

*Fonasba Annual Meeting 2013*

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# ***The Dry Bulk Market***

*(an analysis of the fleet profile, trade prospects and rates)*

***September 2013***

*Chartering & Documentary Committee Plenary Meeting*

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*Lima, Wednesday 23rd  
October 2013*



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# *Fleet Development*

*(Deliveries, Demolitions, Fleet Growth)*



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Over the next few slides we will illustrate the current situation of the dry bulk fleet, in terms of number of trading units, total deadweight, the orderbook, monthly deliveries and demolitions, and projected fleet growth.

We assume our usual size definitions for dry bulk sectors, as shown clearly on the next slide (page 5). We therefore distinguish Handies, Handymaxes (which also include Supramaxes), Panamaxs (which include Kamsarmaxes), Post-Panamaxes, Capesizes and VLOCs (which include the Valemaxes).

In this study we only consider ships larger than 20,000 dwt, and only general bulk carriers plus specialized ore carriers. We intentionally omit all other kinds of specialized units such as OBOs, woodchip carriers, lakers etc.

According to our calculations, the current trading fleet (including units in lay-up and under repair) of bulkers over 20,000 dwt consists of about 8500 units equivalent to about 668 million dwt, as of end of August 2013.

In the first 8 months of 2013, we recorded the delivery of 498 units over 20,000 dwt, for a total of 41.6 million dwt. This included 20 VLOCs (6.4 mln dwt), 49 Capesizes (9.4 mln dwt), 29 Post-Panamaxes (2.8 mln dwt), 132 Panamaxs (10.6 mln dwt), 144 Handymaxes (8.2 mln dwt) and 124 Handies (4.2 mln dwt).

This was 44 percent less than the 884 units (75 mln dwt) delivered in the same period last year.

The total orderbook for 2013 stands at around 73 mln dwt, including the ships already delivered so far this year. However, if we assume that due to delays and non-performance about 15 percent of the orderbook will not be delivered on time, as was the case last year and so far in 2013, than the total should not exceed 60 mln dwt.

Demolition activity is still running high, but has slowed down compared to last year. In the first 8 months of 2013 we recorded the scrapping of 255 units, for a total 15.3 mln dwt. This included 5 VLOCs (1.2 mln dwt), 30 Capesizes (4.8 mln dwt), 4 Post-Panamaxes (0.4 mln dwt), 47 Panamaxs (3.1 mln dwt), 37 Handymaxes (1.7 mln dwt) and 132 Handies (4.1 mln dwt). Overall, this is 27 percent less than in the same period of last year.



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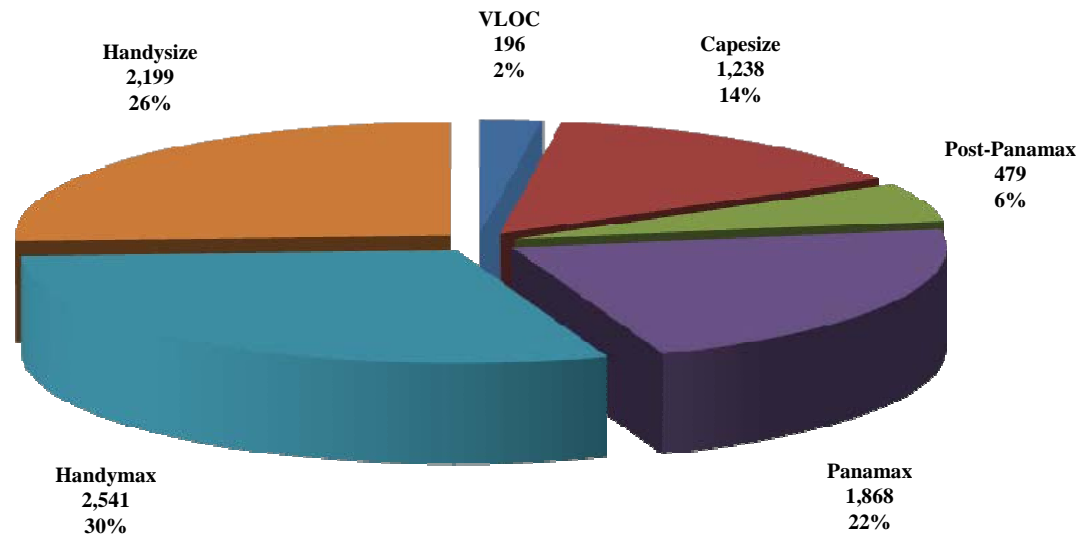
*Our size definitions for bulkers:*

- **VLOC** 210,000+ dwt
- **Capesize** 120,000-209,999 dwt
- **Post-Panamax** 85,000-119,999 dwt
- **Panamax** 65,000-84,999 dwt \*  
\* (for units built before 2000 we apply 60,000-84,999 dwt)
- **Handymax** 40,000-64,999 dwt \*  
\* (for units built before 2000 we apply 40,000-59,999 dwt)
- **Handysize** 20,000-39,999 dwt

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## Total Dry Bulk Fleet By Size Sector - by No. of Units

(august 2013, only units over 20,000 dwt, in number of units)

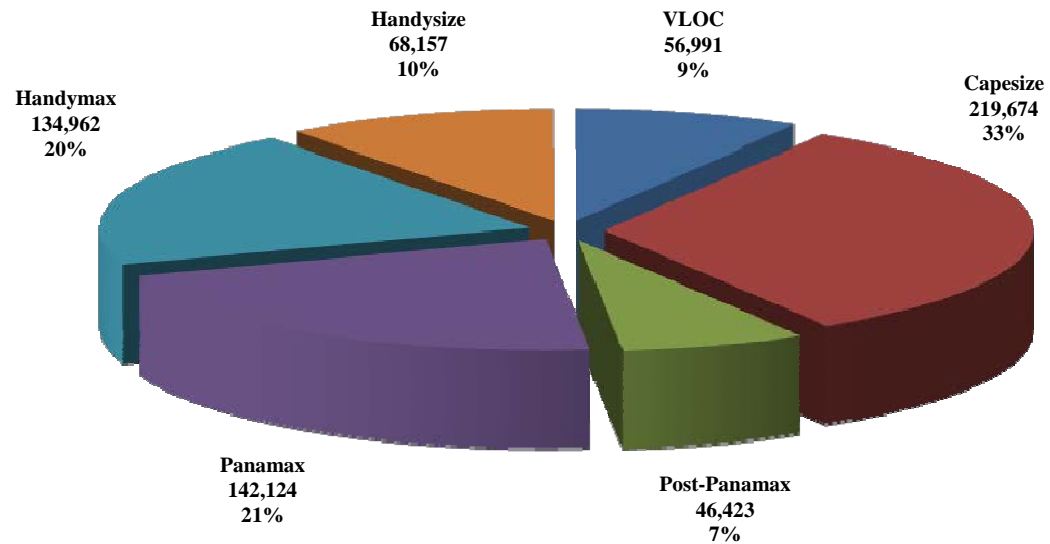


The Handymax fleet is the largest numerically with about 2540 units. Of these, 1880 are larger than 50,000 dwt and therefore can be considered 'Supramaxes'. Panamaxes now total 1868 units, and Capes 1238 units.

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## Total Dry Bulk Fleet By Size Sector - by DWT

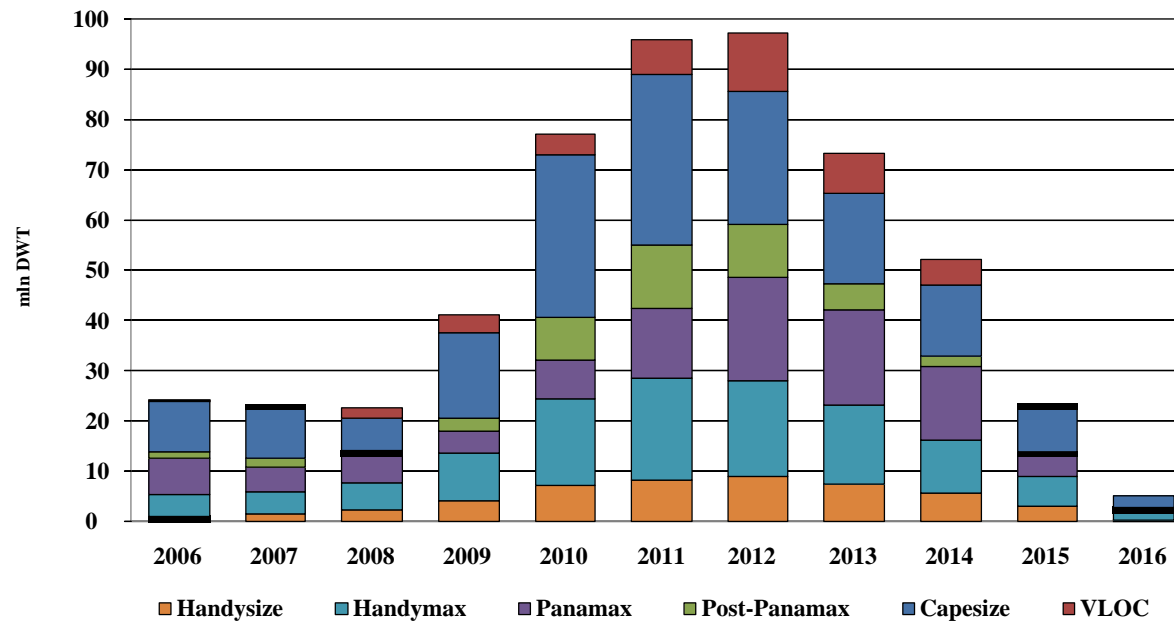
(august 2013, only units over 20,000 dwt, in thousand dwt)



The Capesize fleet now totals over 219 million dwt, or 33 percent of total dry bulk capacity. The VLOC fleet adds another 57 million dwt, with Post-Panamaxes not far behind with 46.4 million dwt.

## Dry Bulk Deliveries + Orderbook in **DWT** - Annual

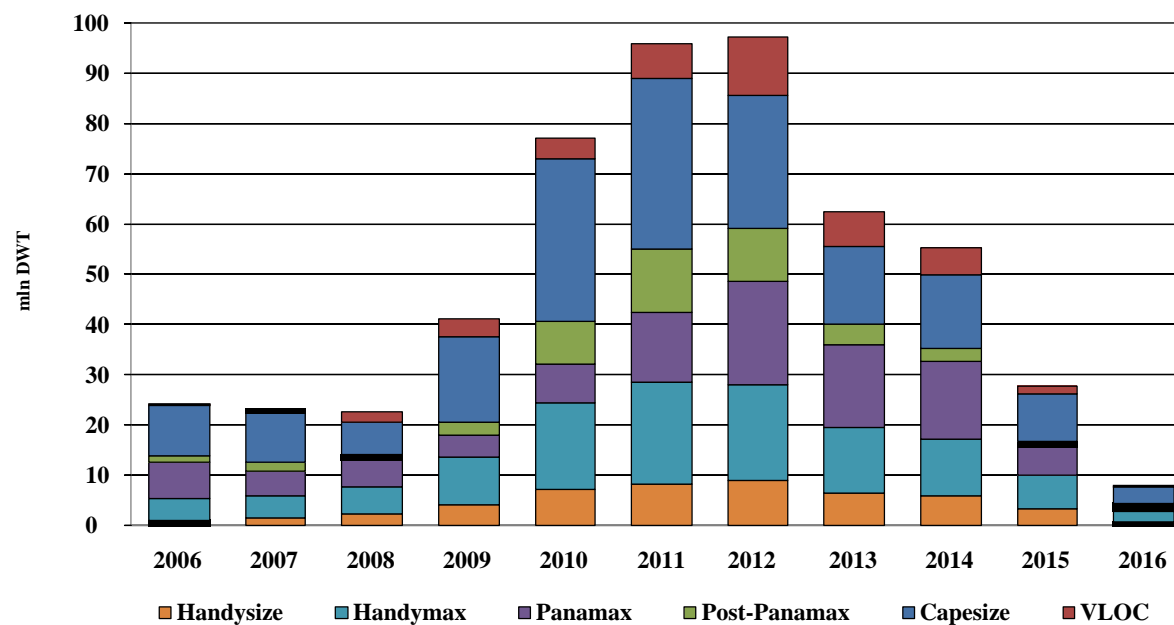
(only units over 20,000 dwt)



97.3 million dwt of new bulkcarriers was delivered in 2012, compared with 95.9 mln dwt in 2011. **In the first eight months of 2013, reported deliveries amounted to only 41.6 mln dwt, down 44.7 percent year-on-year.** The total orderbook for 2013 stands at around 73 mln dwt, including the ships already delivered so far this year.

## Dry Bulk Deliveries + Orderbook in **DWT** - Annual

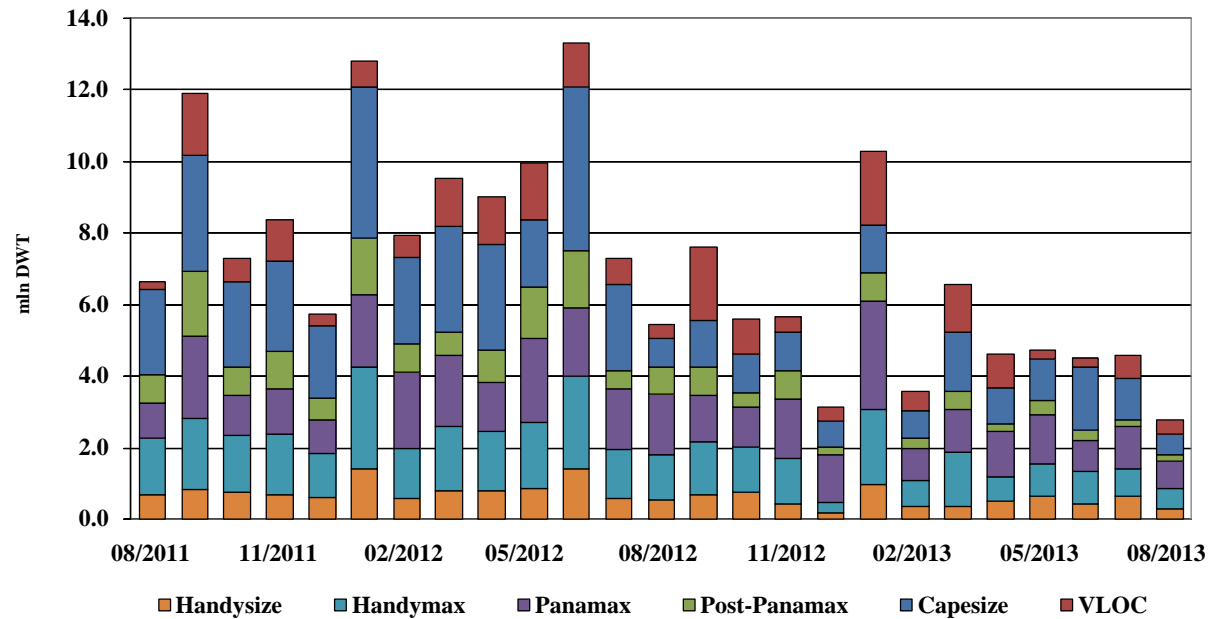
(only units over 20,000 dwt - assuming 15% slippage)



If we assume a 15 percent rate of slippage, than total deliveries in 2013 should not exceed about 60 million dwt. This is consistent with the performance seen this so far this year, with 41 mln dwt delivered in the first 8 months and deliveries steadily declining in recent months, which implies than in the last 4 months we should see less than 20 mln dwt.

