

Outlook for Market Balance of the Dry Cargo Market in 2008/2009

To consider prospects for the dry bulk market, it is crucial to examine how many VLCCs and Suezmaxes have been contracted to convert into bulk carriers. This of course is the flip side of the coin we examined in our last market comment looking at fleet projections for VLCCs and Suezmaxes. Naturally, for a sense of the balance we need to consider the demand drivers for the bulk trades in 2008/2009. At Worldyards, our approach is to start with a micro-analysis of each and every shipyard as well as each and every order to arrive at a supply-side figure. The same bottom-up, sum-of-all parts approach is also the most secure for considering the impact of conversions.

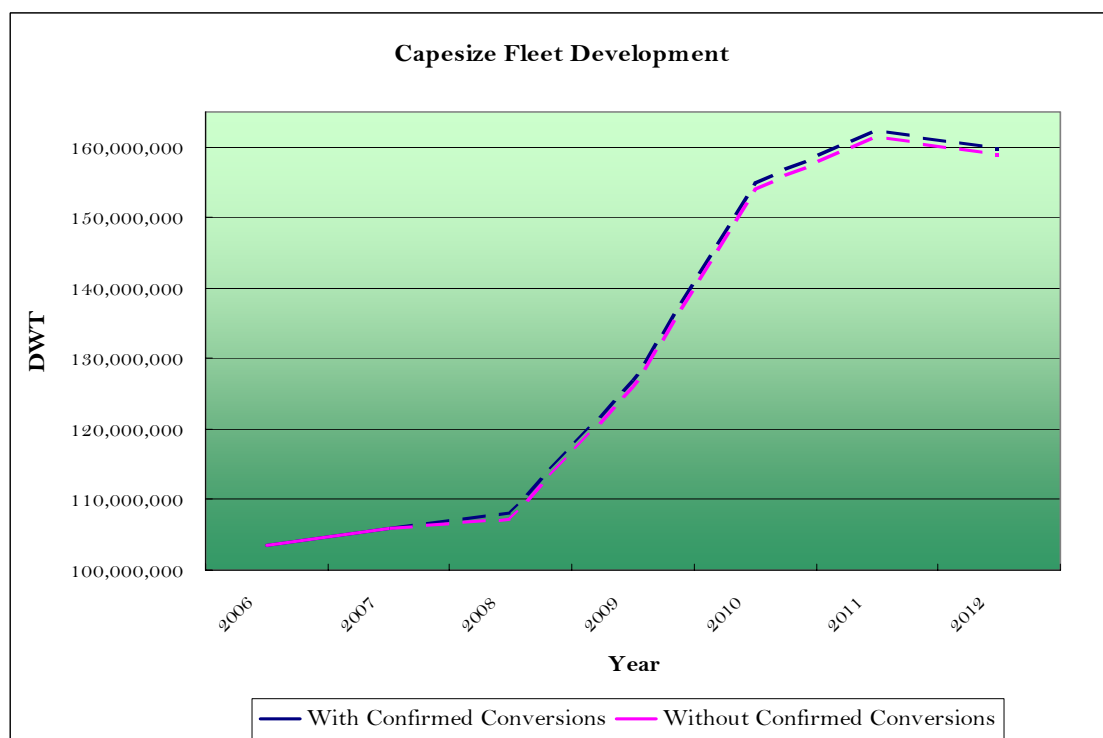
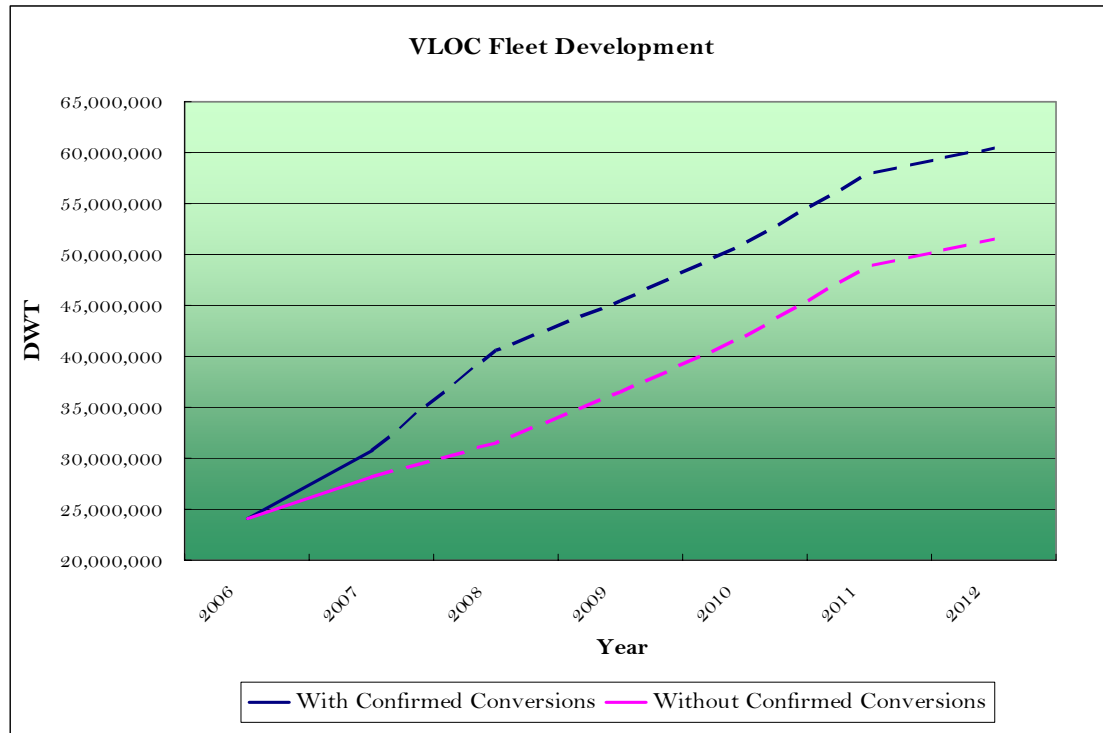
To repeat from our previous market comment (One Eyed Analysis – 7 January 2008):

