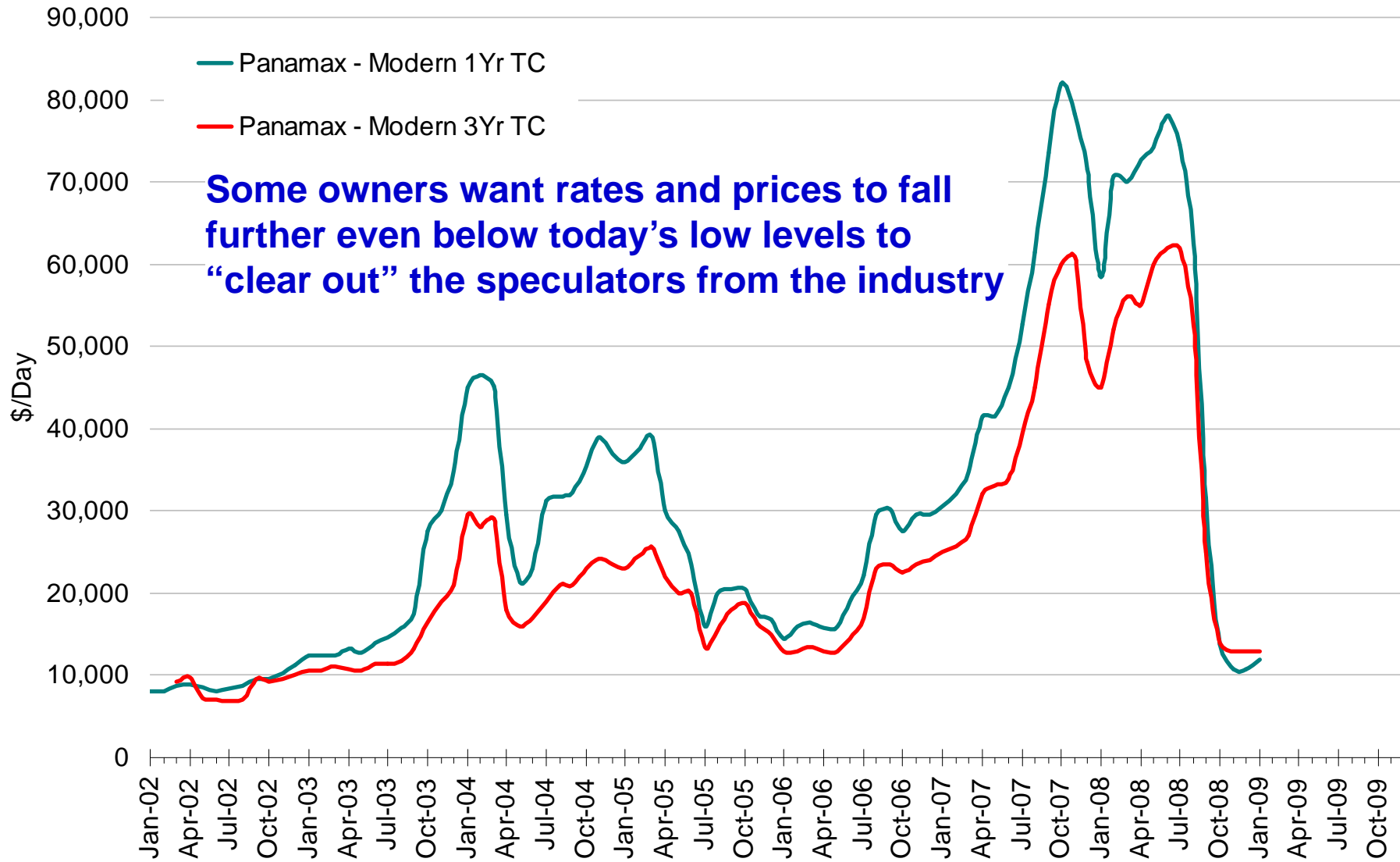
... and in \$/ldt rates for demolition

Source: Baltic Exchange



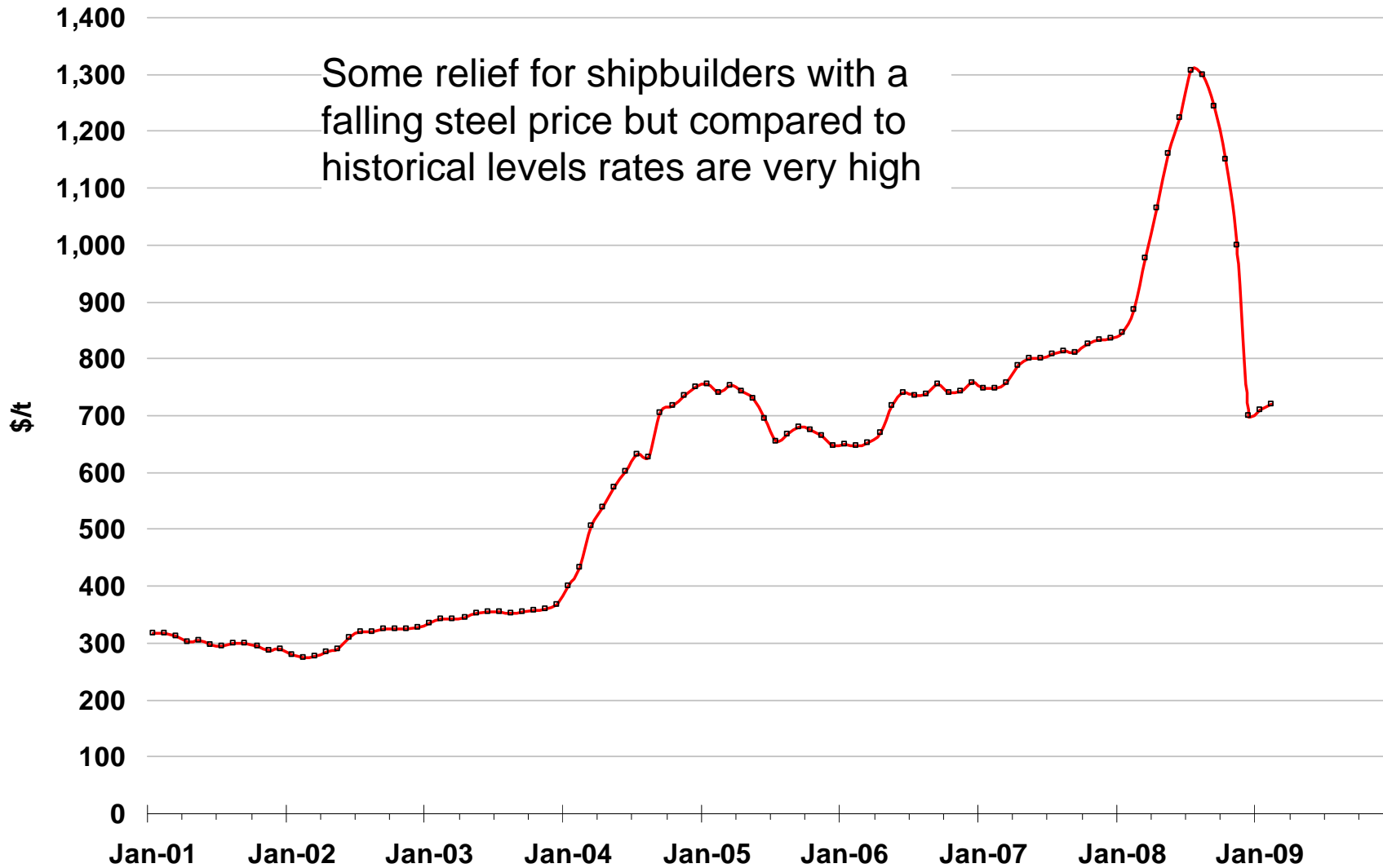
Period Rates do not give assurance to owners

Panamax Bulk Carrier 1-Year and 3-Year Time Charter Rates



Steel Prices fell after record levels and economic crisis

World Average Steel Transaction Price - Hot Rolled Plate



Some relief for shipbuilders with a falling steel price but compared to historical levels rates are very high

Issues for the Shipyards

Problems for Shipyards

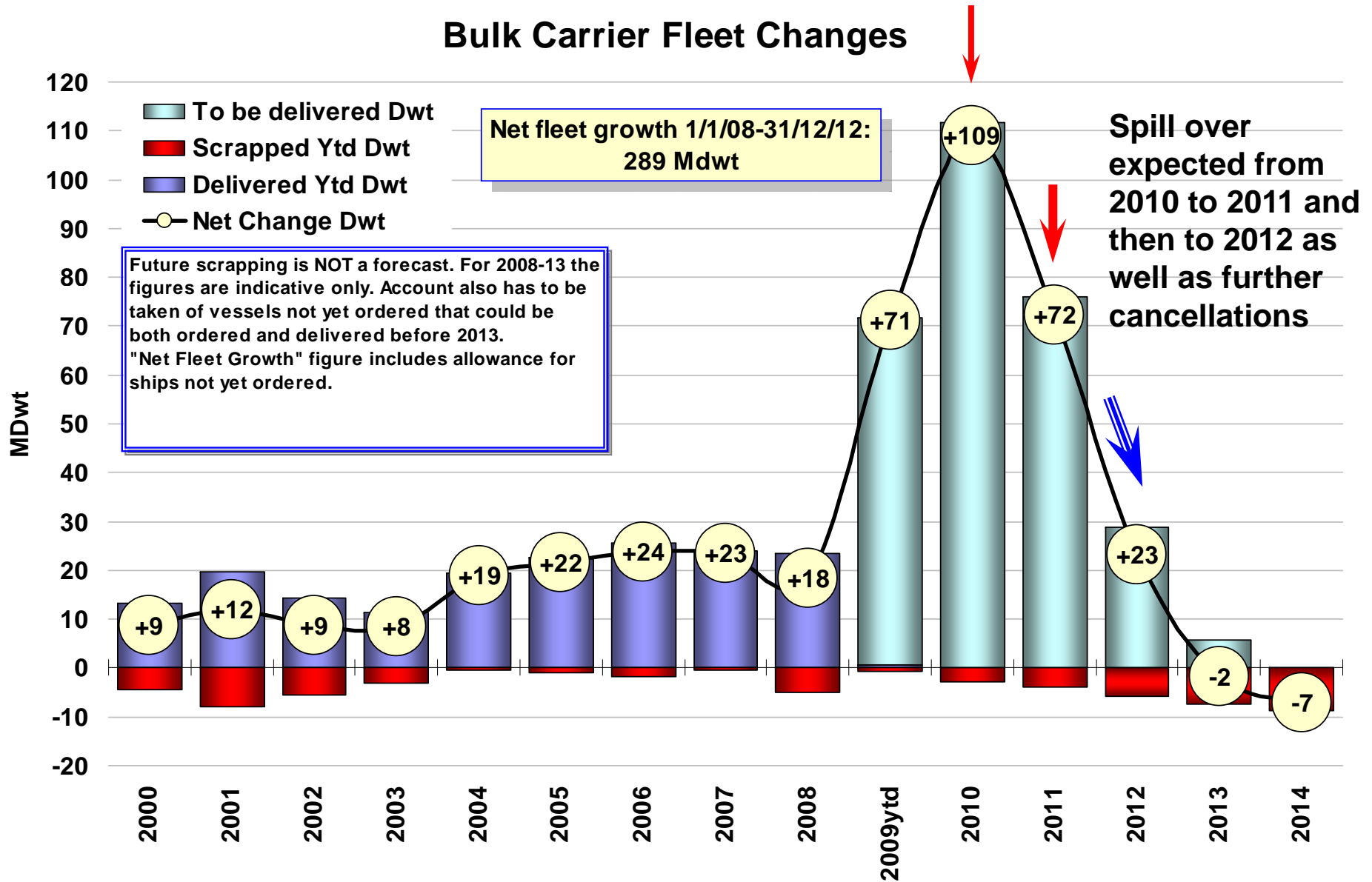
- Even if there is a significant increase in scrapping this will serve to reduce the fleet surplus not create new orders for shipyards because fleet is/will be oversupplied
- Difficulty in obtaining refund guarantees; some reported cases of owners still waiting for refund guarantee confirmation 18 months after signing contracts
- In some yards there are difficulties in obtaining specific parts needed for building
- In China for CSSC or CSIC (top two Chinese state-owned shipbuilding groups) shipyards orders are relatively secure, as owners are worried about being 'blacklisted' (some German owners reported blacklisted)
- Without support from these two state-owned groups, private shipyards may suffer from owners' renegotiation or cancellation