## Dry Bulk Newbuilding Deliveries in DWT - Monthly

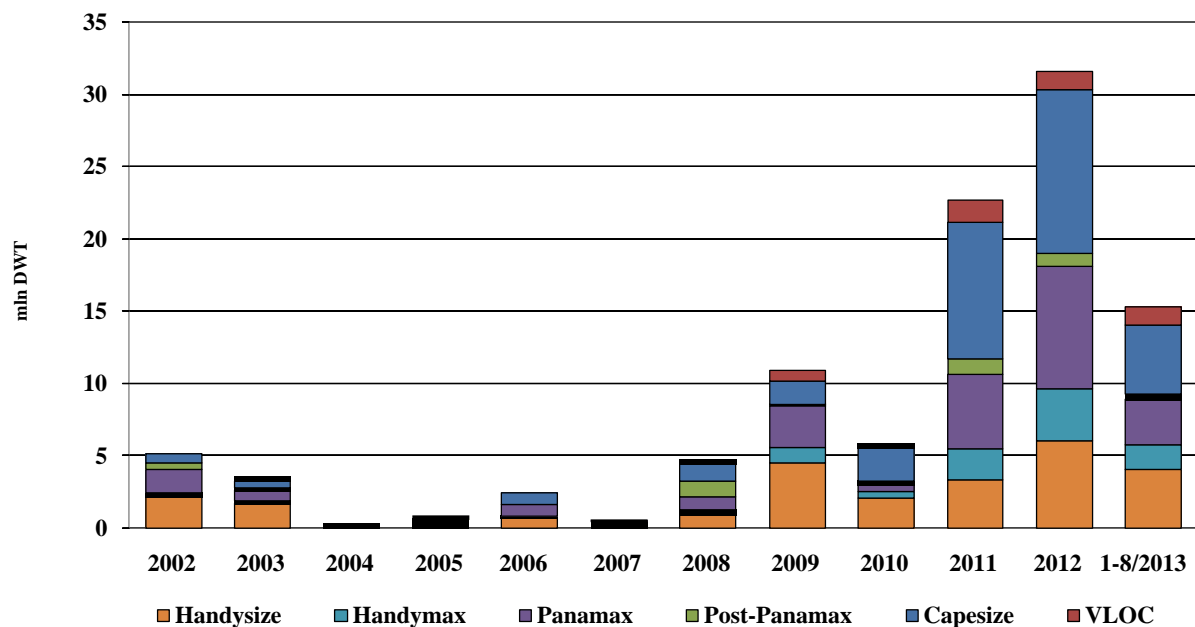
(only units over 20,000 dwt)



In the first 8 months of 2013, we recorded the delivery of 498 units over 20,000 dwt, for a total of 41.6 million dwt. This included 20 VLOCs (6.4 mln dwt), 49 Capesizes (9.4 mln dwt), 29 Post-Panamaxes (2.8 mln dwt), 132 Panamaxes (10.6 mln dwt), 144 Handymaxes (8.2 mln dwt) and 124 Handies (4.2 mln dwt).

## Dry Bulk Demolitions in **DWT** - Annual

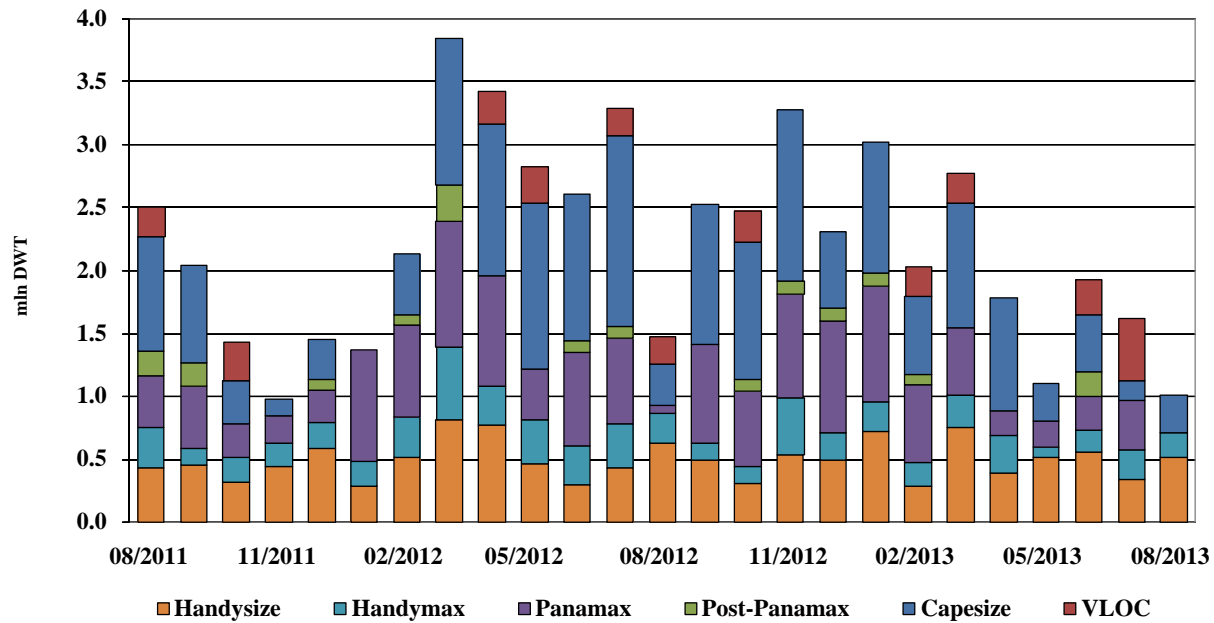
(only units over 20,000 dwt)



2012 was a record year for demolition with 32 mln dwt of bulkcarriers sent for scrap. **Volumes this year are still strong but lower, and unlikely to exceed 20 mln dwt due to improving market sentiment and, more importantly, a sharp fall in the scrap prices offered by Indian scrapyards due to the weakening rupee.**

## Dry Bulk Demolition Activity in DWT - Monthly

(only units over 20,000 dwt)

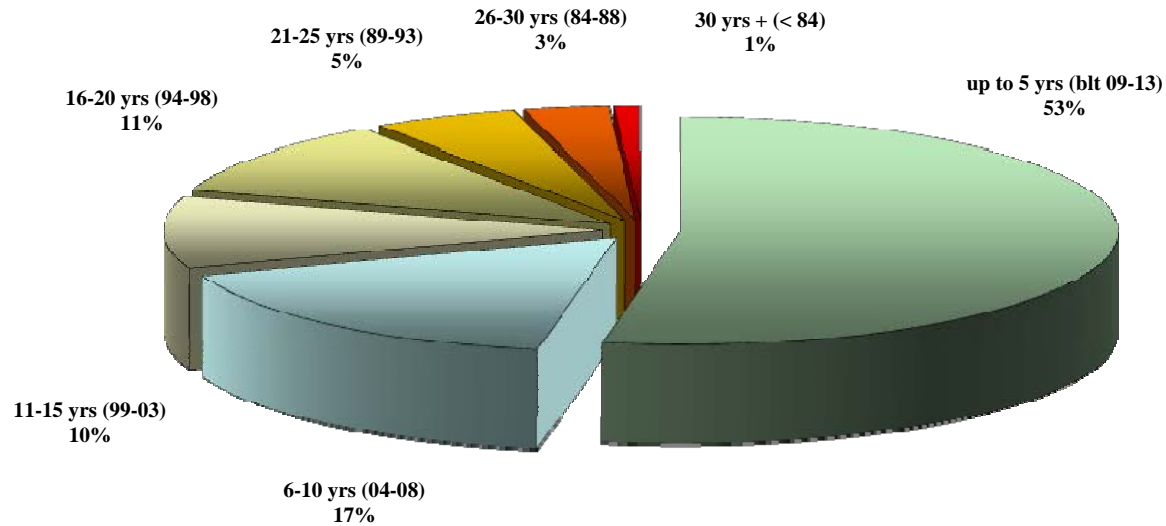


In the first 8 months of 2013 we recorded the scrapping of 255 units larger than 20,000 dwt, for a total 15.3 mln dwt. This included 5 VLOCs (1.2 mln dwt), 30 Capesizes (4.8 mln dwt), 4 Post-Panamaxes (0.4 mln dwt), 47 Panamaxes (3.1 mln dwt), 37 Handymaxes (1.7 mln dwt) and 132 Handies (4.1 mln dwt).

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**All Dry Bulk (20,000+ dwt)  
Age Profile Pie (in DWT)**

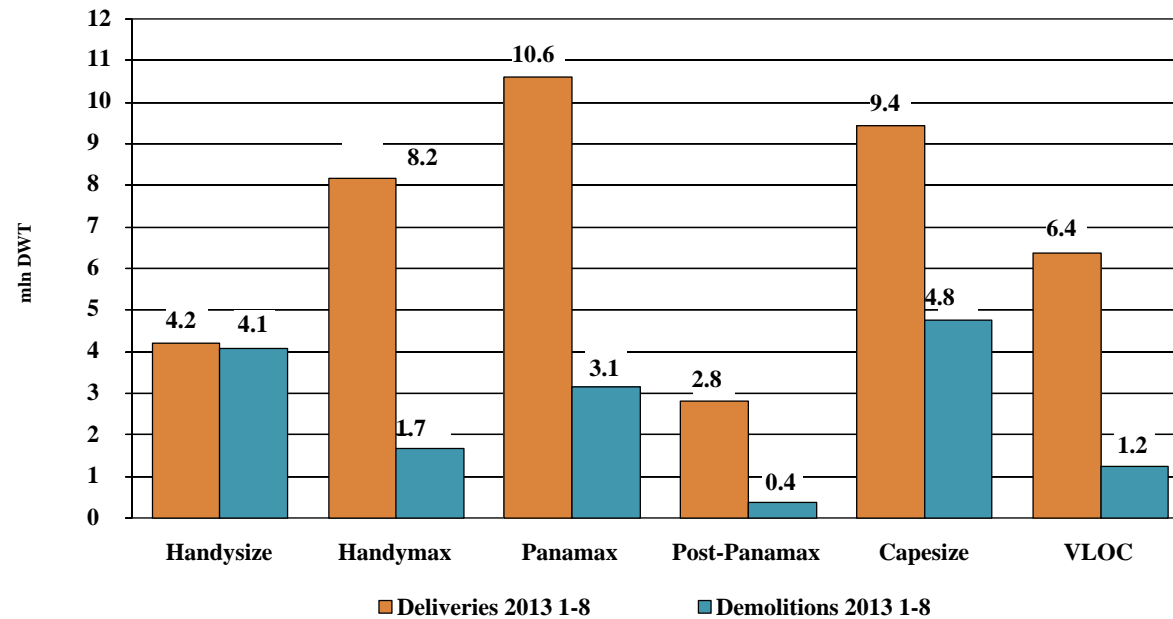
Orderbook/Trading  
16.8%



The fleet is now very young, especially in the larger sizes, which puts a cap on potential demolition. About 4 percent of the current fleet in dwt terms is already over 25 years old, with another 5 percent between 21 and 25 years old.

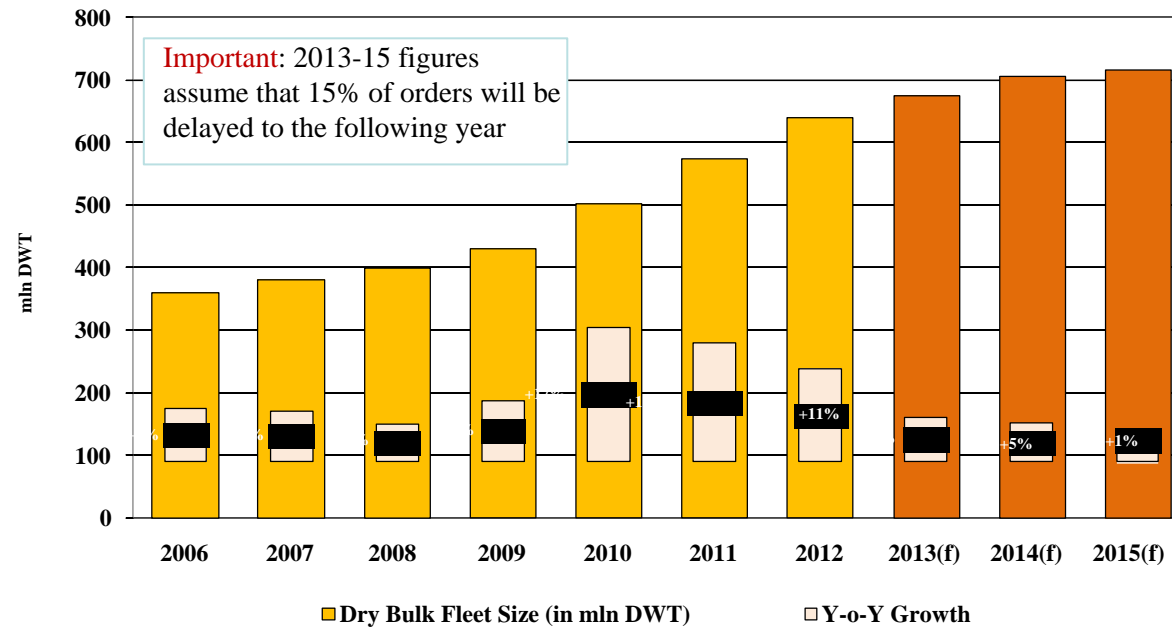
## Deliveries and Demolitions in DWT - Jan-Aug 2013

(only units over 20,000 dwt)



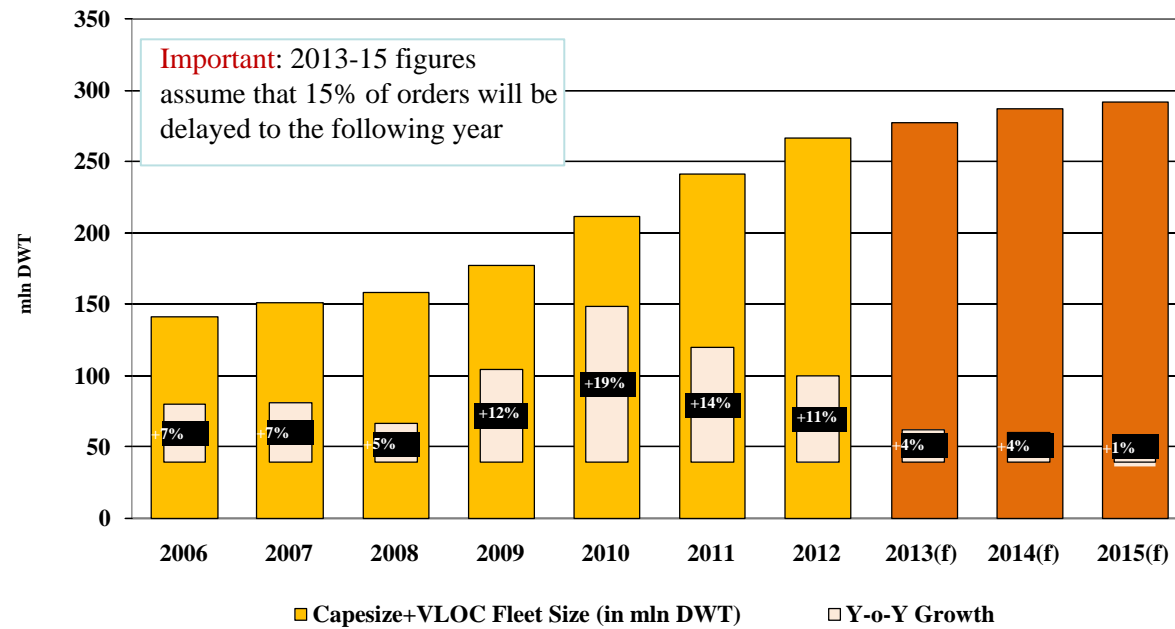
9.4 mln dwt of Capesizes have been delivered so far this year, whilst 4.8 mln dwt have been sold for scrap. The gap is much larger for Panamaxes, where 10.6 mln dwt have been delivered and only 3.1 mln dwt sold for scrap.

**Total Dry Bulk Fleet Growth - with 15% slippage**  
(all units over 20,000 dwt)



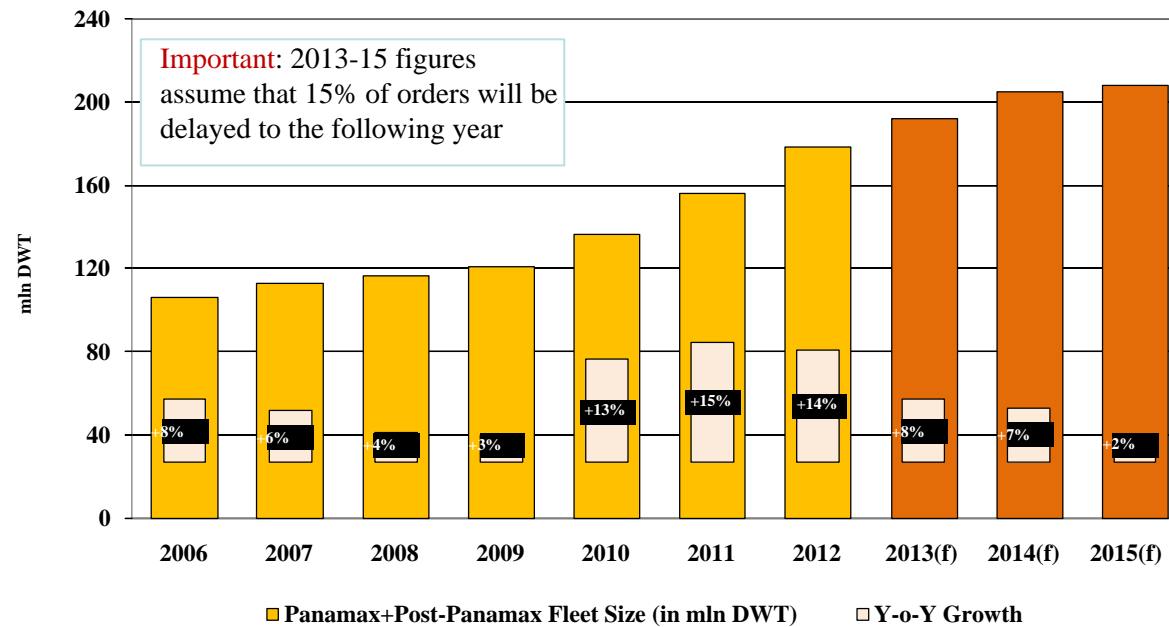
If we assumed that the orderbook would be delivered in full, the dry bulk fleet would continue to expand at 8 percent y-o-y in 2013. If we assume only 85 percent is delivered on time then growth would still be 5 percent y-o-y in 2013.

**Capesize+VLOC Bulk Fleet Growth - with 15% slippage**  
 (only units 120,000+ dwt)



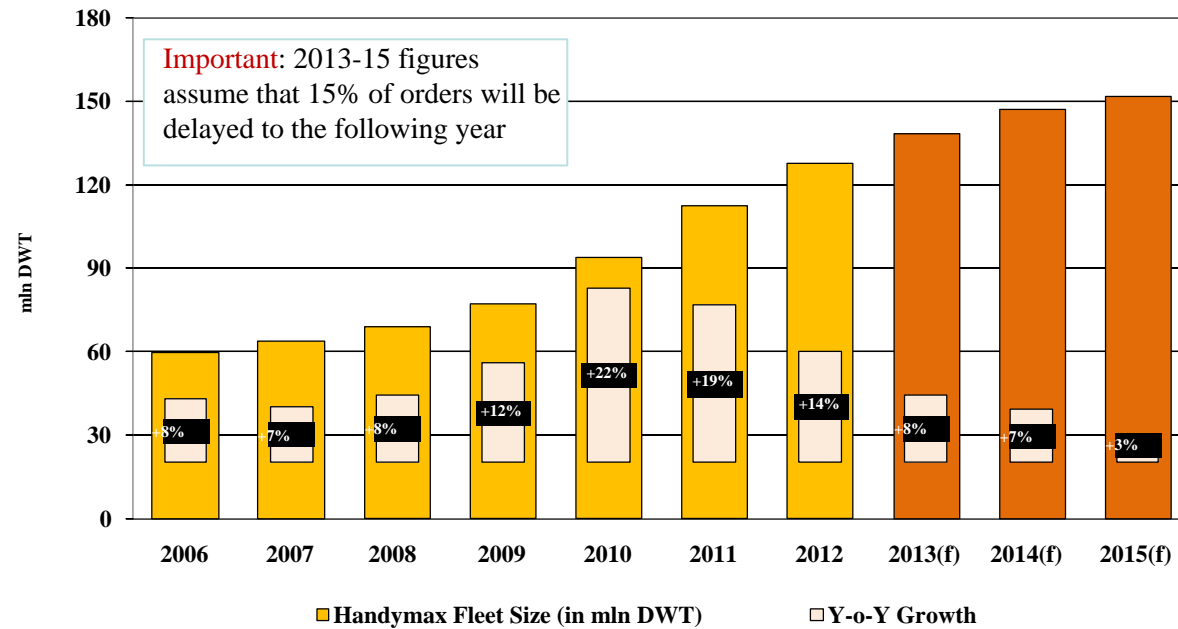
If we assumed that the orderbook would be delivered in full, the cape/vloc fleet would continue to expand at 6 percent y-o-y in 2013. If we assume only 85 percent is delivered on time than growth would still be 4 percent y-o-y in 2013.

**Panamax+Post-Pax Bulk Fleet Growth - with 15% slippage**  
 (only units 65,000-119,999 dwt)



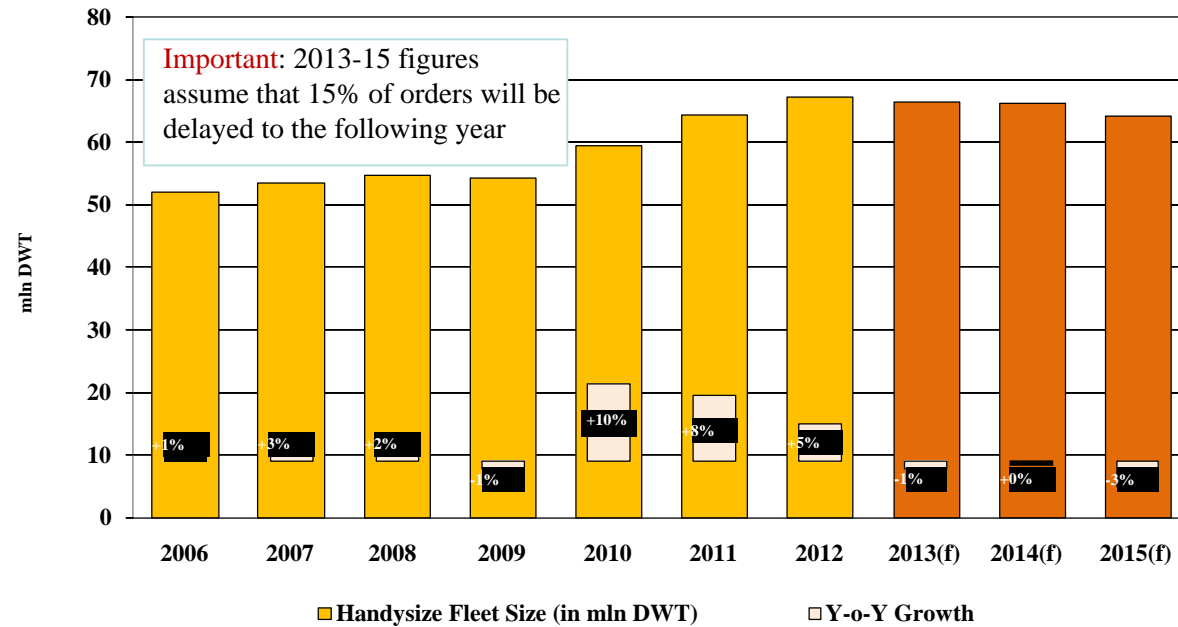
If we assumed that the orderbook would be delivered in full, the panamax/post-pax fleet would continue to expand at 13 percent y-o-y in 2013. If we assume only 85 percent is delivered on time than growth would still be 8 percent y-o-y.

## Handymax Bulk Fleet Growth - with 15% slippage (only units 40,000-64,999 dwt)



If we assumed that the orderbook would be delivered in full, the handymax fleet would continue to expand at 11 percent y-o-y in 2013. If we assume only 85 percent is delivered on time than growth would still be 8 percent y-o-y in 2013.

**Handysize Bulk Fleet Growth - with 15% slippage**  
 (only units 20,000-39,999 dwt)



If we assumed that the orderbook would be delivered in full, the handy fleet would continue to expand at 2 percent y-o- y in 2013. If we assume only 85 percent is delivered on time than the fleet could actually decline by 1 percent in 2013.



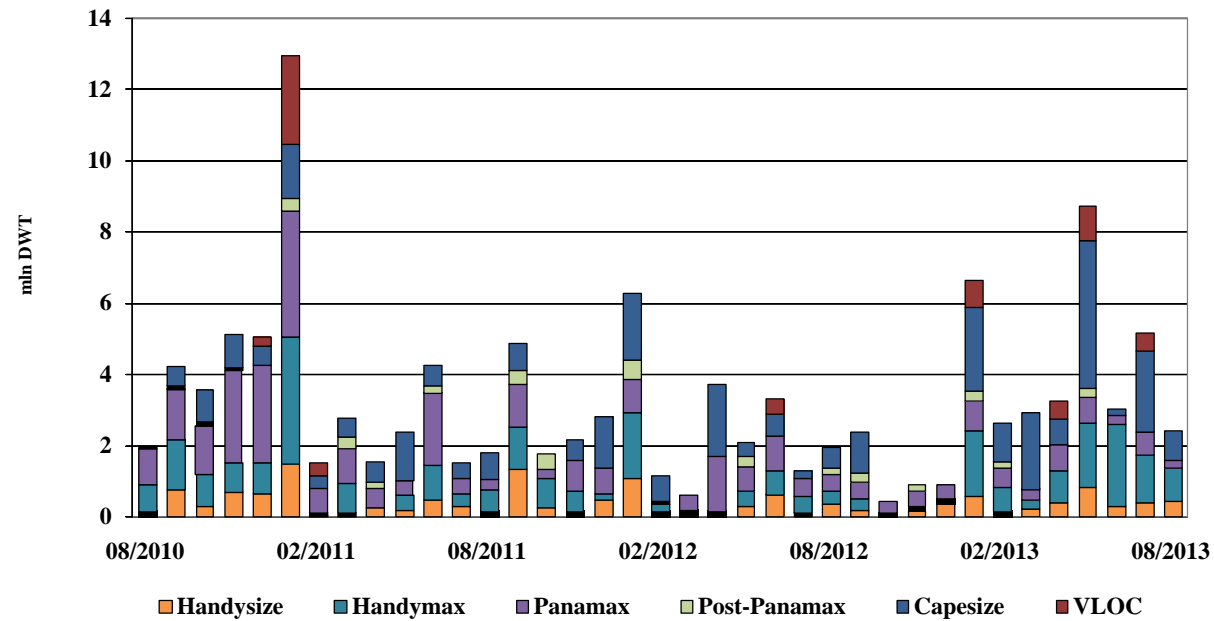
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# *Shipbuilding Trends*

*(Newbuilding Orders, Major Builders)*

## Dry Bulk Ordering Activity in **DWT** - Monthly

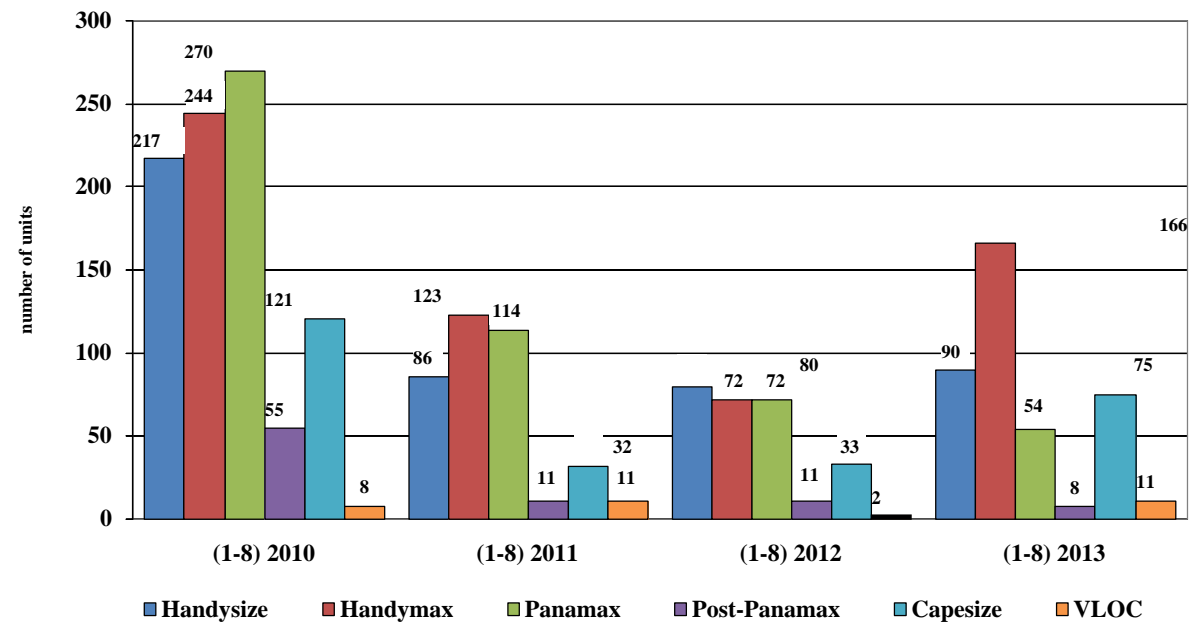
(only units over 20,000 dwt)



**Ordering activity has sharply picked up this year, which is worrying.** There have been 404 reported newbuilding orders in the first 8 months of 2013, which is 50 percent more than in the corresponding period in 2012.

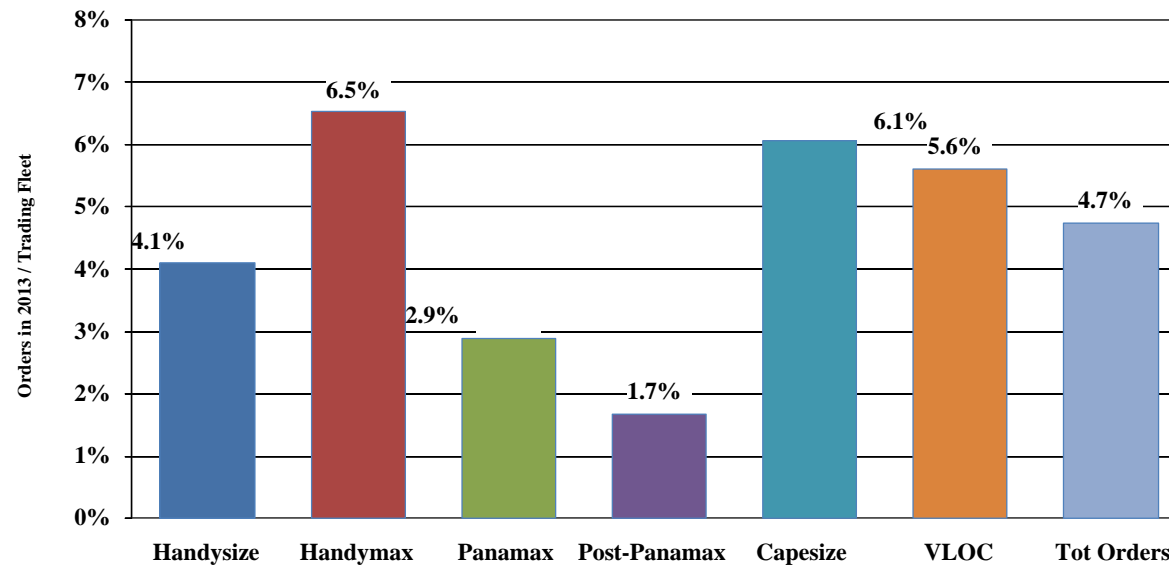
## Dry Bulk Ordering in January-August by Ship Size

(only units over 20,000 dwt, in number of units)



Orders of Capesizes have significantly increased this year, with 75 reported in the January to August period. Only 33 were reported in the same period last year. Panamax orders, on the other hand, have declined.