Quality Issues for Shipyards

- Shipyards now implementing Common Structural Rules (CSRs) which, for new yards, could cause problems
- Some observers are blaming the “speculative” owners who ordered ships for resale with no intention of trading and who have shown minimal interest in supervising their construction
- Reported problems include faulty welds, missing plates, and pipework that needs replacing after weeks at sea
- Small private shipyards also have relatively weaker technical teams which make them more open to owners’ criticism on the technical issues

An expectation of increased scrapping and fewer deliveries than *scheduled*

Bulk Carrier Fleet Changes

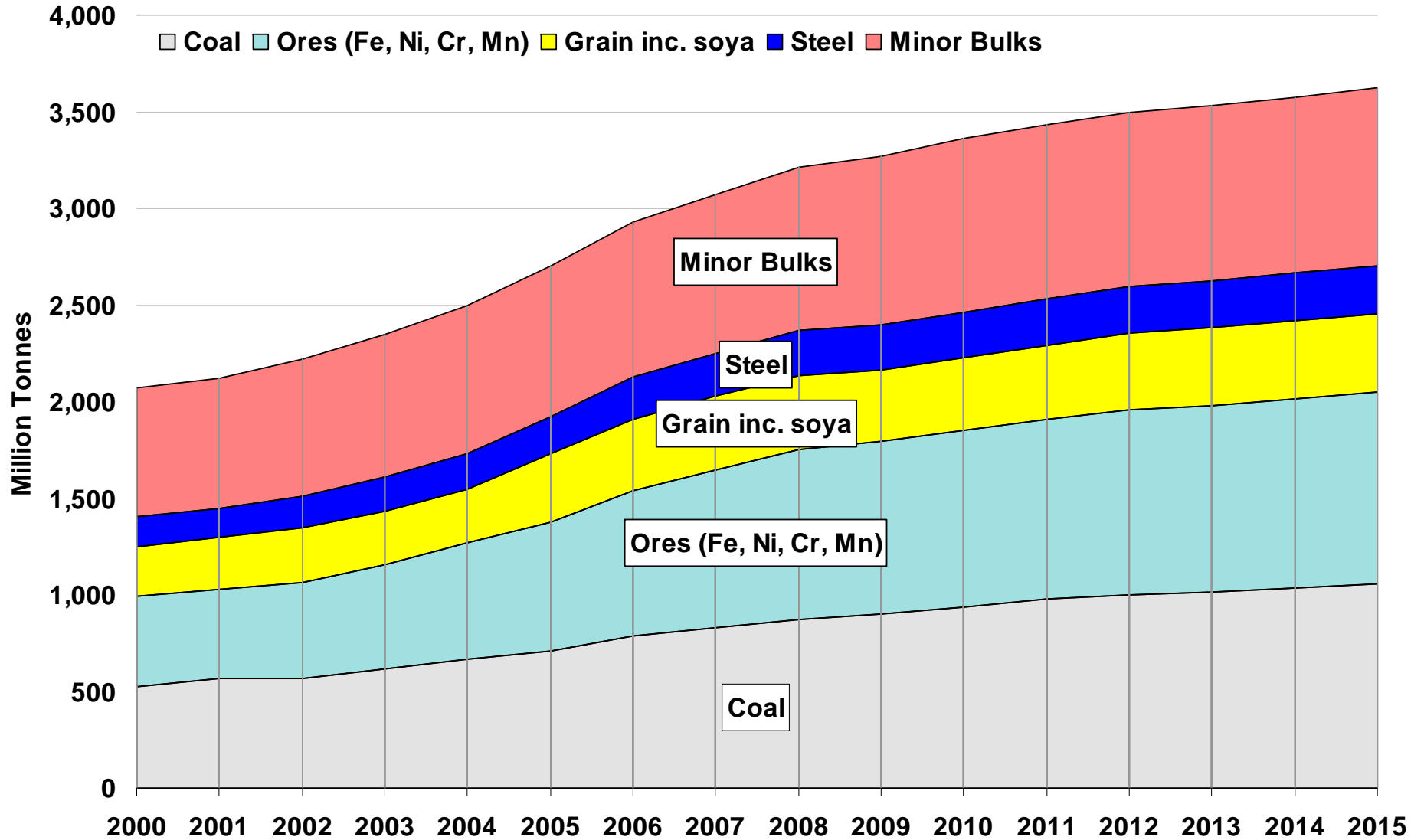


Options for Shipyards

- Contract with 1st class shipowners – but how is this decided?
 - Even if with “1st class owner” this is not a guarantee but is perhaps more reliable
- Consolidation with other shipyards
- Agree new delivery dates
- Agree refund guarantee arrangements
- Risks to Shipyards:
 - Shipowners defaulting
 - Steel plate price
 - Cash flow
 - Fall in contract price
- **Some shipyards considering taking equity in their own newbuildings to help owner take delivery on time. The idea is to Time Charter out for maybe 5 yrs, *not* to become long-term owners.**