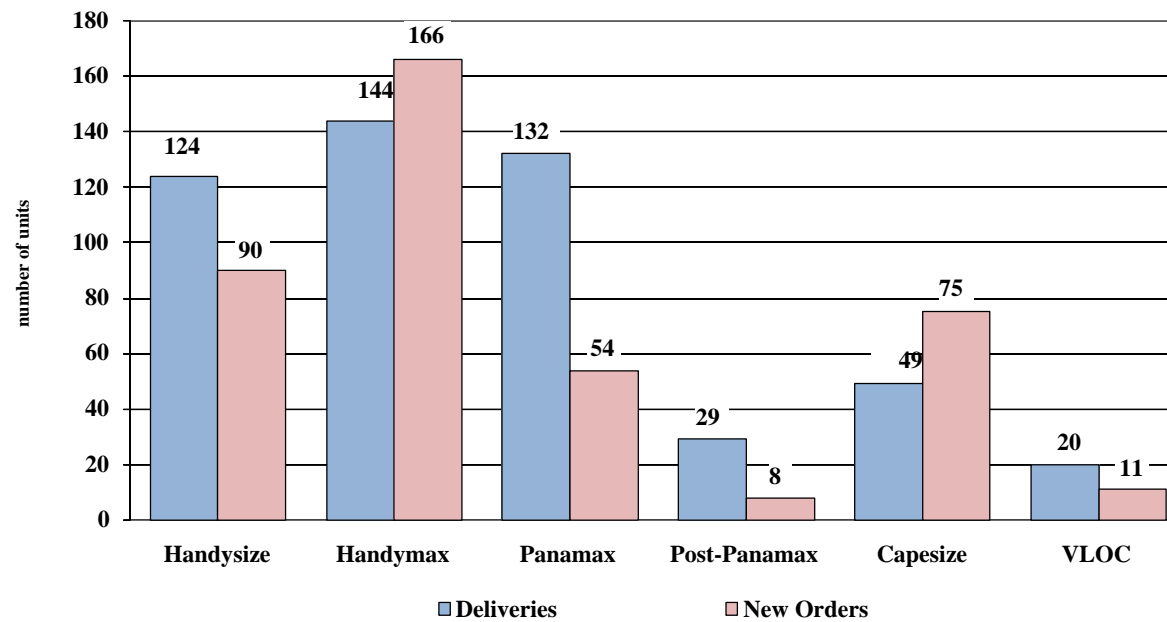
### Bulk Orders in Jan-Aug 2013 as Proportion of Trading Fleet (only units over 20,000 dwt, in number of units)



The bulkcarriers reported ordered so far this year are equivalent to 4.7 percent of the current trading fleet. The proportion varies between sizes – it was 6.1 percent for Capesizes but only 2.9 percent for Panamaxes.

## Dry Bulk Deliveries v. New Orders - Jan-Aug 2013

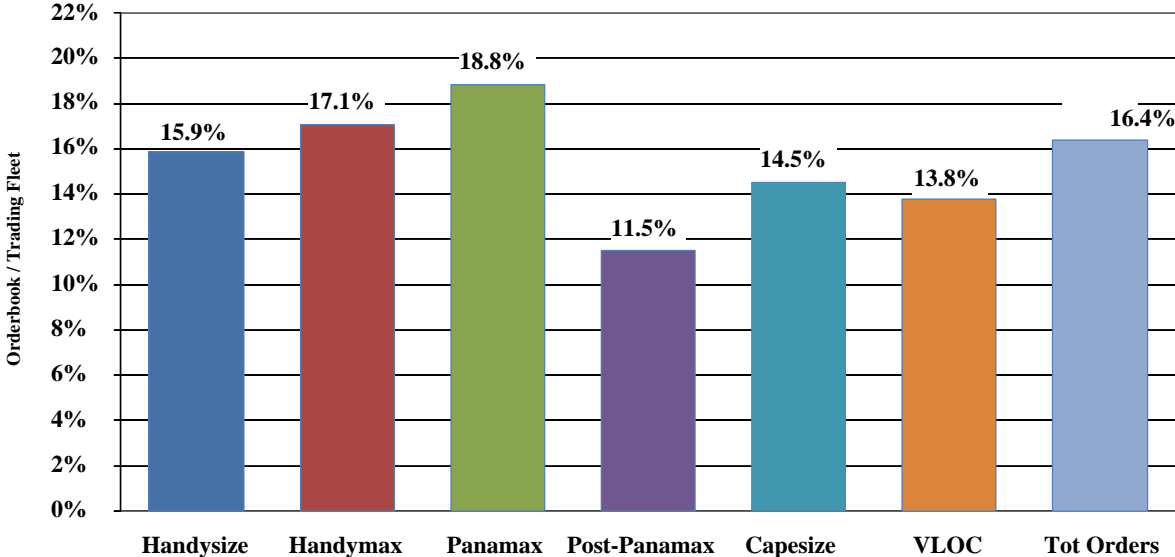
(only units over 20,000 dwt, in number of units)



The orderbook actually shrank this year as deliveries have so far exceeded new orders. For Panamaxes we have seen 132 units delivered so far this year but only 54 newbuilding orders have been reported so far.

### Dry Bulk Orderbook as Proportion of Trading Fleet

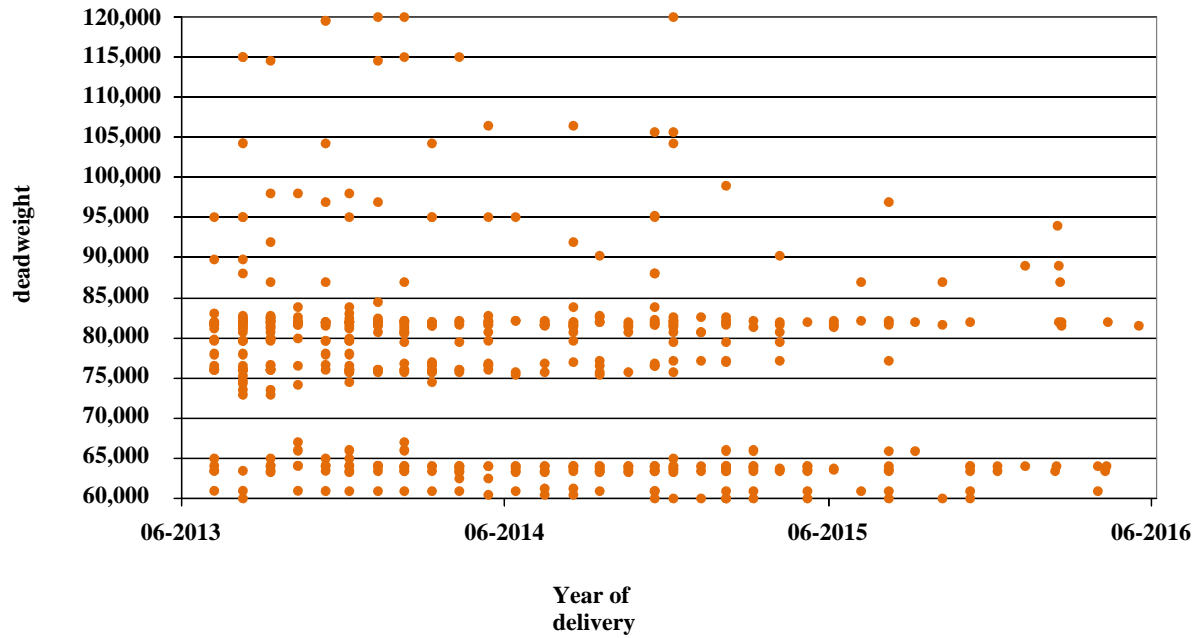
(only units over 20,000 dwt, in number of units)



The total orderbook is now equivalent to 16.4 percent of the total trading fleet in dwt terms. The heaviest orderbook is for Panamaxes, where it is equivalent to 18.8 percent of the trading fleet, whilst it is only 14.5 percent for Capes.



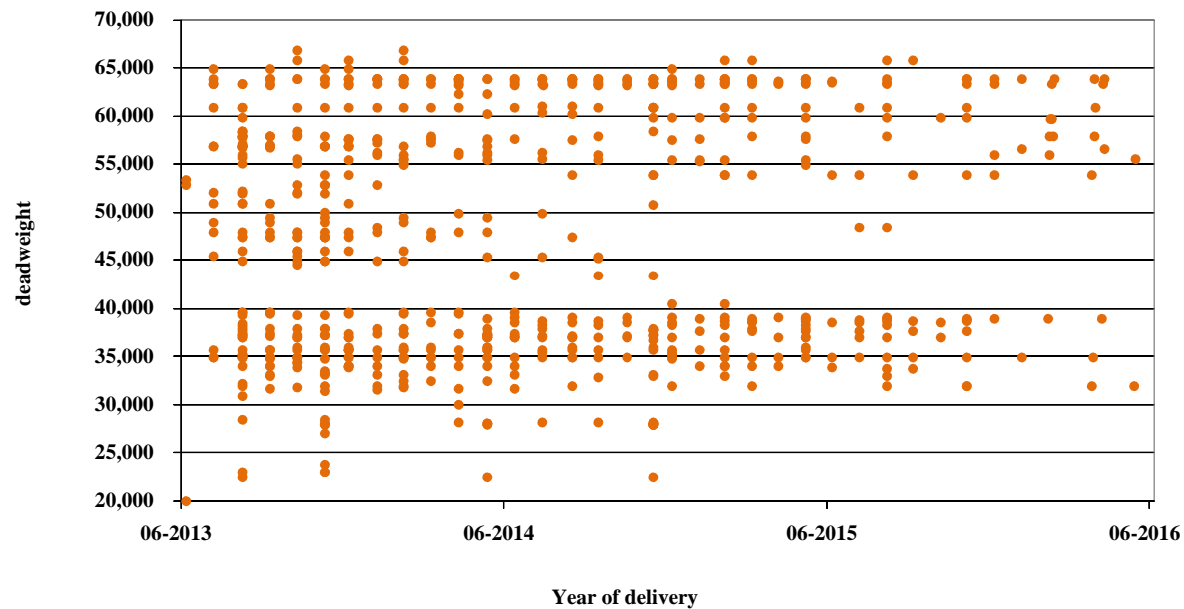
### Panamax+Post-Panamax Orderbook Size Distribution (all bulkers 65,000-120,000 dwt due in each month)



The most common designs in the Panamax range are currently around 82,000 dwt, but there are many also of around 76,000 dwt. Supramax designs are now reaching 67,000 dwt.

## Handysize+Handymax Orderbook Size Distribution

(all bulkers 20,000-65,000 dwt due in each month)



There is a wide variety of Handymaxes being built, with common designs around 62,000 or 65,000 dwt, but also in the range 55,000-58,000 dwt. Handy ships are being built mostly in the range 35,000-40,000 dwt.



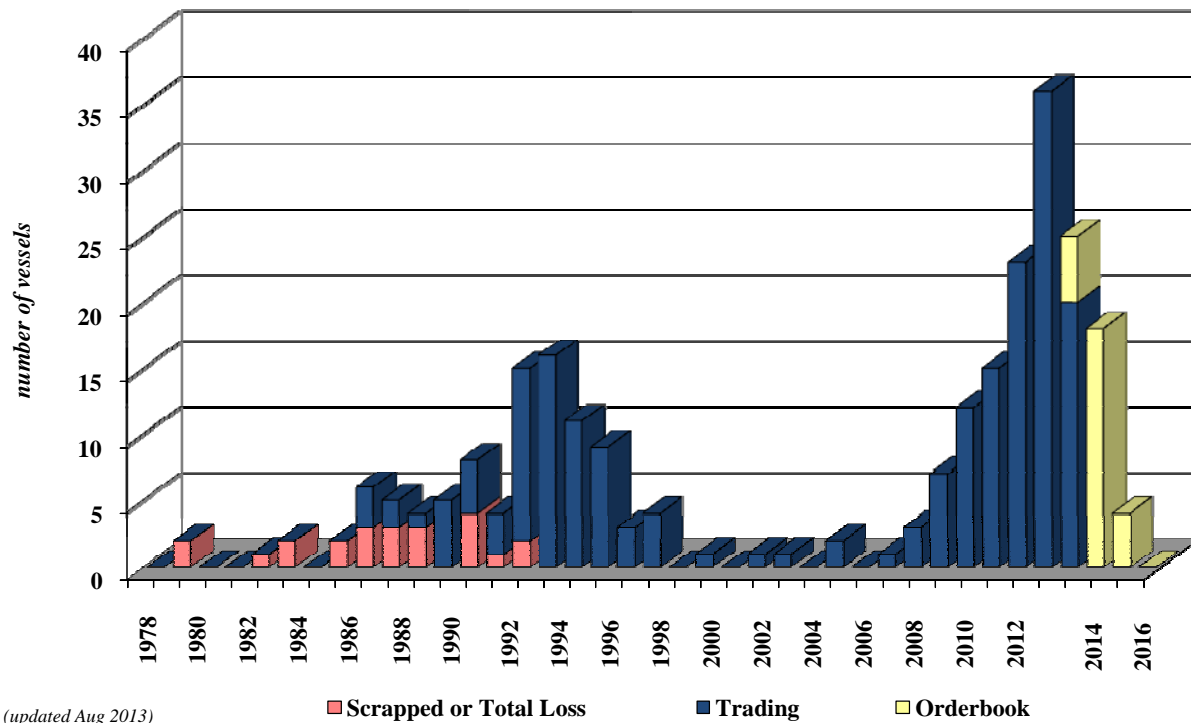
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# *Detailed Age Profiles*

*(For Individual Sectors)*



### VLOC Bulk (210,000+ dwt) Age Profile (in units)



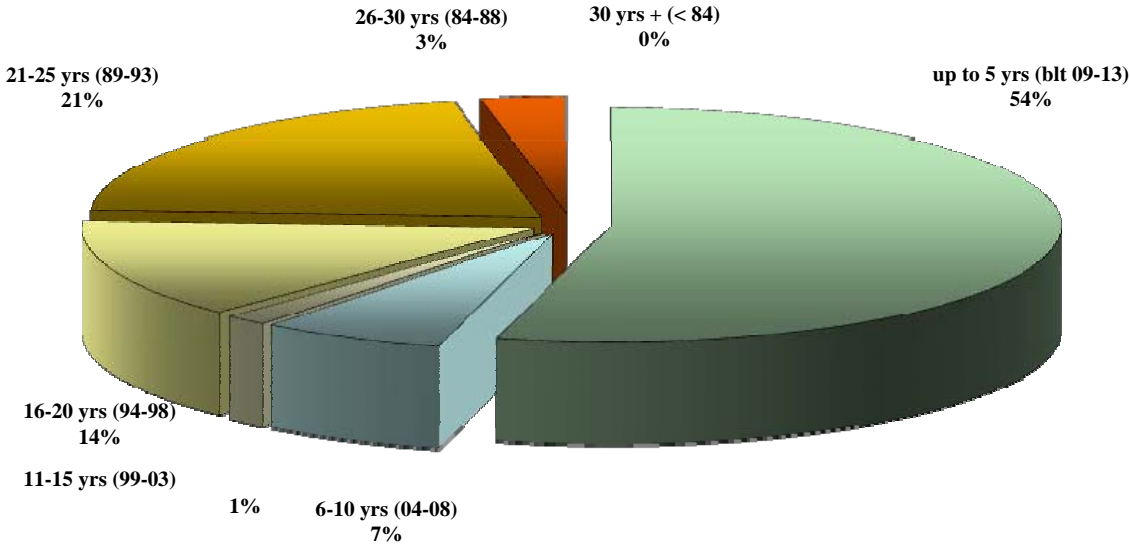
(updated Aug 2013)

■ Scrapped or Total Loss    ■ Trading    ■ Orderbook

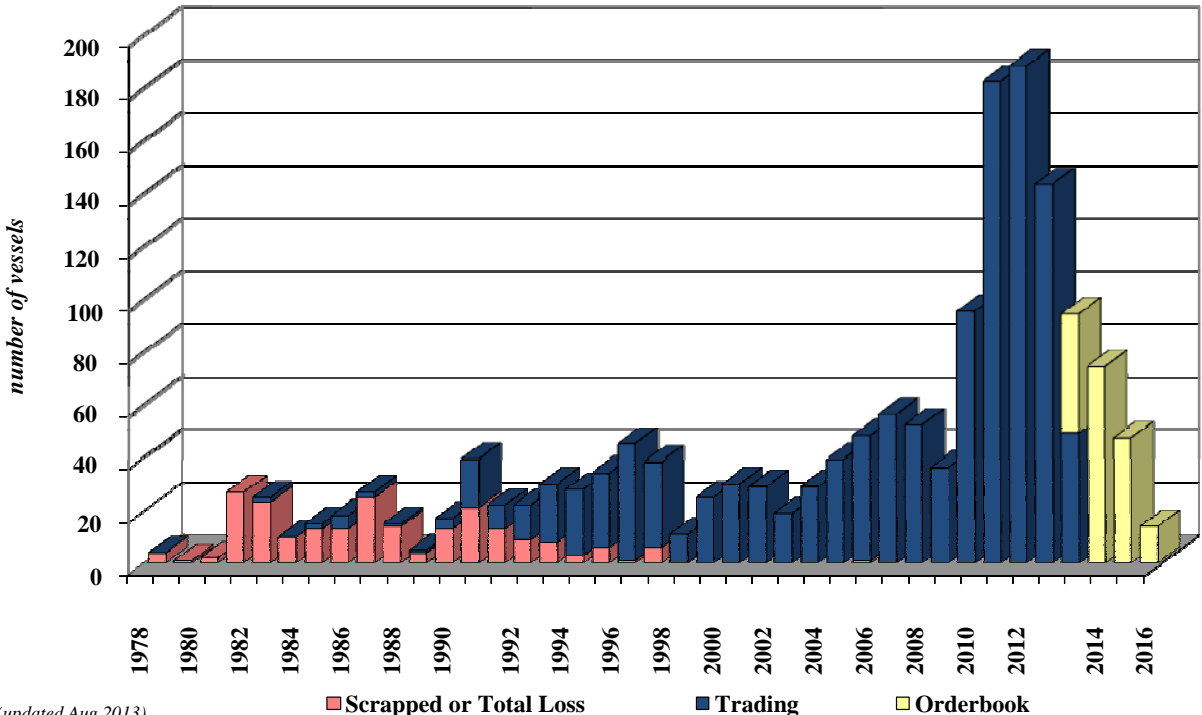


**VLOC Bulk (210,000+ dwt)  
Age Profile Pie (in units)**

**Orderbook/Trading  
13.8%**



**Capesize Bulk (120,000-209,999 dwt) Age Profile (in units)**

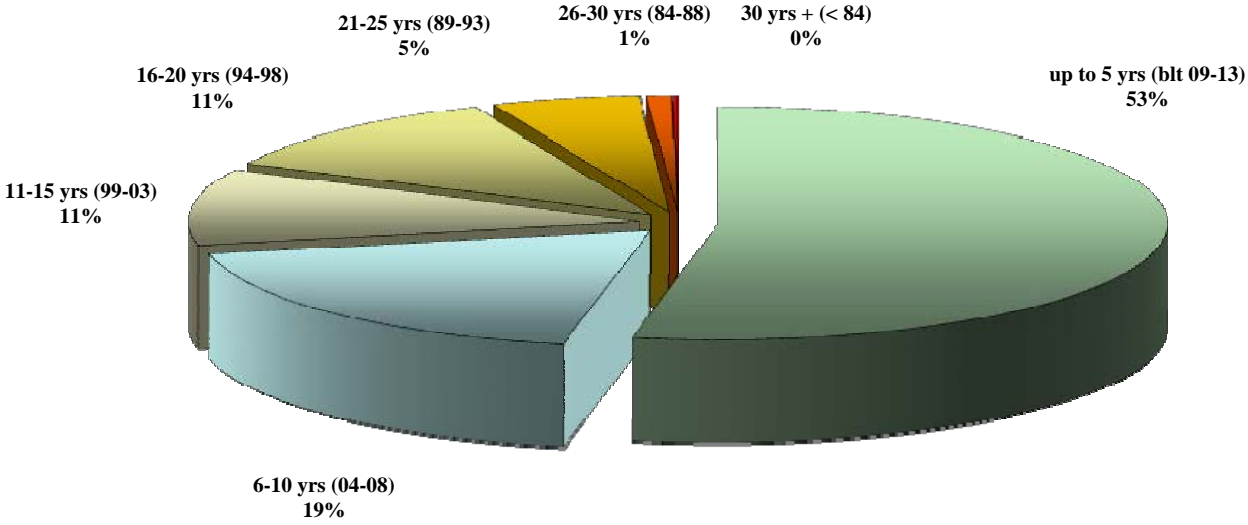


(updated Aug 2013)



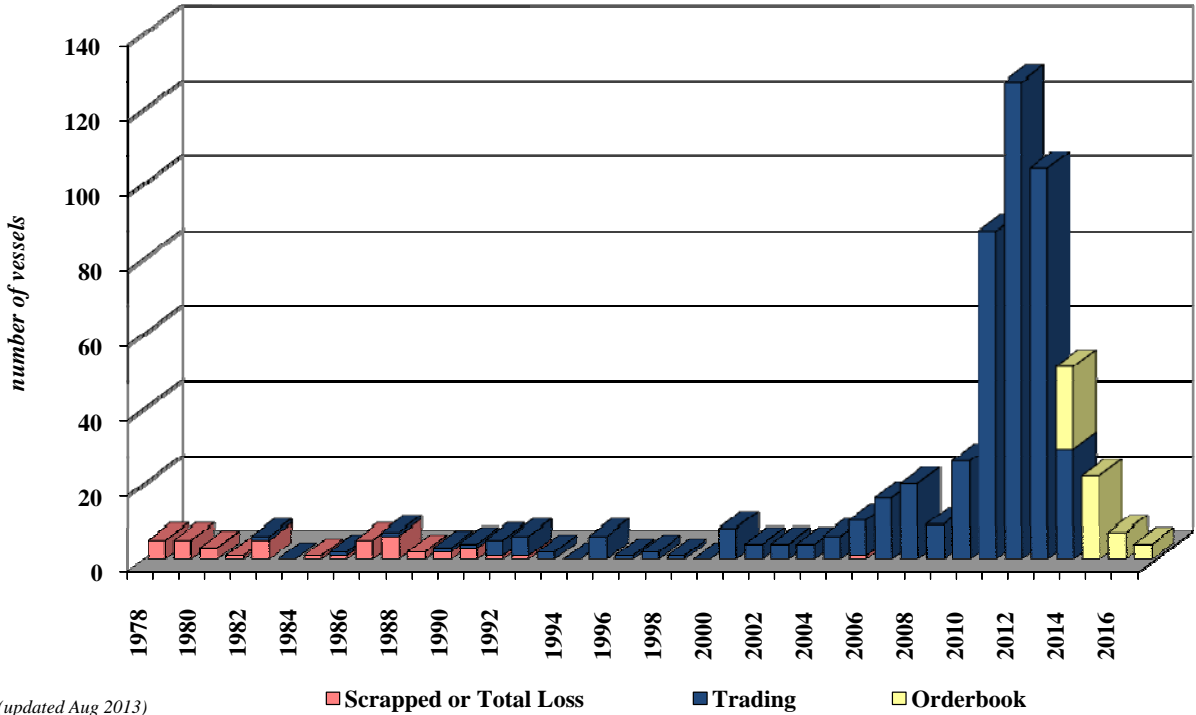
**Capesize Bulk (120,000-209,999 dwt)  
Age Profile Pie (in units)**

**Orderbook/Trading  
14.5%**





**Post-Panamax Bulk (85,000-119,999 dwt) Age Profile (in units)**



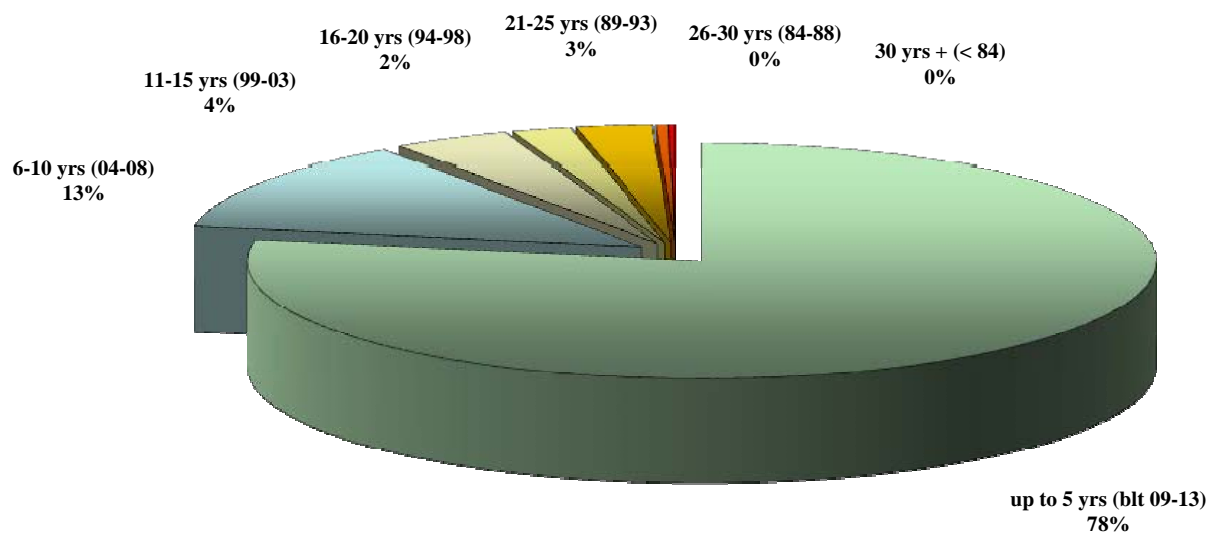
(updated Aug 2013)





**Post-Panamax Bulk (85,000-119,999 dwt)**  
**Age Profile Pie (in units)**

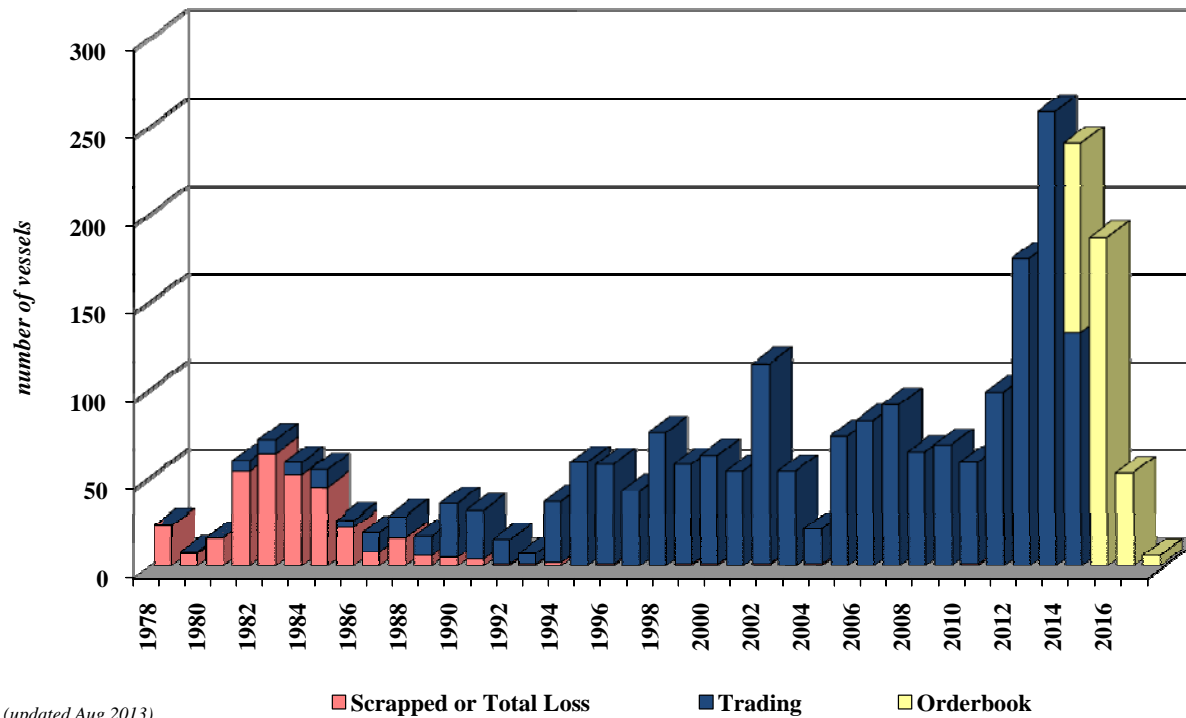
**Orderbook/Trading**  
**11.5%**





### Panamax Bulk (65,000-84,999 dwt\*) Age Profile (in units)

\* please note that before year 2000 the range was 60,000-84,999 dwt



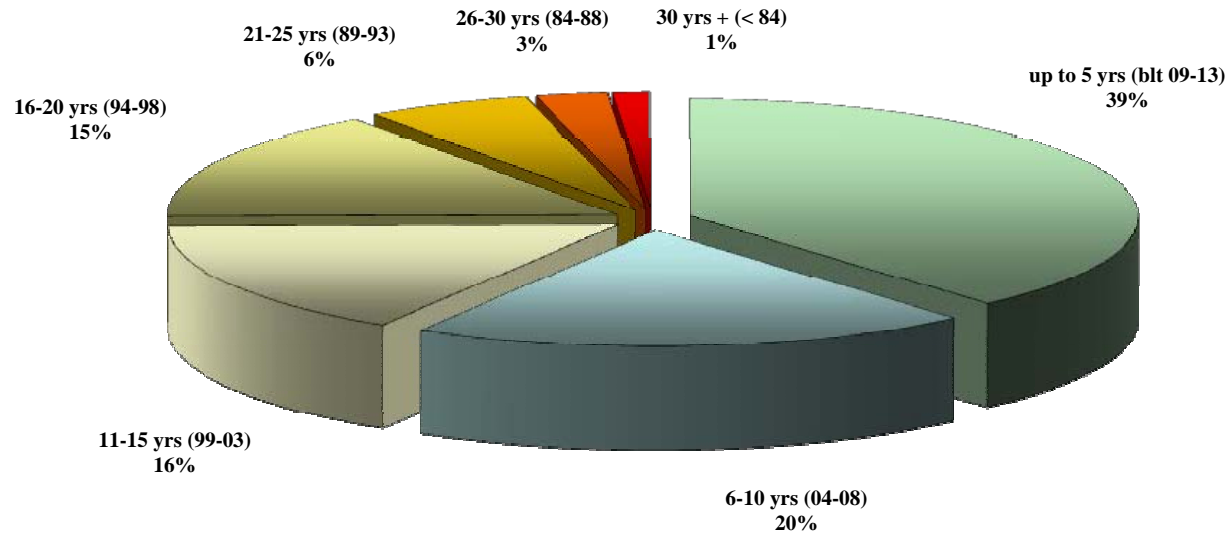
(updated Aug 2013)