Long-term slow-down in bulk trade growth

Seaborne Bulk Trade 2000-2015



Net Fleet Change and Trade Growth

Cargo & Net Fleet Growth 2008-2012

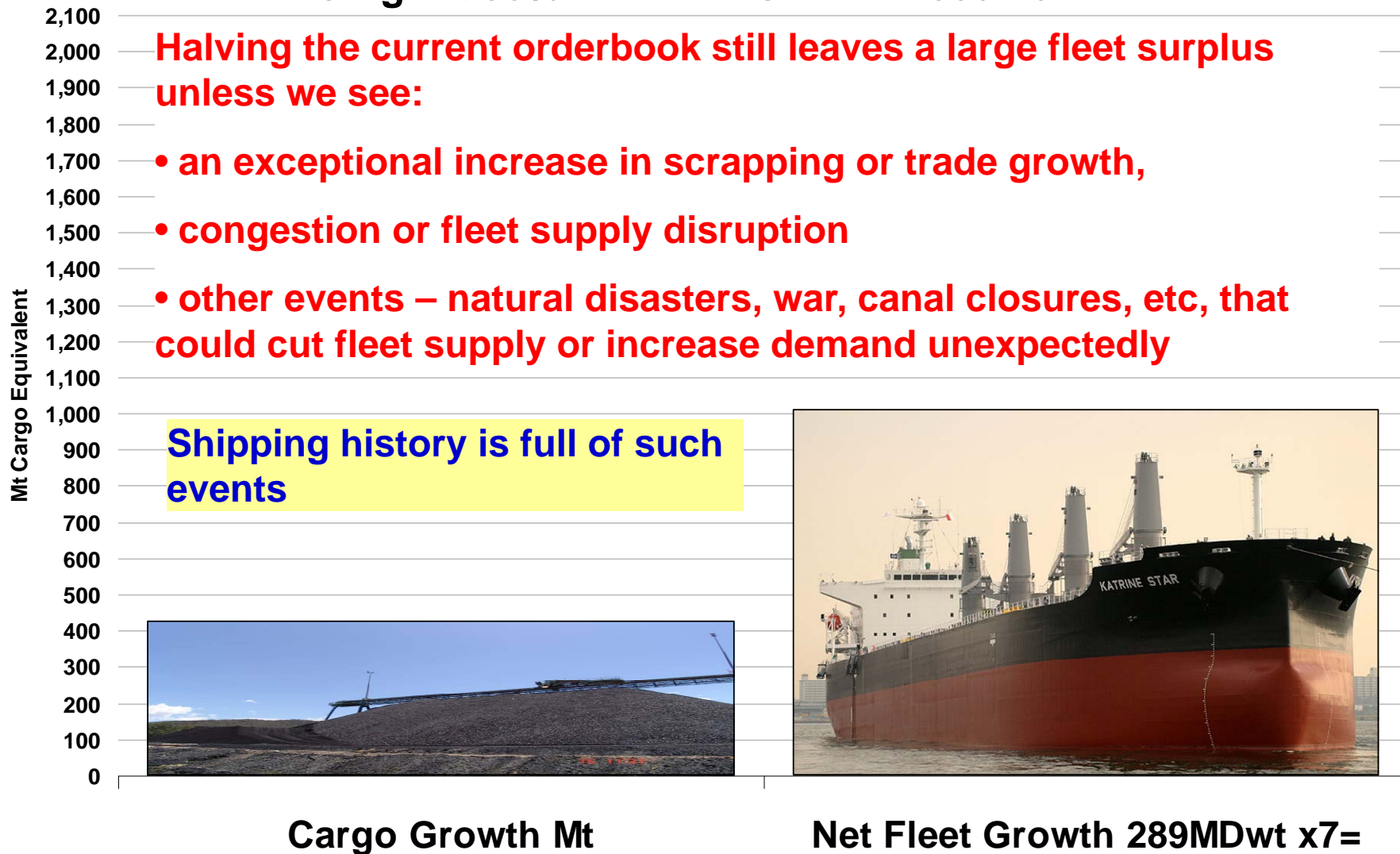


Cargo Growth Mt

Net Fleet Growth 289MDwt x7=

Assume 50% cut in scheduled deliveries

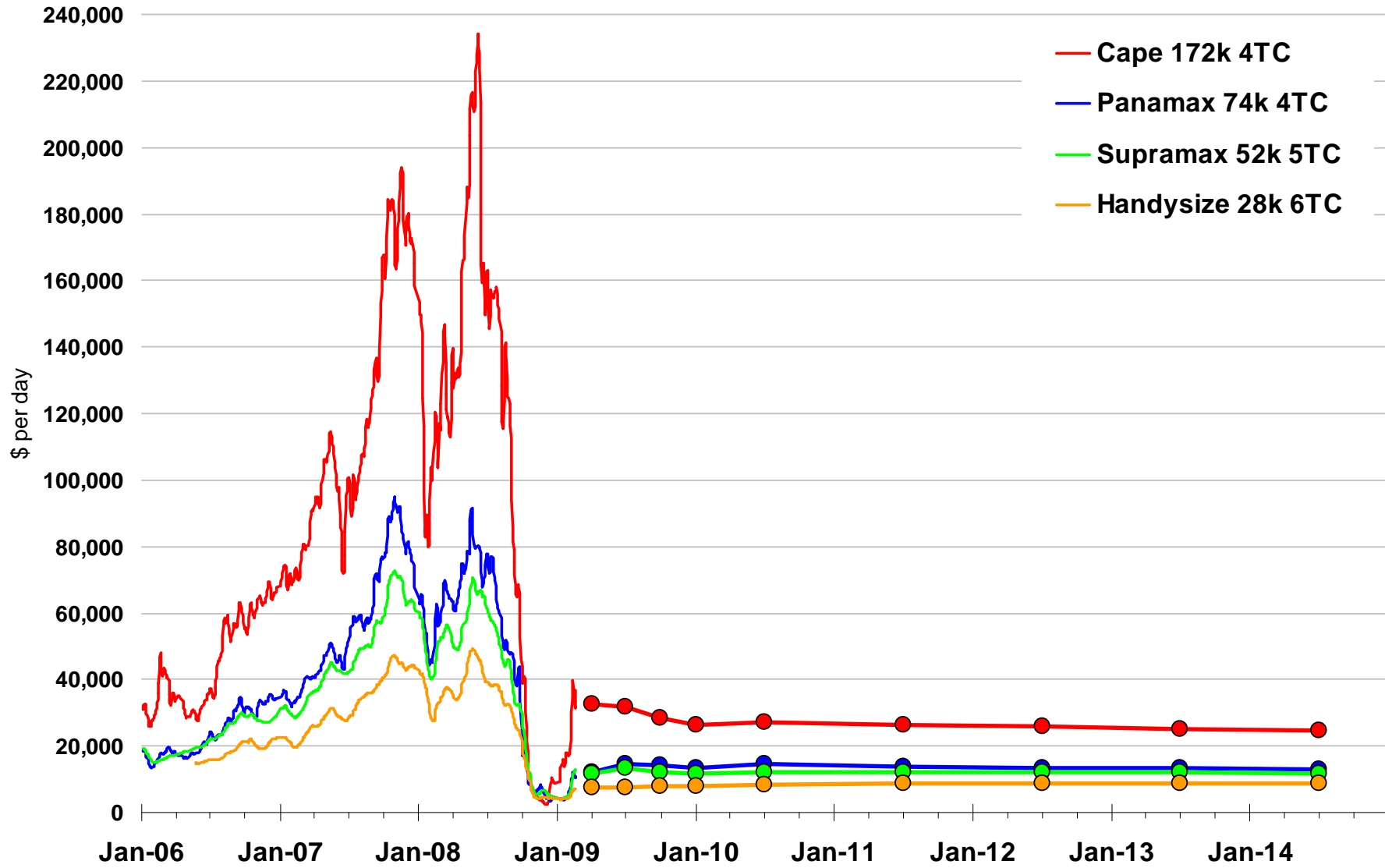
Cargo & 50% Net Fleet Growth 2008-2012



Forward Markets

Source: Baltic Exchange/ICAP Shipping

Dry FFAs at 18-Feb-09



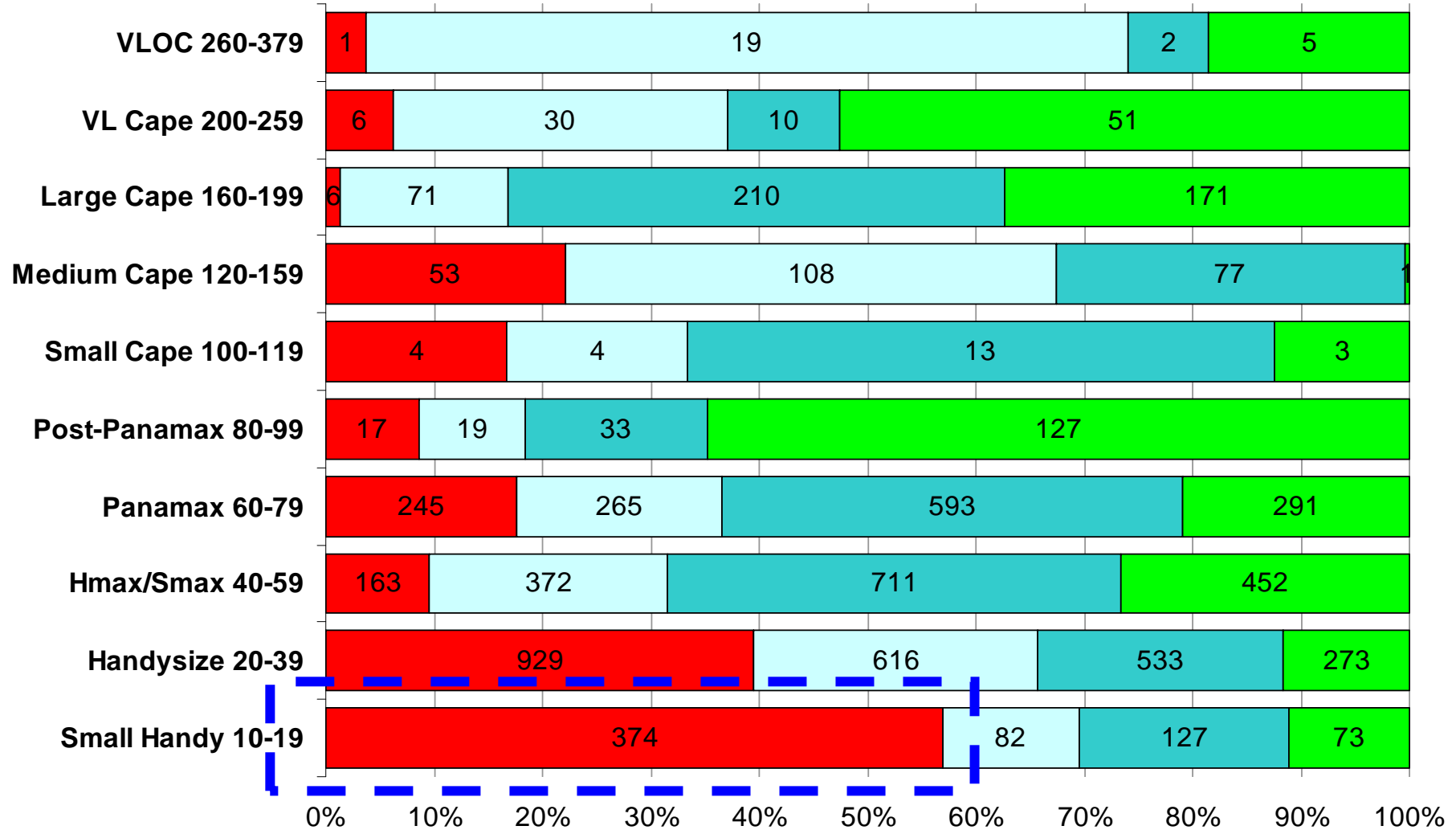
Options for Shipowners in conditions of overcapacity

- Slow steaming/Lay-up
- Scrap older ships
 - in extremis scrap newer ships – it has been done before in 1970s when ships as young as 12 years old were scrapped
- Slow down of ordering of new ships
- Sell ships before taking delivery (use as asset play)
 - an option when prices are rising but clearly less attractive on a falling market
- Refinance as much as possible but is this feasible in current climate?
- Fix ships on long term period
 - The problem was that the speed of the collapse took many by surprise and this option (with very few exceptions) was not considered until it was too late
- **Agree new delivery date with shipyard – can pay premium to delay delivery.**
- **By delaying delivery the owner hopes the market will recover – or, in extreme cases where minimal payment has been made, to hope(!) for the yard to go bankrupt**

Only sector which is substantially “old” is Handysize

Age Distribution BC Fleet 1/10/08

■ Age 25+ ■ Age 15-24 ■ Age 5-14 ■ Age 0-5



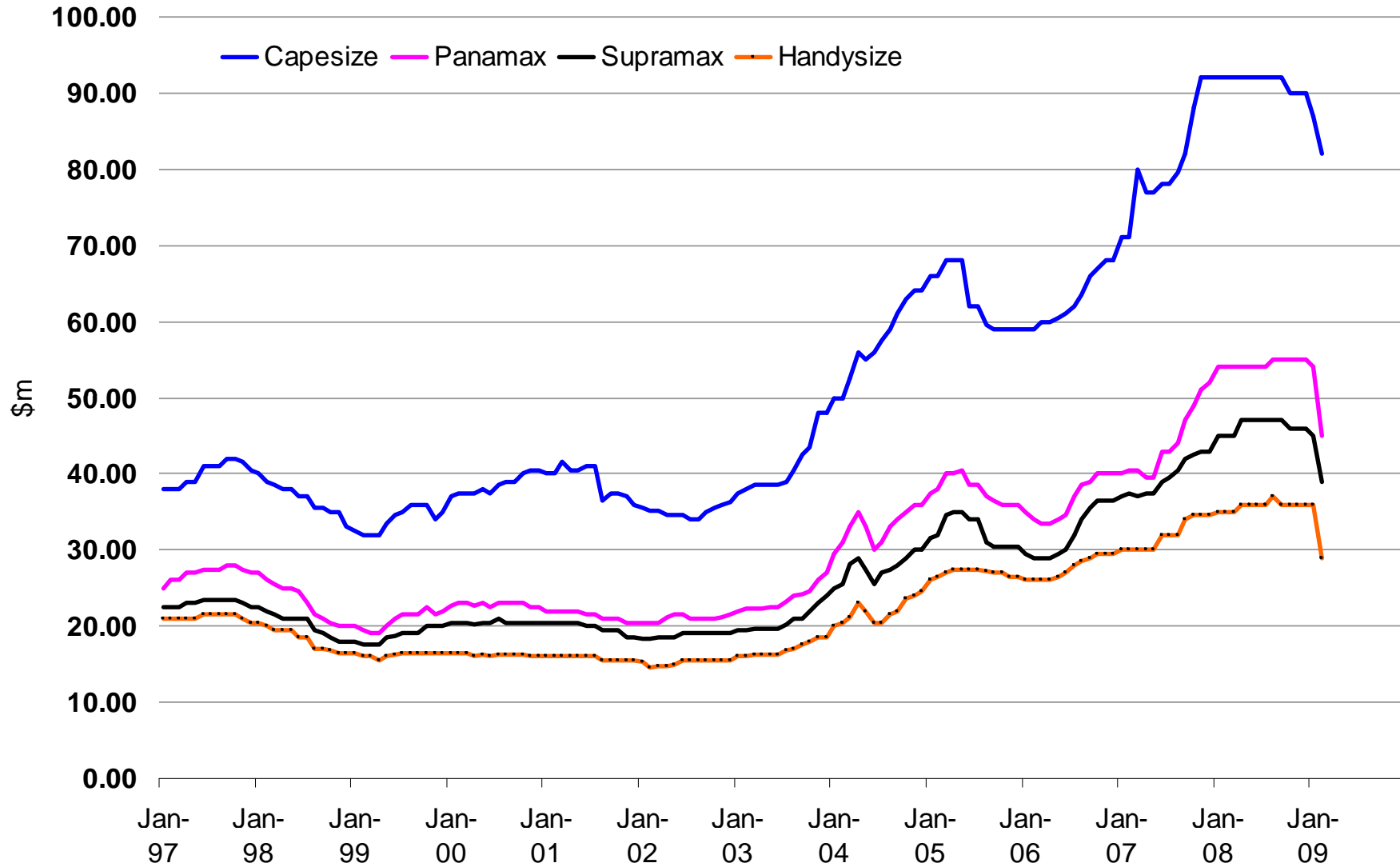
Greenfield sites Rongsheng example

- Rongsheng, as a newly established Chinese shipyard, has received a lot of media scrutiny concerning development progress
- Shipyard construction began on 28 Oct 2005 & started building its first ship on 28 Oct 2006
- Is already one of the biggest shipyards in China, having received strong government support
- However, the yard has slipped a few deliveries, partly due to inexperience as a new shipyard, and also because of shipowners deferring delivery due to economic conditions
- Following the rapid development, Rongsheng is now struggling to attract new orders to fulfil its large building capacity post 2011