**Panamax Bulk (65,000-84,999 dwt\*)**  
**Age Profile Pie (in units)**

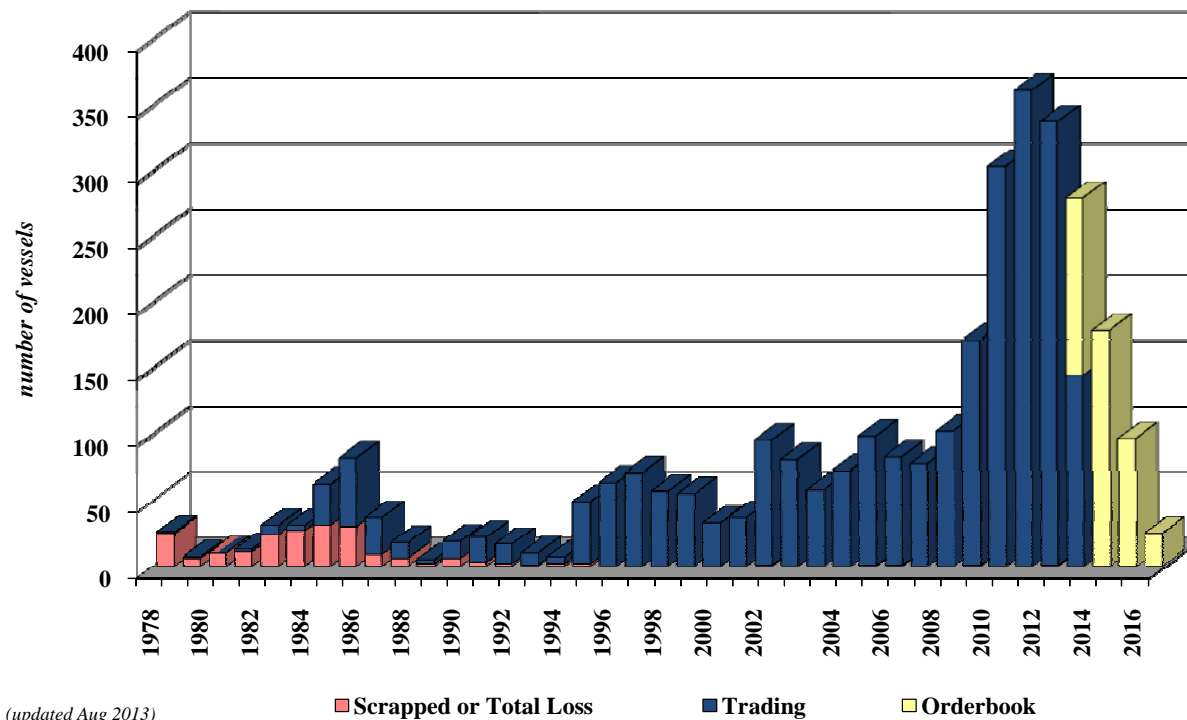
**Orderbook/Trading**  
**18.8%**

\*please note that before year 2000, the range was 60,000-84,999 dwt



### Handymax Bulk (40,000-64,999 dwt\*) Age Profile (in units)

\* please note that until year 2000 the range *excludes* units above 60,000 dwt

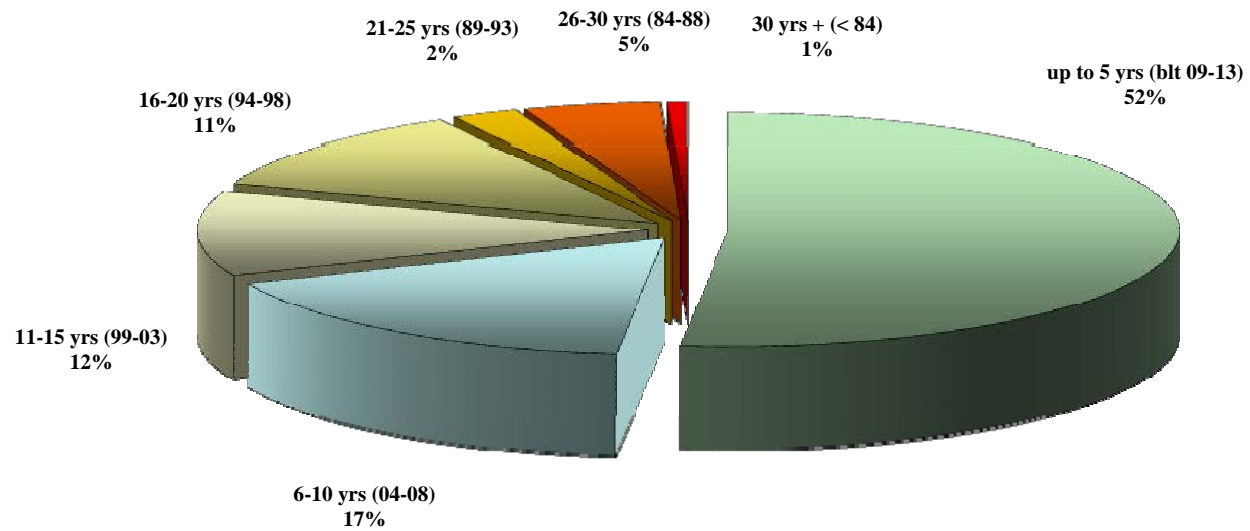




**Handymax Bulk (40,000-64,999 dwt\*)**  
**Age Profile Pie (in units)**

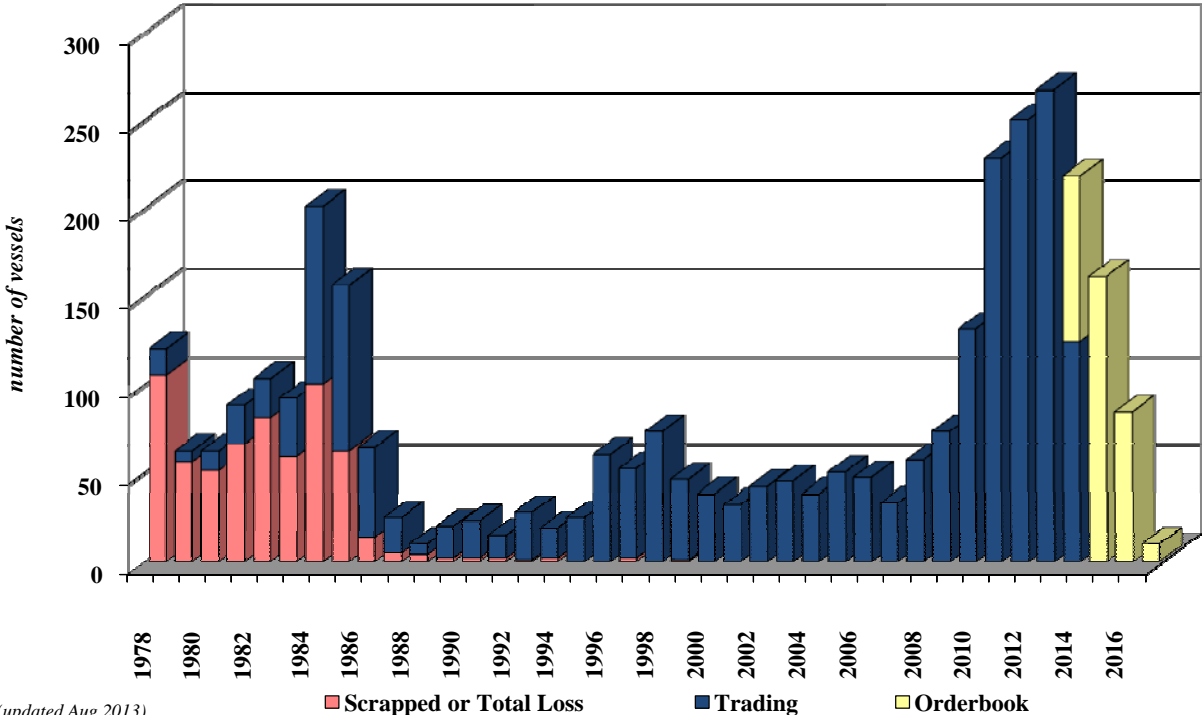
Orderbook/Trading  
17.1%

\*please note that until year 2000 the range *excludes* units above 60,000 dwt





**Handysize Bulk (20,000-39,999 dwt) Age Profile (in units)**



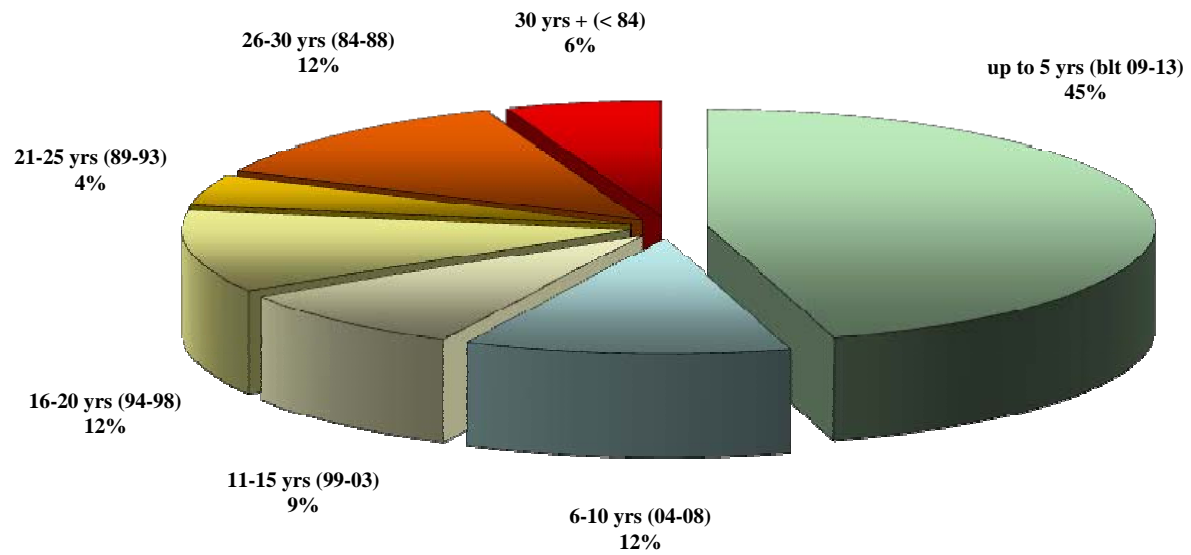
(updated Aug 2013)





**Handysize Bulk (20,000-39,999 dwt)  
Age Profile Pie (in units)**

**Orderbook/Trading  
15.9%**






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# *The Demand Side*

*(Steel, Iron Ore, and Coal)*



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These days, dry bulk seaborne trade is increasingly dominated by the steel industry and the power sector. Sixty percent of all cargo volumes are either iron ore or coal.

Growth in seaborne bulk trade has averaged about 5 percent y-o-y over the last decade, and is estimated to reach 7 percent in 2013. Trade in iron ore and coal is running even faster, and is expected to reach 9 percent y-o-y in 2013.

China remains at the forefront of the action. Steel production in the country has increased by over 9 percent year-on-year in the first 8 months of 2013. It imported 527 mln tonnes of iron ore in the first 8 months, up 8.1 percent y-o-y.

Iron ore imports to China actually experienced a very slow start to the year. In the first quarter of 2013 volumes totaled only 187 mln tonnes, down 0.4 percent on last year. This had much more to do with supply disruptions – weather and other problems in Australia and Brazil, virtually zero exports from India – than with actual demand.

Ore prices surged during the winter – to 154 dollars in February from 113 in October. This led to domestic Chinese mines restarting production (up 12 percent y-o-y in 1Q13), and China running down on its stocks at ports.

Things changed again in the following months. Prices declined in the second quarter – unsurprisingly domestic ore mining slowed down, growing only by 4 percent y-o-y in the quarter. Improved availability from Australia and Brazil led to rising imports – up 10.1 percent y-o-y in the second quarter.

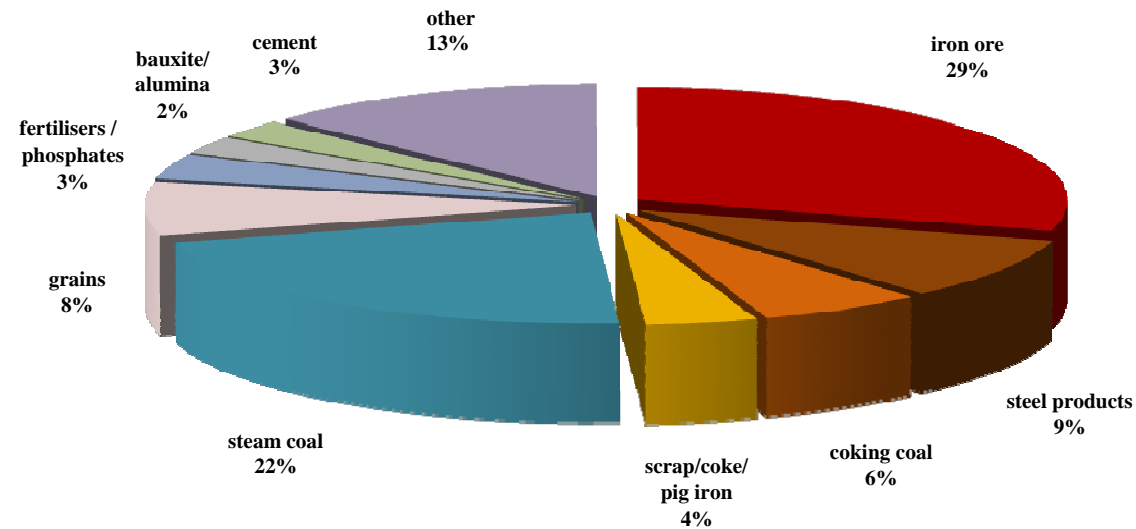
With volumes available from Brazil increasing sharply, and the economic sentiment in China improving in recent months, imports begun to surge in the third quarter. China imported 73 million tonnes of iron ore in July, an all time record and up 26.4 percent y-o-y.

A similarly positive situation is seen with coal. Electricity production in China increased by 6.3 percent in the first 7 months of 2013. With domestic coal output below 2012 levels, imports of coal have increased by 10.3 percent y-o-y.

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## All Seaborne Dry Bulk Trade by Commodity in 2012

(estimate, all bulkcarriers)



Dry bulk trade is driven by the steel industry, which between iron ore, coking coal, steel products and scrap, accounts for about half of total volumes. The second largest source of demand is steam coal required for power generation.

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## Iron Ore Trade



### Major Iron Ore Exporters in 2012:

Australia	494 mln tons
Brazil	327 mln tons
CIS	327 mln tons
South Africa	50 mln tons
Canada	47 mln tons
India	34 mln tons
	23 mln tons

### Major Iron Ore Importers in 2012:

China	Japan	745 mln tons
EU		131 mln tons
South Korea		128 mln tons
Taiwan		66 mln tons
		18 mln tons

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## Coal Trade



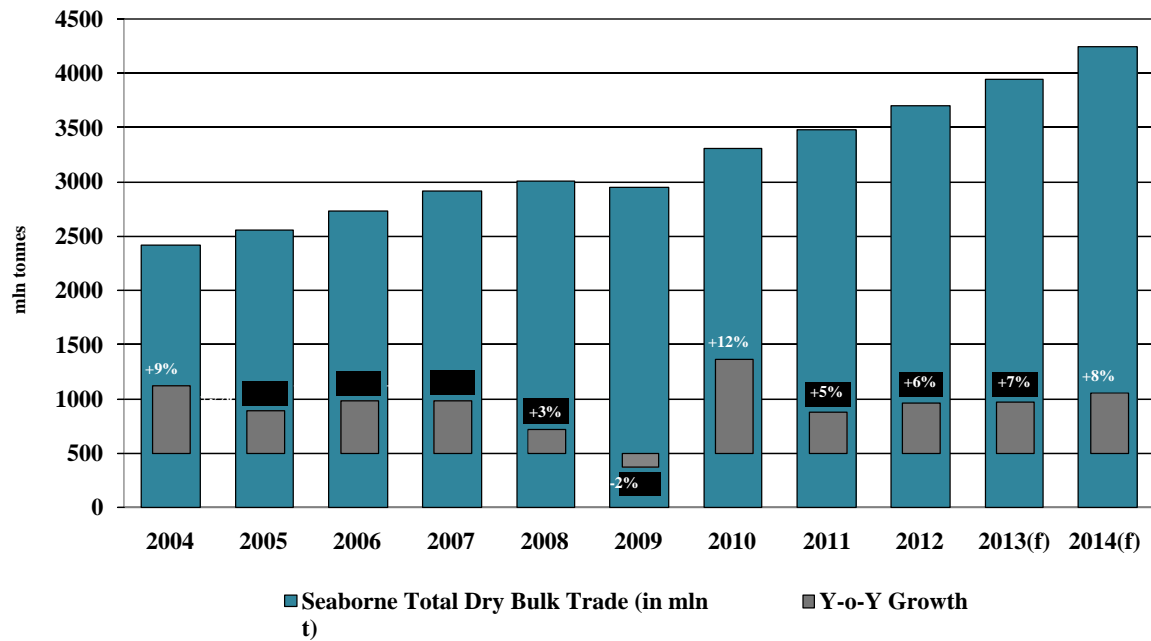
**Major Coal Exporters in 2012 (thermal + coking):**

Indonesia	315 + 0 mln tons
Australia	171 + 145 mln tons
Russia USA	110 + 16 mln tons
Colombia	50 + 63 mln tons
South Af rica	76 + 0 mln tons
	75 + 0 mln tons

**Major Coal Importers in 2012 (thermal + coking):**

China EU	210 + 52 mln tons
Japan	173 + 42 mln tons
South Korea	133 + 53 mln tons
India	95 + 33 mln tons
Taiwan	101+ 16 mln tons
	63 + 7 mln tons

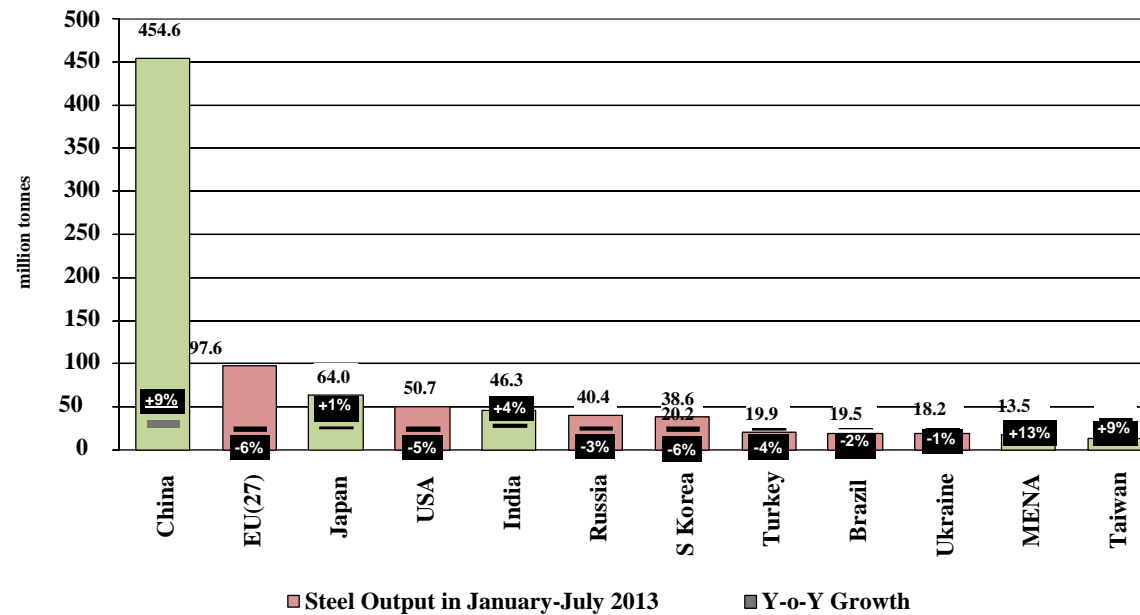
## World Seaborne **Total Dry Bulk Trade** (all dry bulk commodities, estimates, in mln tonnes)



Growth in global seaborne dry bulk trade averaged about 5 percent over the last decade, led in particular by iron ore and coal trade which expanded by a combined 8 percent annually over the last 10 years.

## World - Crude Steel Output - Jan-Jul 2013

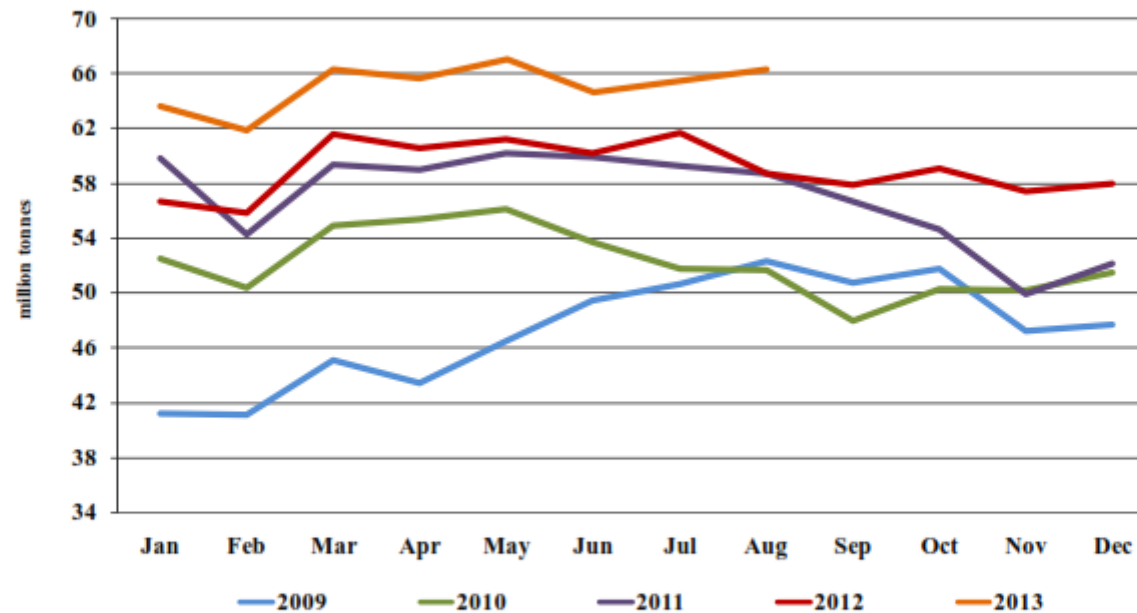
(source: worldsteel ; in million tonnes ; comparison year-on-year)



China remains the only beacon in the global steel industry, with output growing by almost 9 percent in the first 7 months of the year. In the same time, output declined in the UE, in the US, in Russia and in South Korea.

## China - Monthly Steel Output - Seasonality

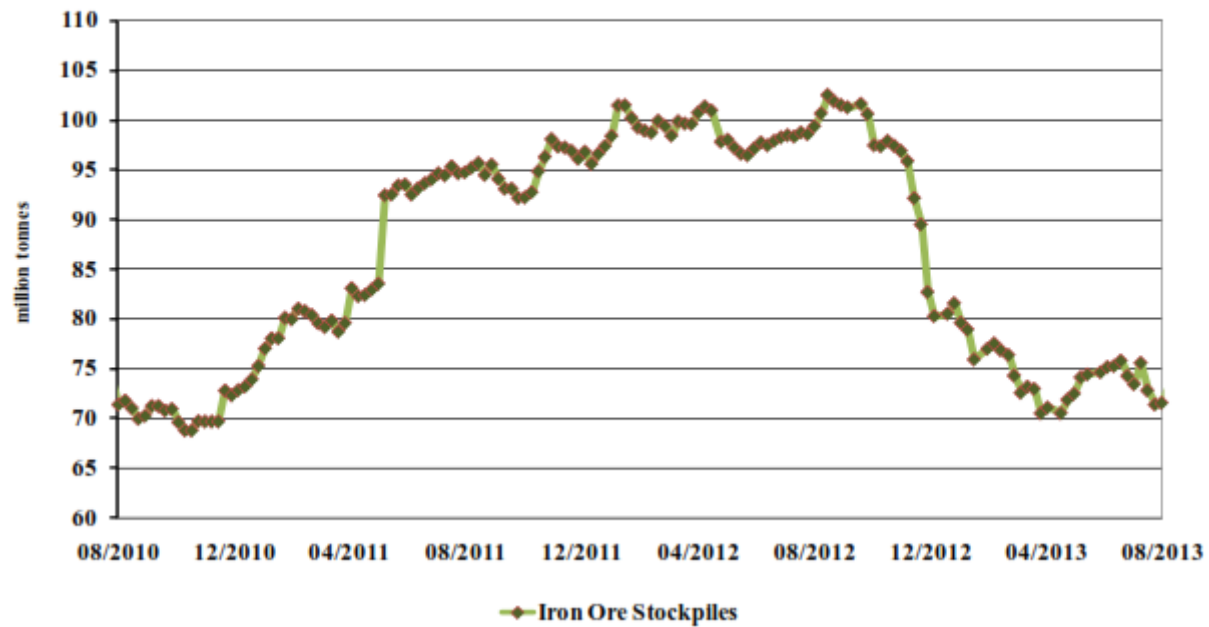
(source: worldsteel, cisa ; in million tonnes)



Crude steel production in China strongly rebounded in the first quarter of 2013, up 10.16 percent on the same period last year. Production still remains strong – in August China produced 66.3 mln tonnes, up 12.9 percent year-on-year.

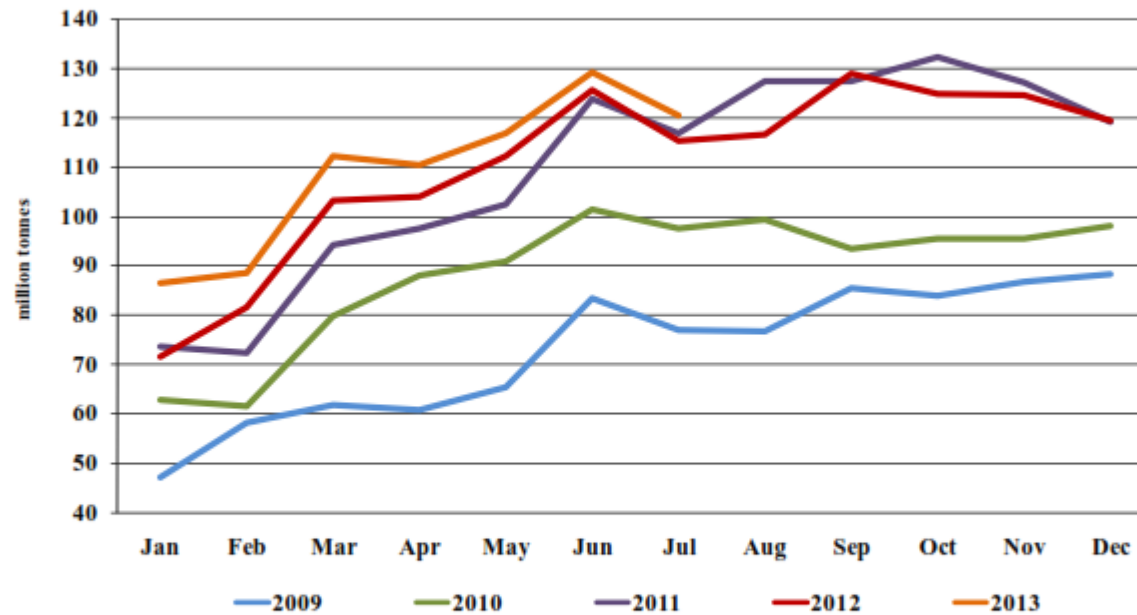
## China - Iron Ore Stockpiles at 25 Major Ports

(source: xinhua)



Iron ore imports declined in the first quarter due to supply disruptions in Brazil, Australia and India, rising ore prices. This led China to run down ore stocks at ports and increase domestic output. Things are reversing in the third quarter.

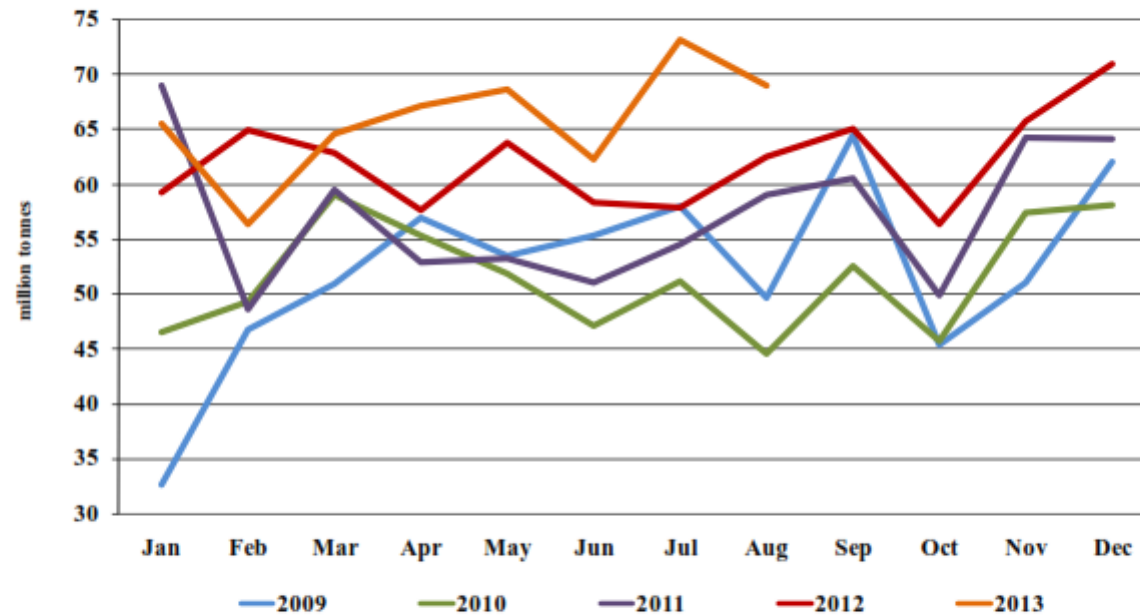
### China - Monthly Iron Ore Output - Seasonality (nominal gross production ; in million tonnes)



Domestic iron ore output slowed down considerably last year. However, with the bounce in ore prices earlier this year, production increased by 12 percent year-on-year in the first quarter. It has slowed down to 4.2 percent in 2Q2013.

## China - Monthly Iron Ore Imports - Seasonality

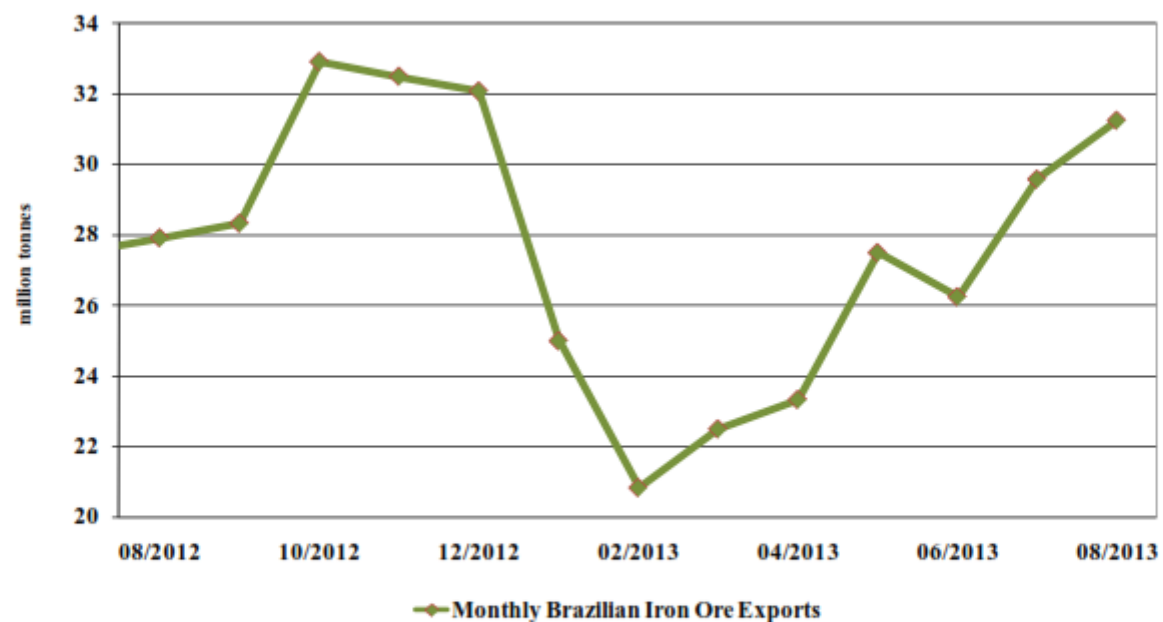
(source: customs data ; in million tonnes)



Following a slowdown in 1Q13, imports of iron ore continued to surge this year, with the country importing 527 million tonnes in the first 8 months of 2013, an increase of 8.1 percent year-on-year, with a record 73 million tonnes in July.

## Brazil - Monthly Iron Ore Exports - last 12 months

(source: brazilian trade ministry ; in million tonnes)



Brazilian iron ore exports began the year very slowly – down 4.5 percent y-o-y in the 1Q2013. Since then, availability clearly improved. In August, Brazil exported over 31 mln tonnes, an increase of 12 percent on the same month last year.