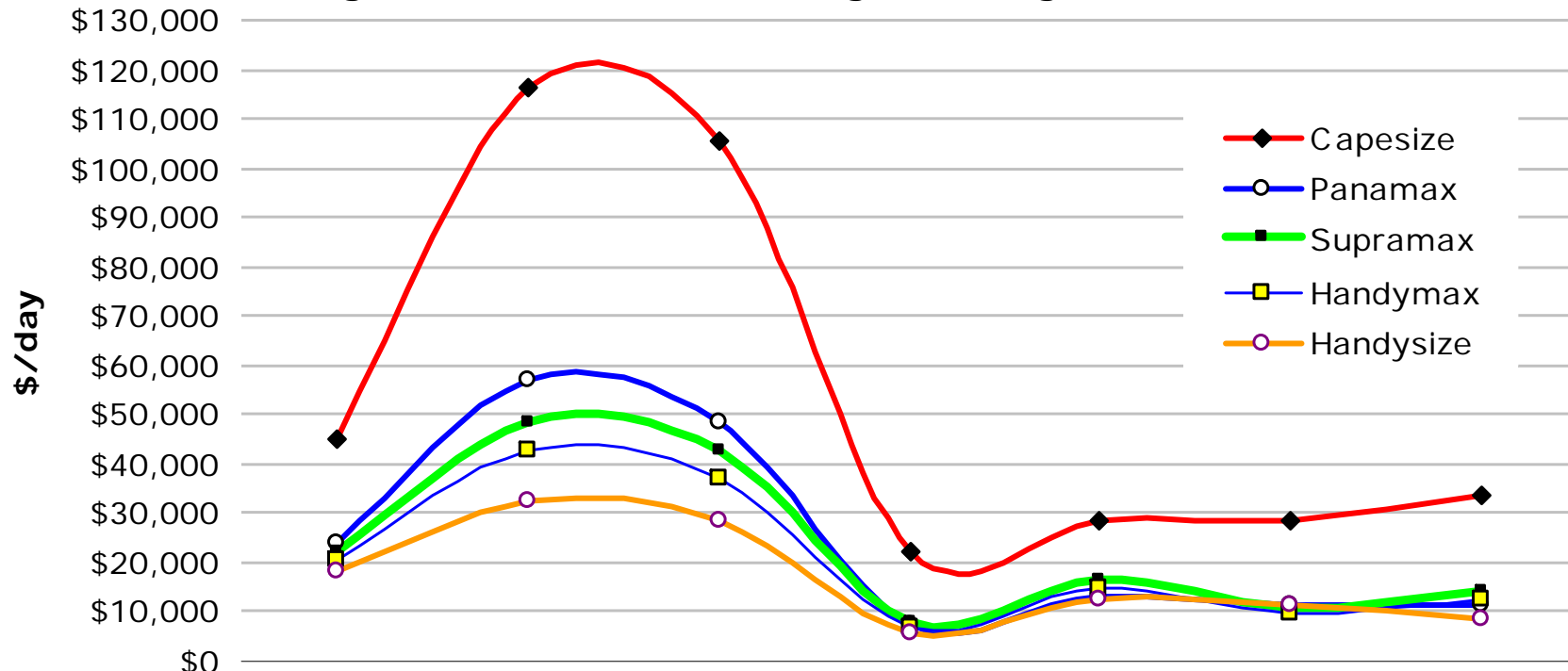
NB prices have been slow to react but now dropping sharply

Dry Bulk NB Prices



While NB overhang lasts little reason for sustainable market recovery

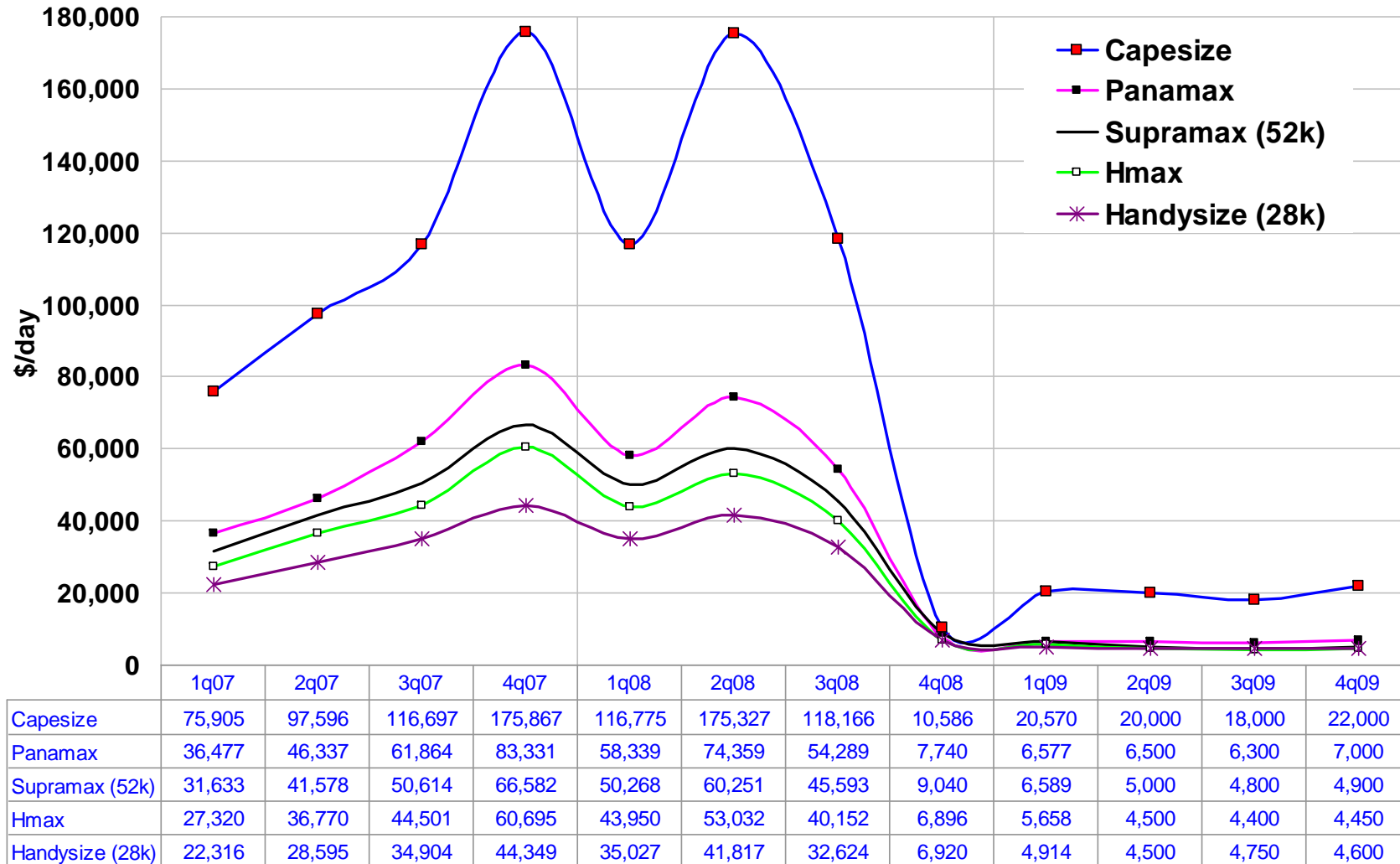
Freight Market Annual Average Earnings Forecast



	2006	2007	2008	2009 ytd	2010	2011	2012
Capesize	\$45,319	\$116,540	\$105,390	\$22,475	\$28,226	\$28,665	\$33,857
Panamax	\$23,858	\$56,854	\$48,653	\$7,248	\$12,894	\$11,159	\$11,395
Supramax	\$22,446	\$48,424	\$42,861	\$8,108	\$16,778	\$10,945	\$14,520
Handymax	\$20,616	\$43,035	\$37,274	\$7,034	\$14,554	\$9,495	\$12,596
Handysize	\$18,327	\$32,531	\$28,353	\$5,550	\$12,583	\$11,155	\$8,575

Short term prospects remain weak this year

Quarterly Basket of Average TC Rates



Conclusion

- A period of extreme turmoil in the shipbuilding industry
- Nearly every shipyard now receives enquiries on possible resales
- Quite possible that many “Greenfield” shipyards will now simply never be built but the example of Rongsheng shows that the potential for rapid capacity increases is still very pronounced.
11/2/09: China announces ban on new shipyards for 3 years and no more expansion of existing yards – also for 3 years. Govt also intends banks to increase trade finance to support export orders.
- Fall in average age of fleet as older ships removed and many new ones delivered
- Newbuilding prices are expected to fall
- Newbuilding orderbook expected to fall steadily, scrapping to increase and contracting to remain at low levels
- Recovery could take significant time to work through the system