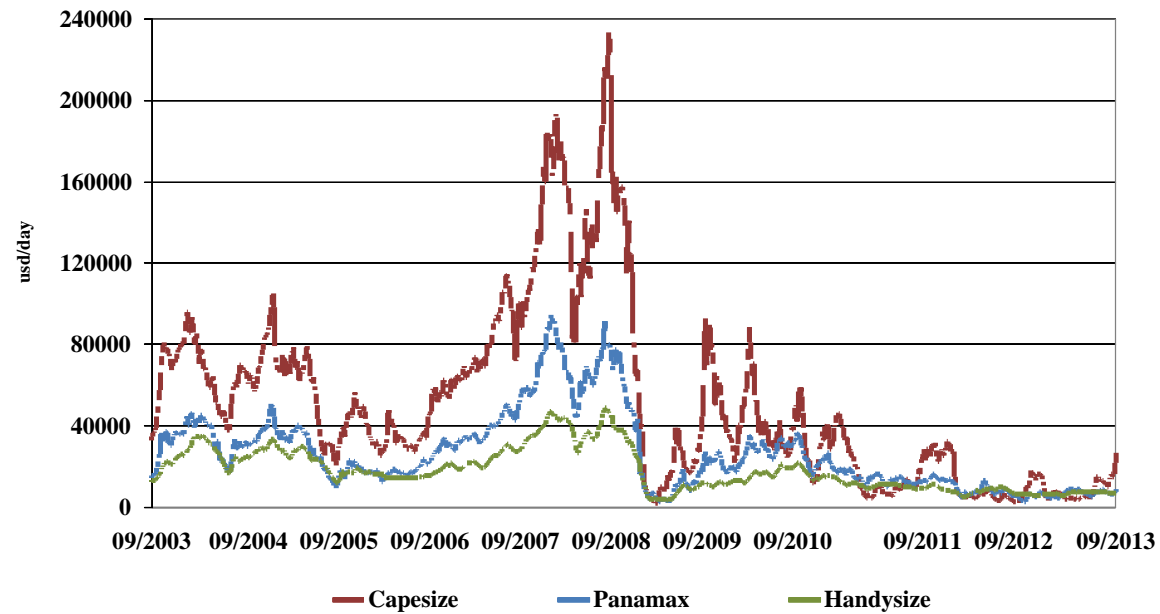
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# *Charter and S&P Markets*

*(Rates, Secondhand Prices, and Sales Volume)*

### Baltic Exchange Timecharter Averages - last 10 years

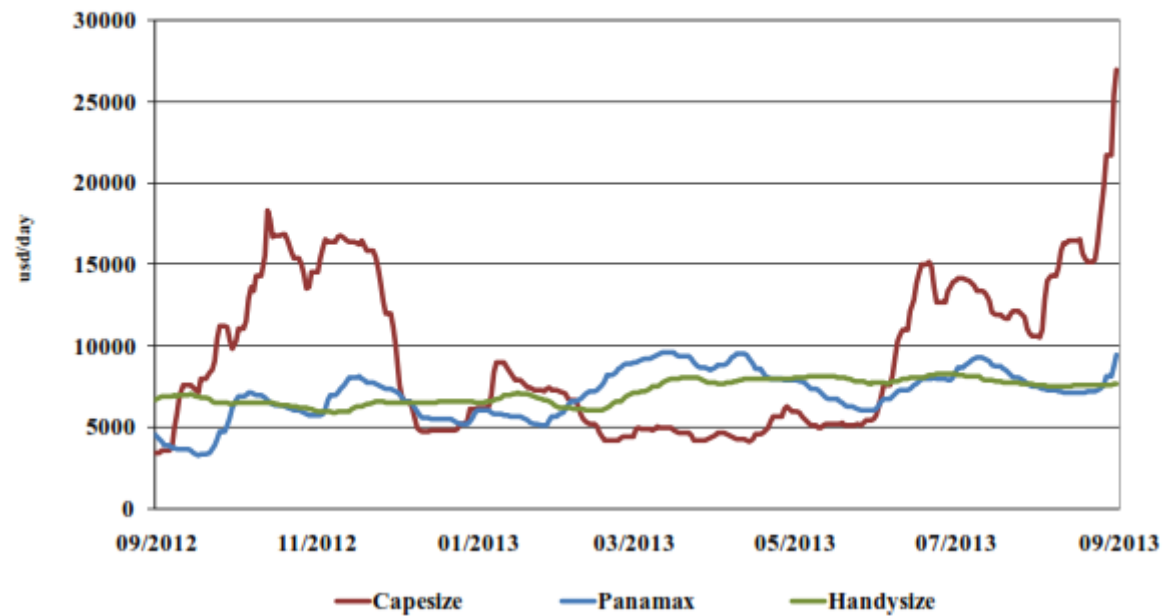
(source: the baltic exchange, daily data, usd/day)



The freight market has sunk to record-low levels last year, with both the Baltic's Capesize Index and Panamax Index averaging about 7700 usd/day in 2012. For much of the year Capesizes were actually cheaper than Panamaxes.

### Baltic Exchange Timecharter Averages - last 12 months

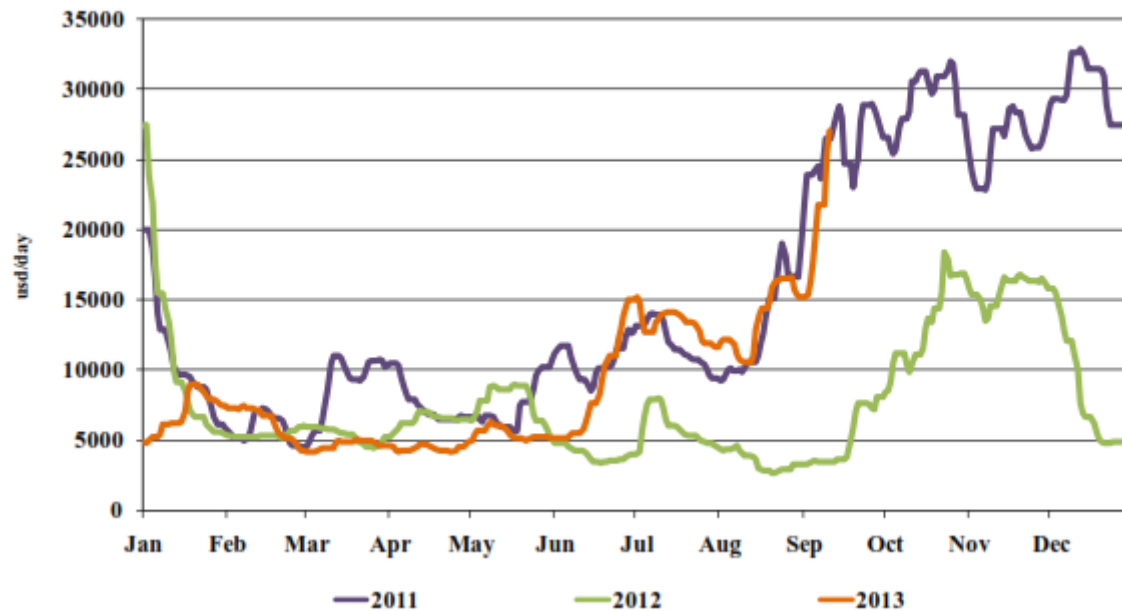
(source: the baltic exchange, dally data, usd/day)



Capesize rates have strongly rebounded over the last few weeks, driven primarily by record imports of iron ore by China, and a significant increase in Brazilian ore cargoes on the market which is increasing tonne-miles.

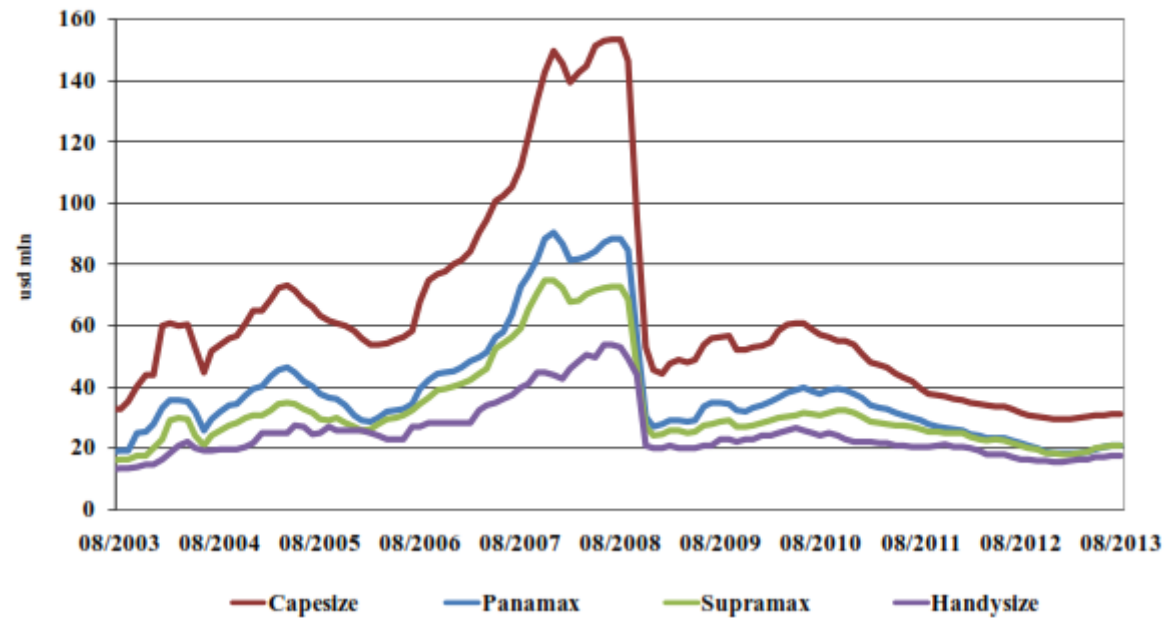
### Baltic Exchange Capesize TC Average - Seasonality

(source: the baltic exchange , dally data, usd/day)



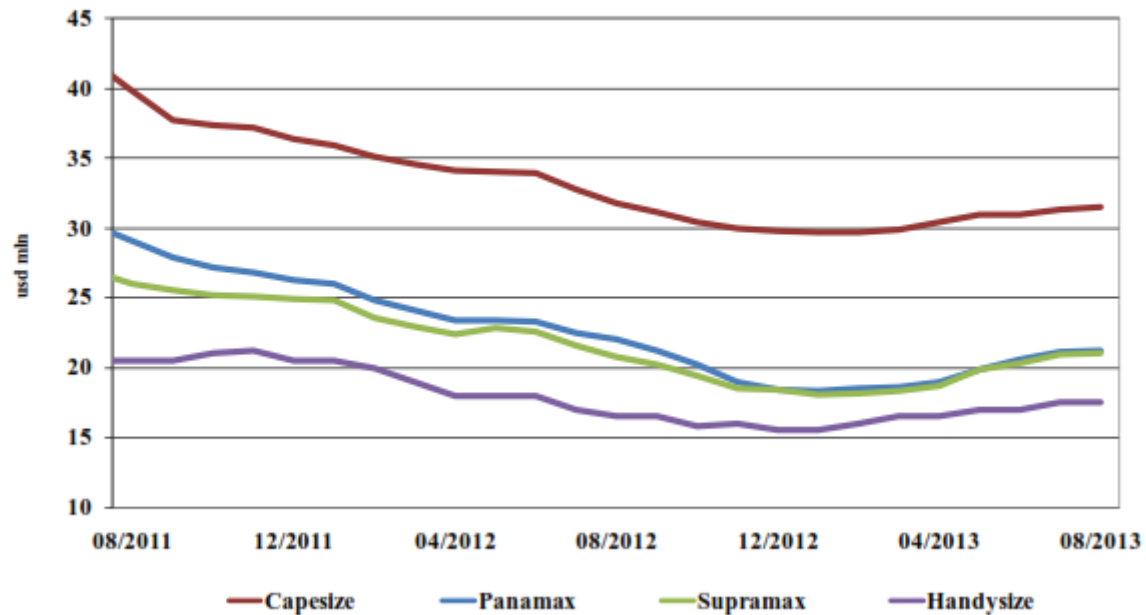
We could also say that the current rally in Capesize rates is not exactly surprising, given that the third quarter has been cyclically a strong period over the last few years. Rates this year are effectively shadowing the trend seen in 2011.

### Dry Bulk - 5 Year Old Secondhand Prices - last 10 years (basis Korean built, indicative average, in USD mln)



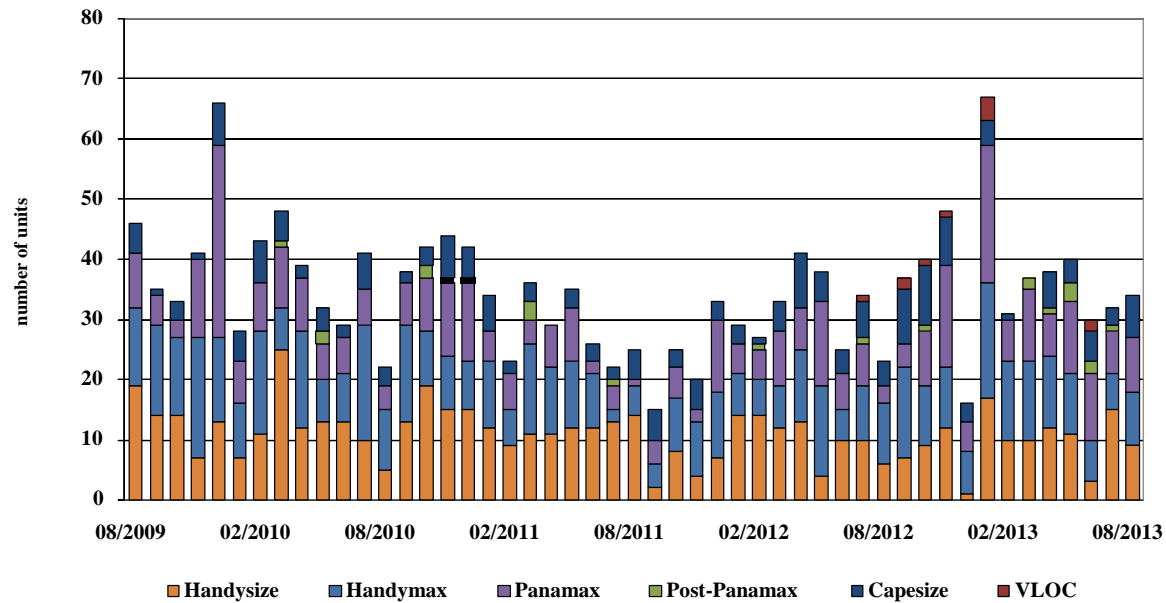
Second hand values have largely followed the fortunes of the charter market, recovering slightly in 2009/2010 and tumbling since the beginning of 2011. However, they seem to have bottomed out since the beginning of this year.

### Dry Bulk - 5 Year Old Secondhand Prices - last 24 months (basis Korean built , indicative average, in USD mln)



There is now a clearly positive trend in second hand prices since January, with five-year old Panamaxs gaining almost 3 million dollars. It is interesting to note that Supramax values are now almost undistinguishable from Panamaxs.

## Dry Bulk Reported Secondhand Sales in **No. of Units** (only units over 20,000 dwt)




After steadily decreasing throughout 2009 to 2011, secondhand activity seems to have slightly turned around in 2012. Reported sales have stabilized this year, as rising values are convincing owners to hold on their assets.



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# *Final Words*

*(Summary and  
Conclusions)*



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Until recently, 2013 appeared to be another challenging year for dry bulk shipowners, with rock-bottom charter rates and record-low asset values. However, some green shoots of optimism have begun to appear.

Capesize rates have rallied significantly over the last few weeks, with the Baltic Exchange index exceeding 25000 dollars per day at the time of writing. The gains have so far failed to trickle down to Panamax and Handies.

It is way too early to call this a beginning of a trend. What is happening with Capesizes is mostly a seasonal upturn, similar to what we saw in previous years (see slide 57). Sure, iron ore imports to China have surged over July and August (up 18 percent y-o-y), but this is mostly a restocking process following poor volumes in the first part of the year. It certainly helps that much of the new volumes are coming from Brazil, which is good for tonne-miles.

Don't get us wrong. We are certainly not saying that demand is or will be poor. China, the current backbone of dry bulk trade, has seen its steel production and imports of iron ore increase by 9.3 and 8.1 percent respectively y-o-y in the first 8 months of 2013. Coal imports were up by 10.3 percent y-o-y in the first 7 months of the year.

However this is not new. Demand was strong also last year, when China's iron ore and coal imports increased by 8.9 and 29 percent respectively. World bulk trade expanded by 6 percent in 2012. Demand was never a problem.

The reason to be cheerful is another one. The main challenge for bulk shipping is oversupply, with the fleet expanding by 11 percent in 2012 with 97.3 mln dwt of new ships delivered. Fortunately the peak is behind us. In the first 8 months of 2013, we recorded the delivery of 498 units over 20,000 dwt, for a total of 41.6 million dwt. This was 44 percent less than in the same period last year. The orderbook for next year is even lower.

We now expect the dry bulk fleet to expand only 5 percent this year, and the Capesize fleet only 4 percent. This will be the first year since 2007 in which trade expands faster than the fleet. Next year should be a better year.