The Bulk Carrier Shipbuilding Market A review of the major issues post 2008

Philip Rogers

Associate Dean ~ Copenhagen Business School

Head of Consultancy ~ ICAP Shipping Ltd

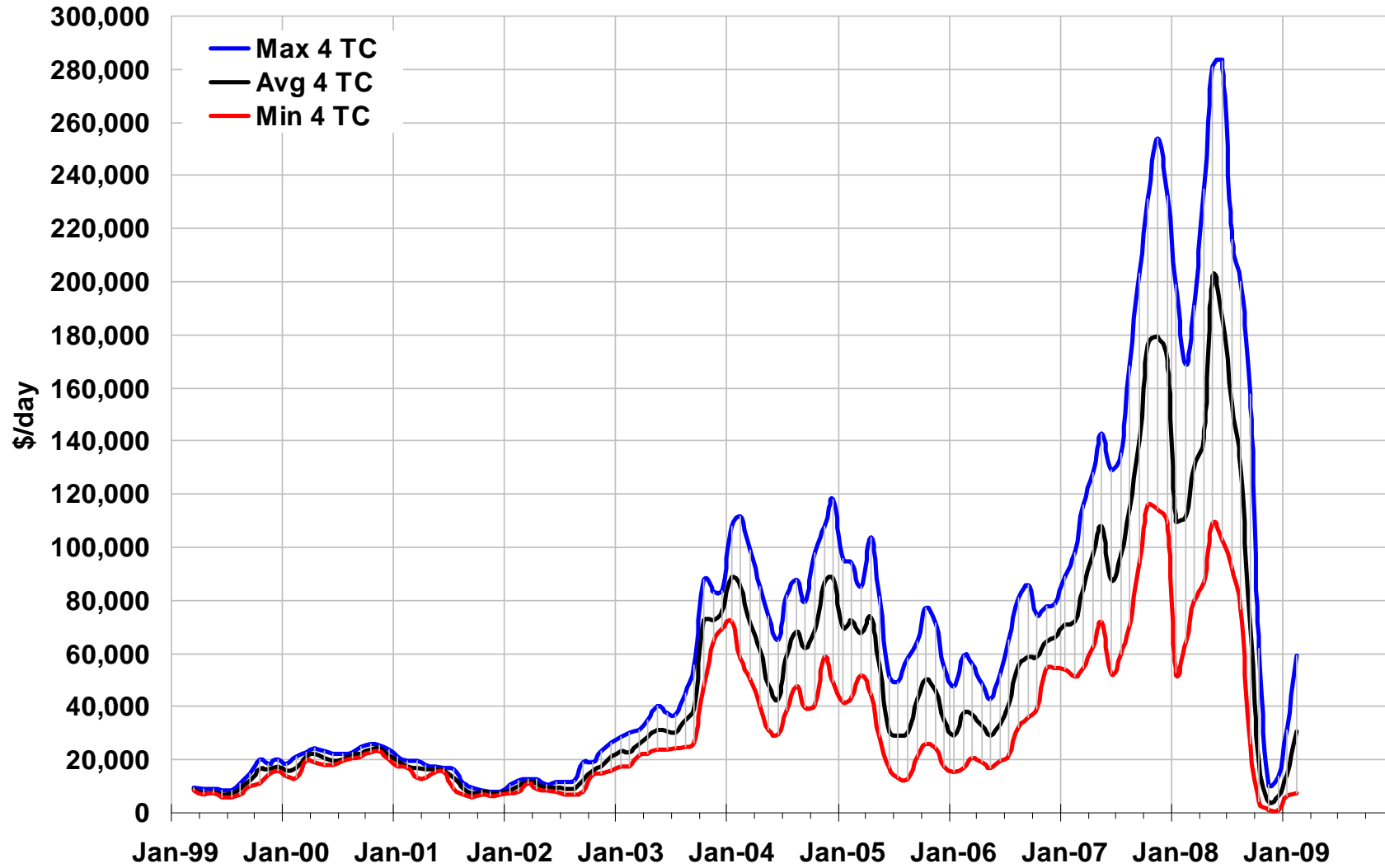
Copenhagen 19th February 2009

Back-up slides

Extreme volatility clearly evident

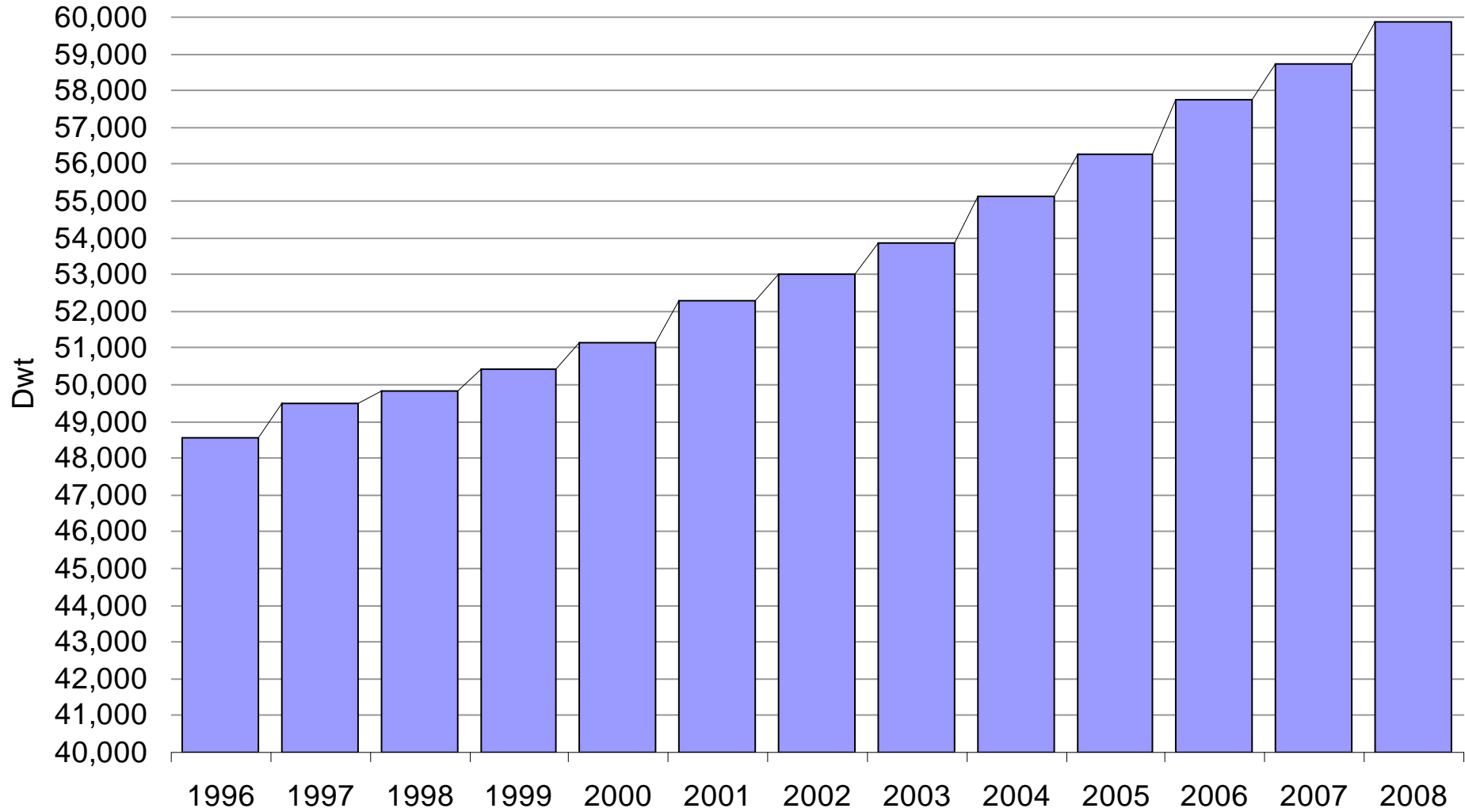
Source: Baltic Exchange

Capesize High/Low Monthly Earnings

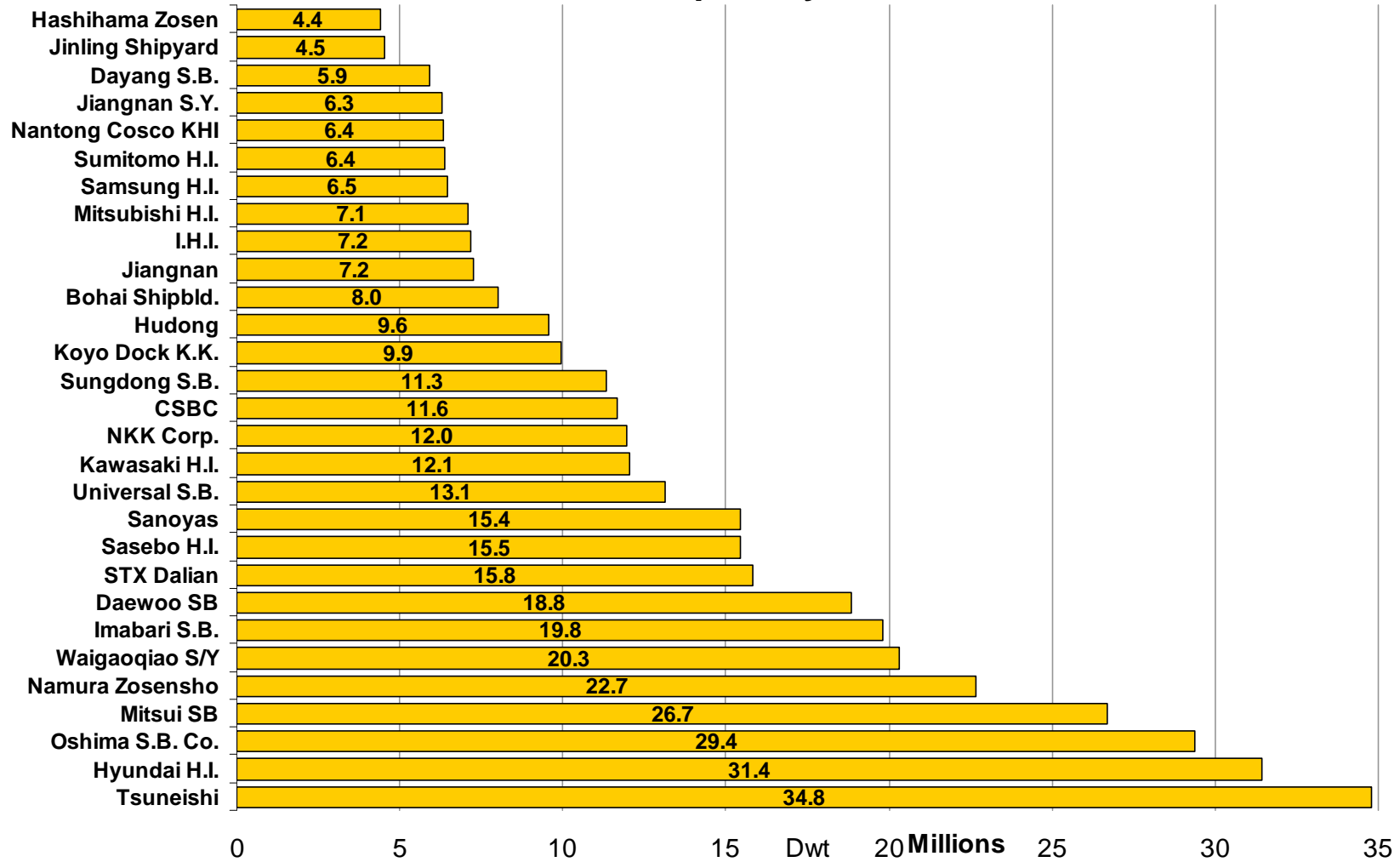


Clear increase in average ship size

Average Bulk Carrier Size

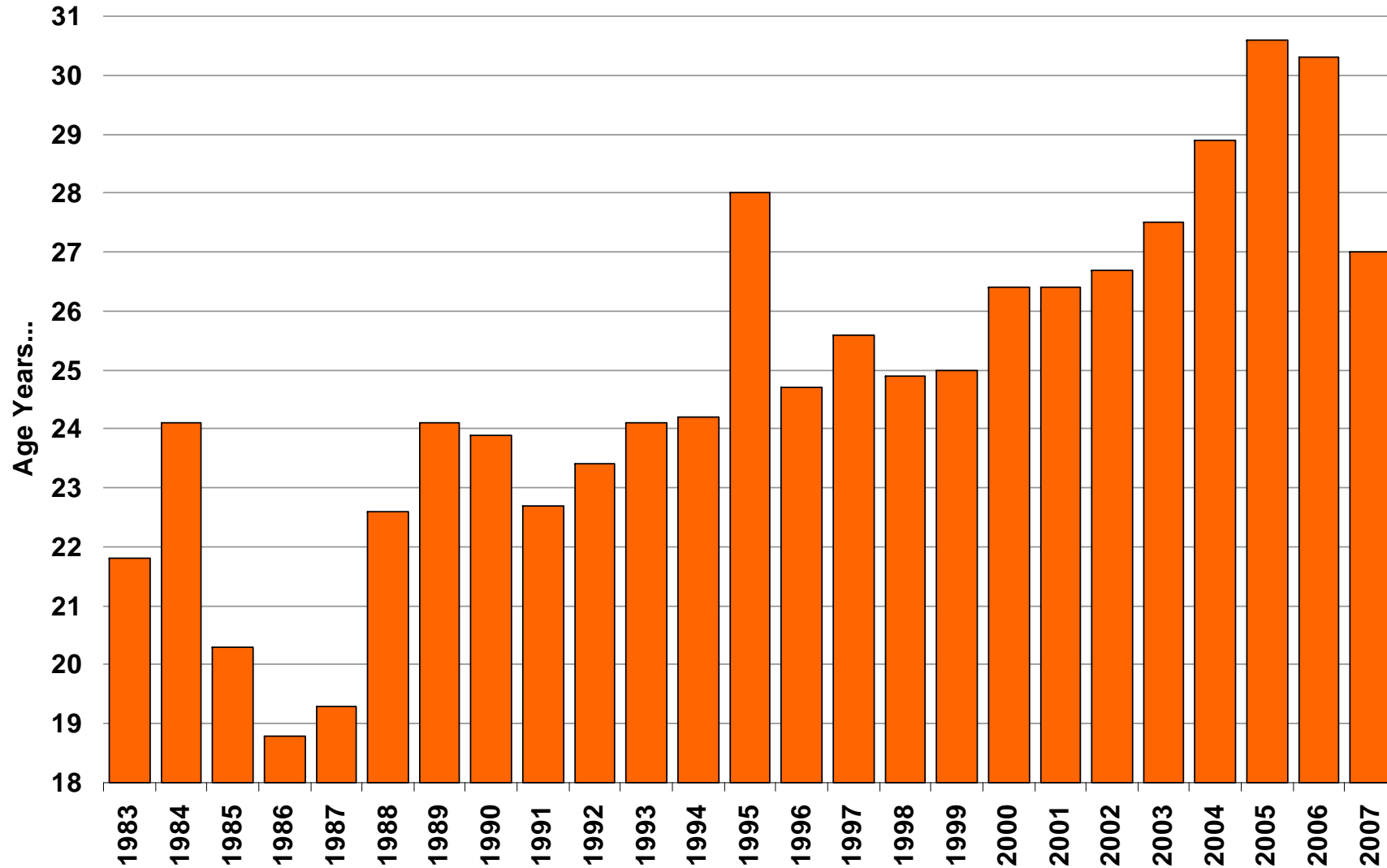


All Bulk Carriers: top 30 by Builder - Dwt



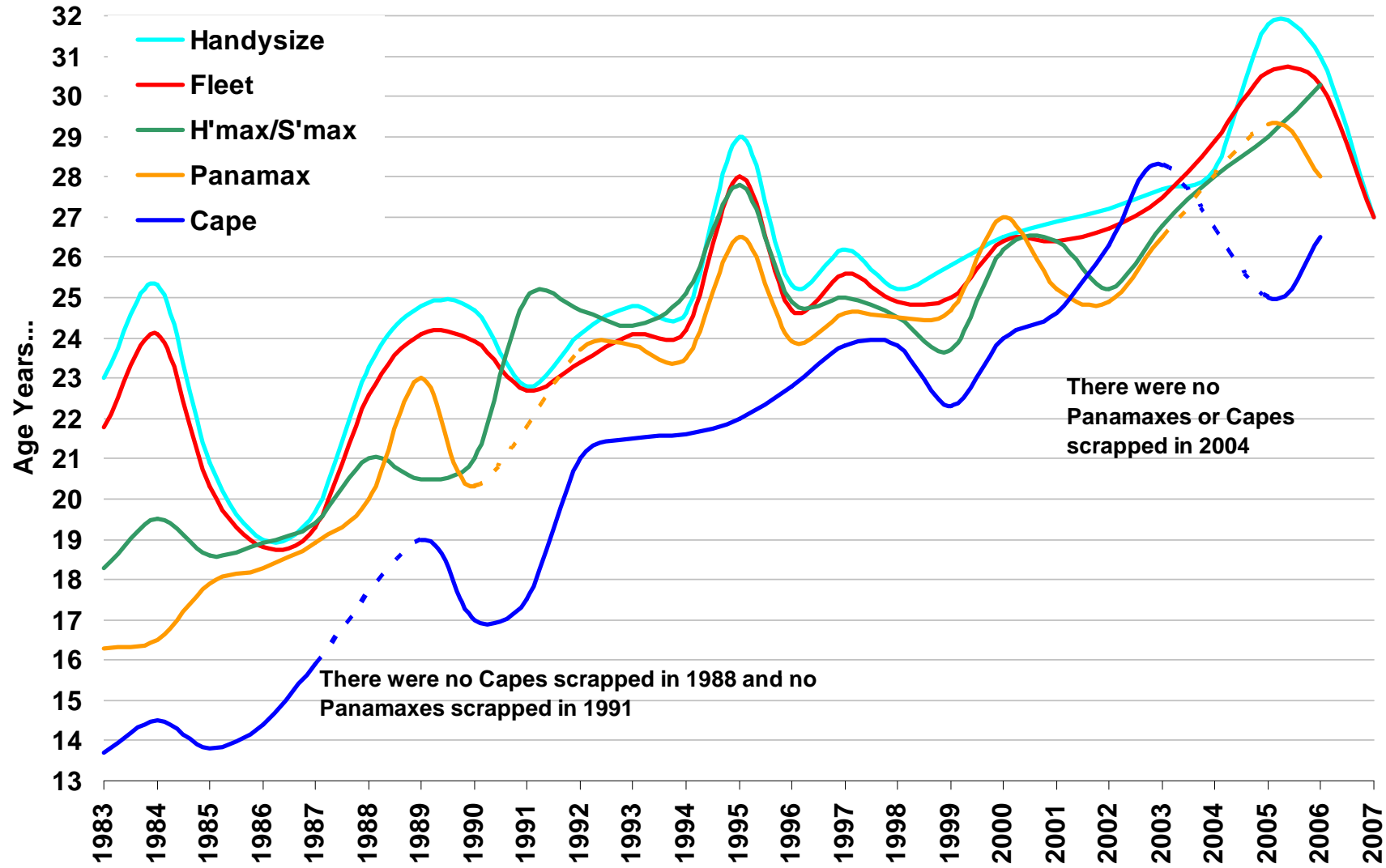
Scrapping Fall in 2007 distorted because of low numbers

All Bulk Carriers Average Age When Scrapped

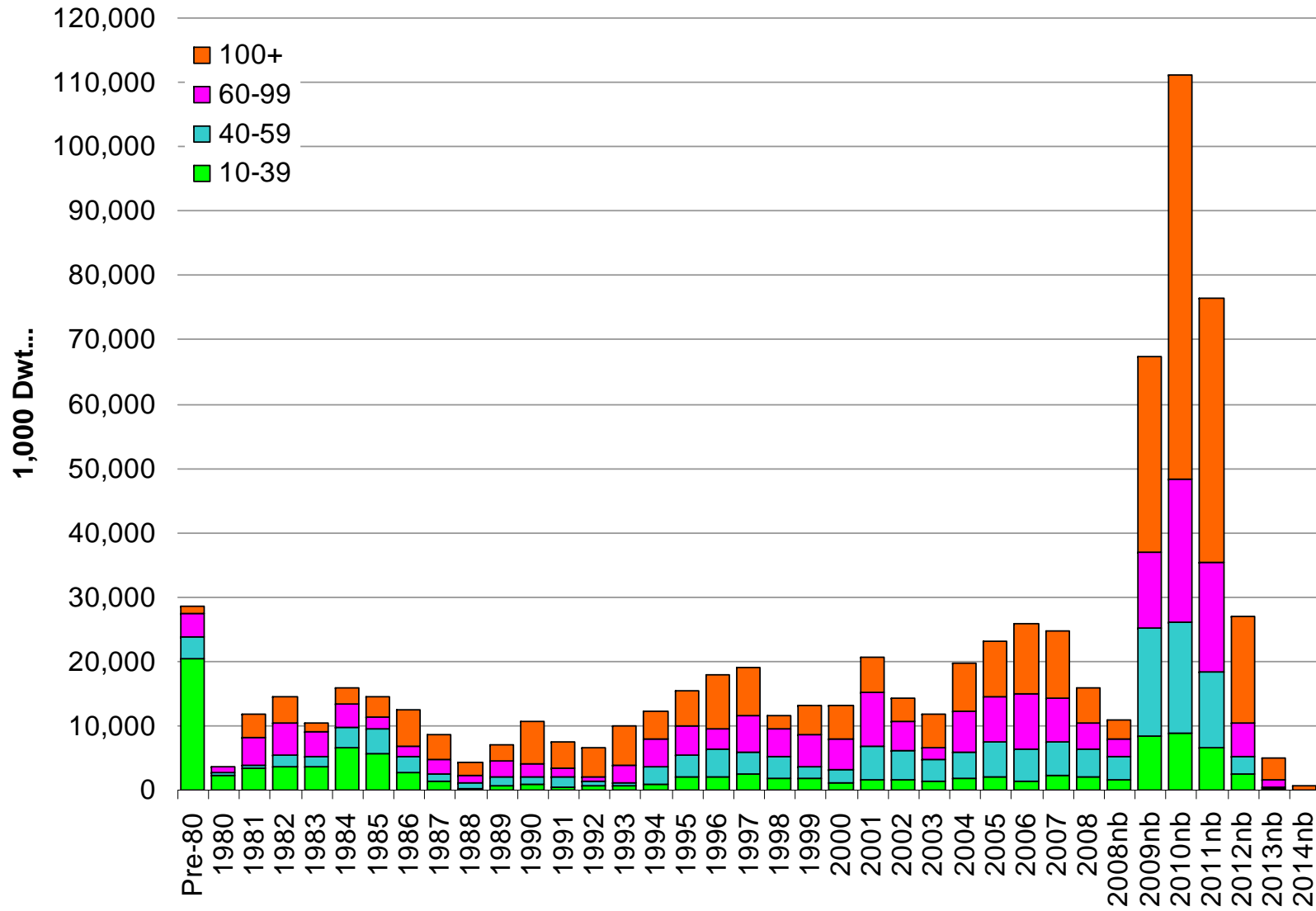


Rising trend of scrapping age – now to come down?

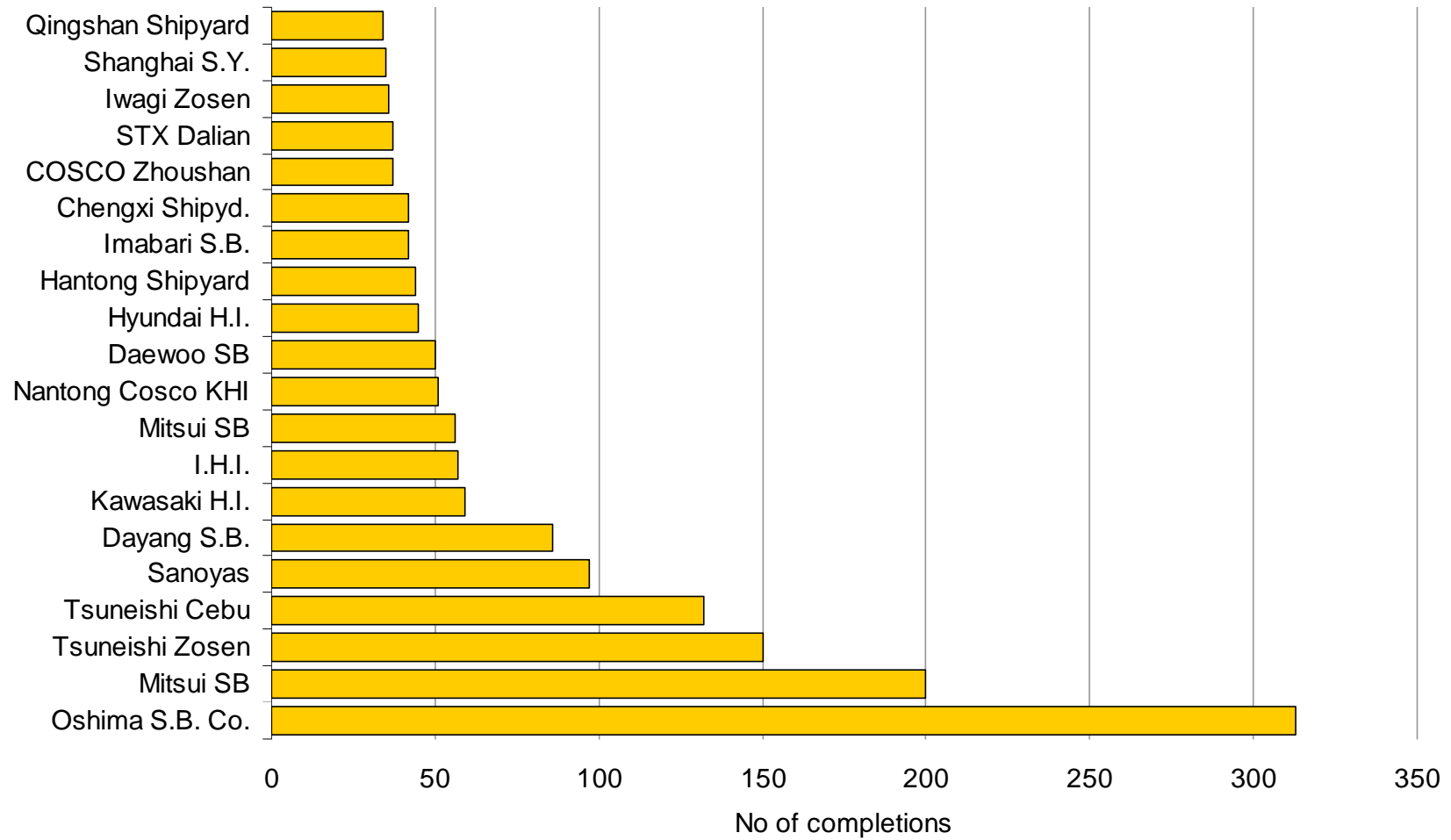
Bulk Carriers Average Age When Scrapped



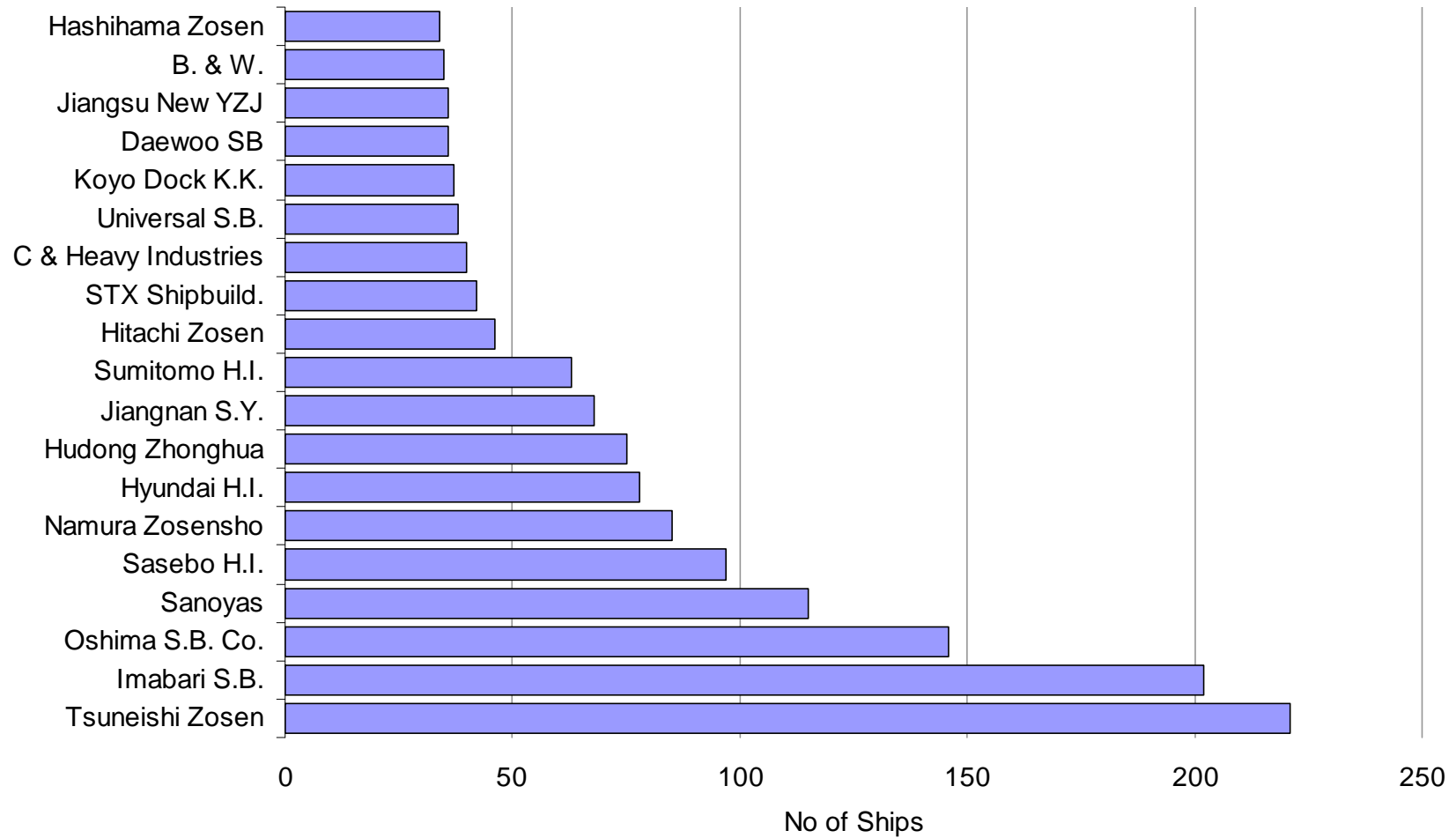
BC Fleet by Dwt 1/10/08



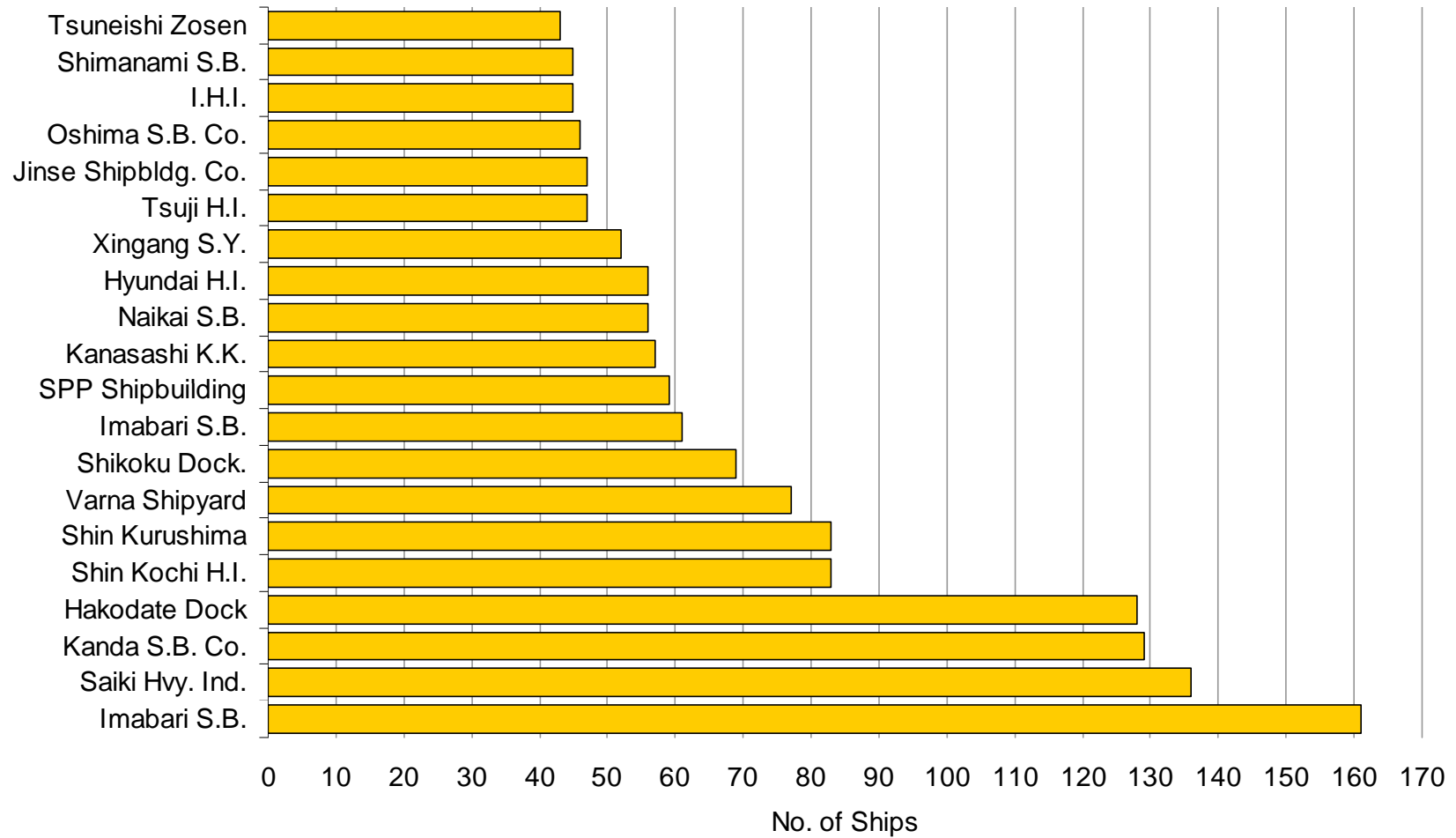
H'max/S'max Top 50 Builders



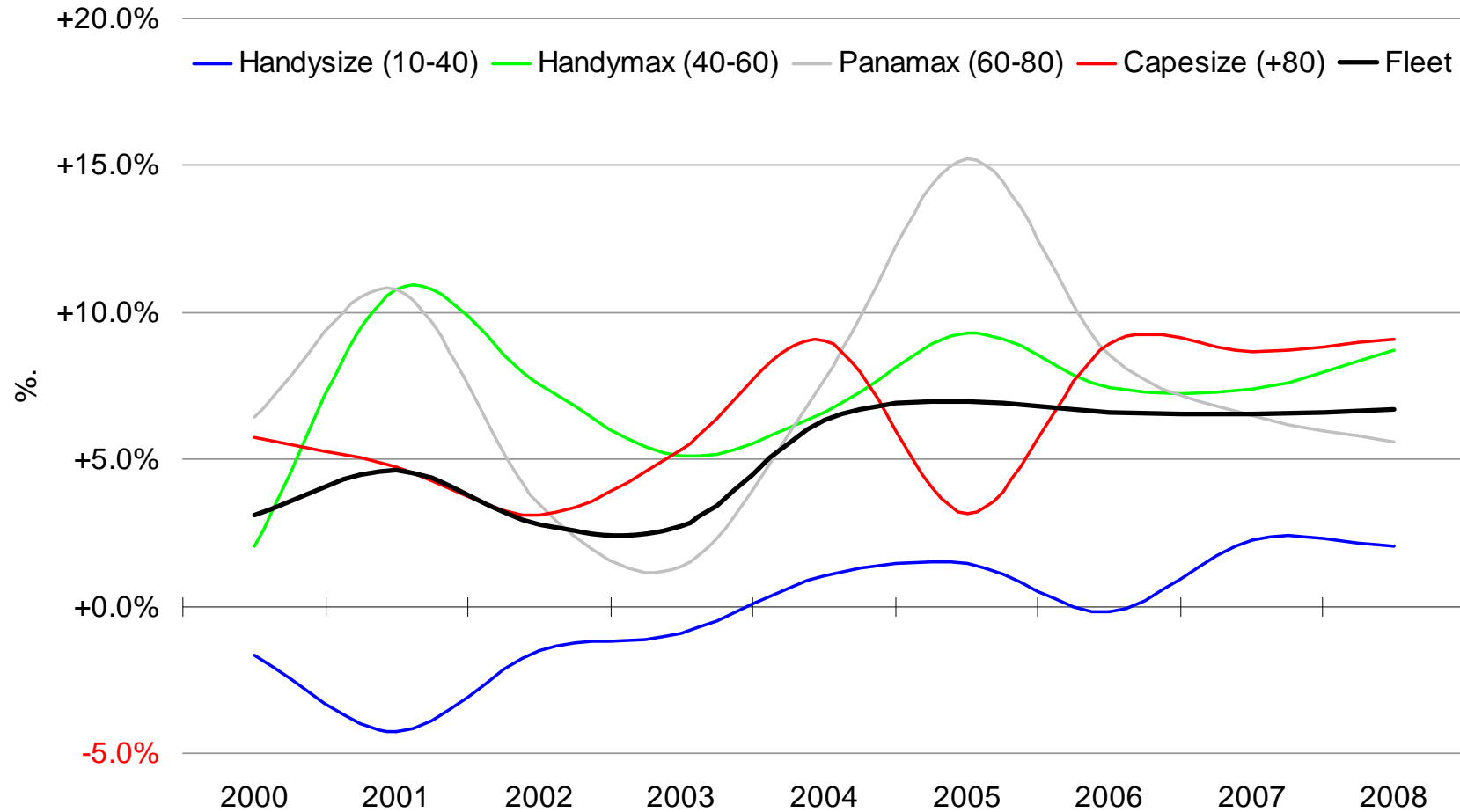
Top 20 Panamax Shipbuilders



Handysize BC: Top 20 builders

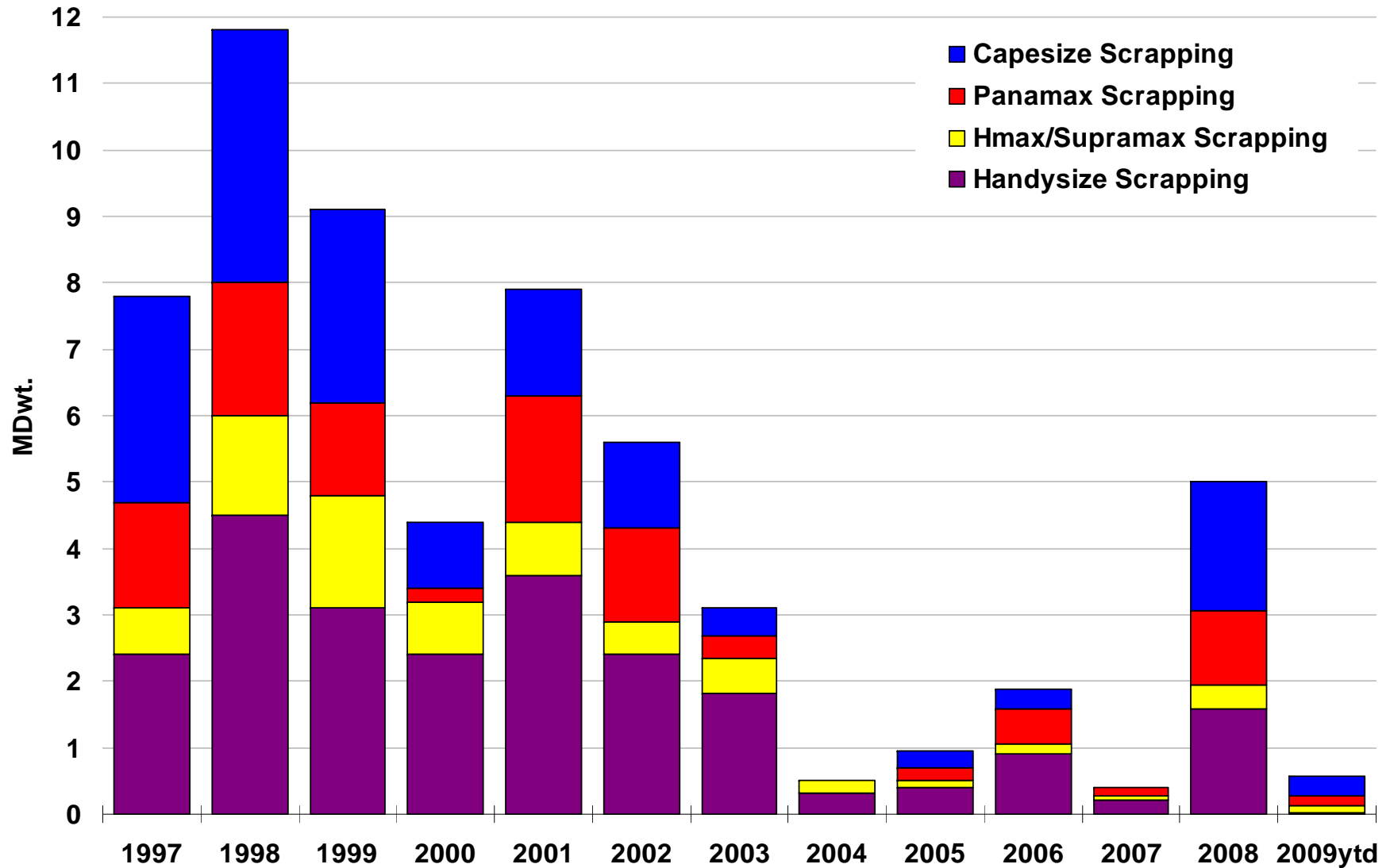


BC Fleet Growth (Dwt) by Sector



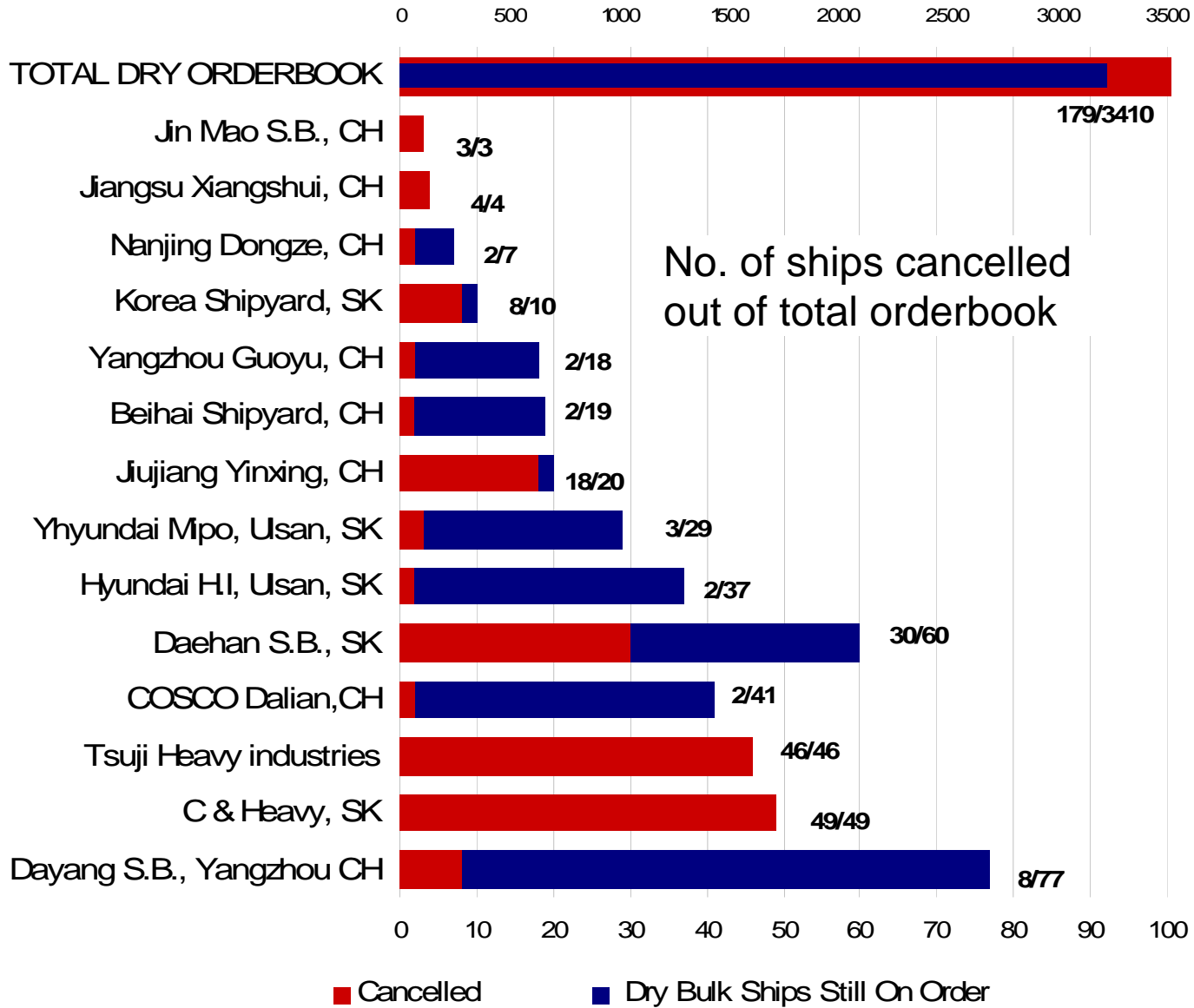
Scrapping virtually ceased in last five years

Dry Bulk Carrier Scrapping Dwt



Cancellations: continuing to feed through daily

Links broken



Cancellations represent only a small proportion so far