QUOTE

The conversion pace for large ships for 2007 and booked for 2008 is largely already known (Worldyards has expended considerable effort in contact with repair yards and owners to confirm what the status of various planned projects are and this requires continual monitoring because of the short lead time and the possibility for owners to change their mind.) Yards are booked till the third quarter of 2008 for VLCC and Suezmax conversions, so we only have to make assumptions from 2009 and beyond in order to work out fleet projections.

END QUOTE

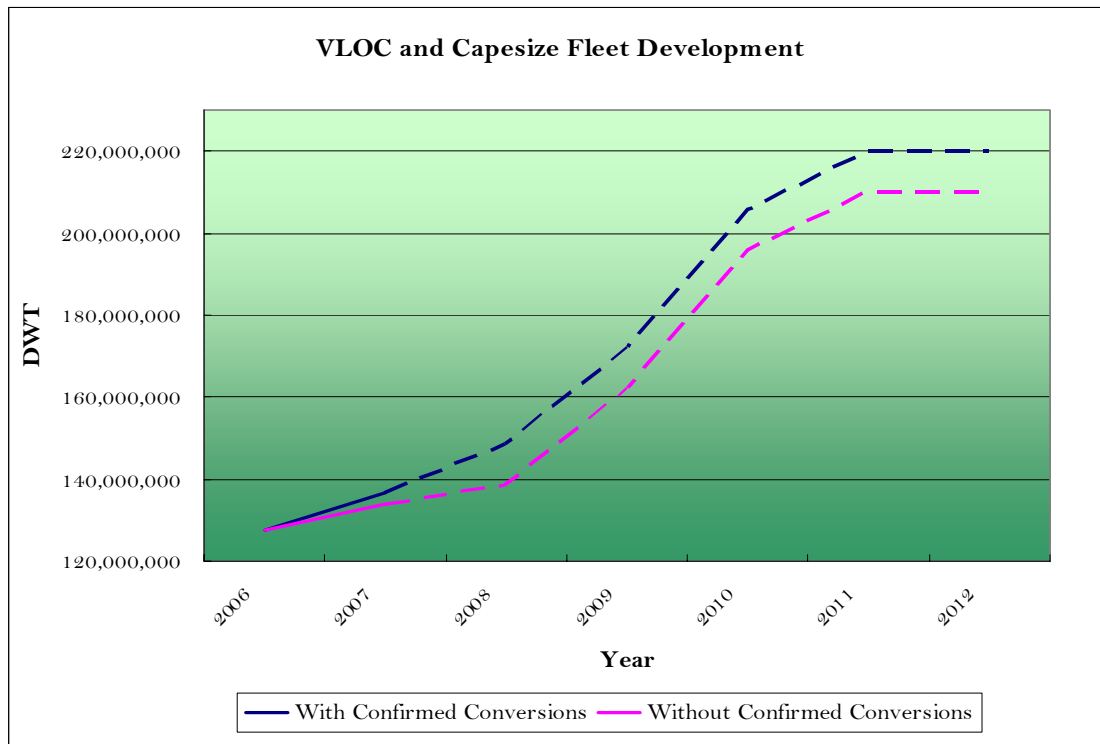
After taking into account the "confirmed" conversions that Worldyards can track, the growth of VLOCs and capesizes is as per the following graph (figures are for end of the year, please refer to the tables at the end of the article for numbers underlying these graphs). We can see that for the past year conversion impacted significantly on the rate of growth for VLOCs, pushing fleet expansion from about 18.5% without conversions, up to 28%. During 2008, the number of VLOCs is expected to reach 170, (28.79% growth, compared to 136 ships and 11.48% growth without conversions). As there are relatively fewer suezmaxes being converted, the effect of conversion to capesize rate is relatively insignificant.



Notes/Assumptions:

1. Fleet = current fleet plus scheduled deliveries less scrap plus conversions
2. Scrap age assumption is at 27 years which is the average scrap age taken from the WY historical data.

VLOCs are not bulk carriers from a construction point of view (which is why they do not need to comply with Common Structural Rules), but for all practical and commercial purposes they are bulk carriers designed to carry only one kind of bulk cargo - which is ore. It is therefore meaningful to see the combined tonnage growth of VLOCs and capesizes in the graph below.



*note that fleet growth in 2011 flattens out as conversions and expected future orders are not included in the calculation

We can see that conversion has increased growth of the combined capesize and VLOC fleet in 2007 from about 5% to 7%, from about 3.5% to 8.7% during 2008 then followed by very high growth rate of about 16% during 2009 (last time we had a double digit tonnage growth was in 1996). VLOCs and capesizes make up about 37% of the total bulk fleet as of end 2008 - we know that a substantial amount of tankers, aframaxs and all the way down to handysize (even to very small CPP tankers) are booked to be converted into bulkers. Such conversions are happening at smaller repair yards and by definition are more difficult to quantify, but a good guesstimate is that overall rate of growth for the total dry cargo fleet is not less than that for the big ships.

Apart from tanker conversion, there are other sources of growth. About 50 cellular container ships, conbulklers and MPPs have left container/liner trades totaling about 65000 teu. Cellular container ships will need to be converted to trade in bulk. This adds up to about 1 million dwt, according to AXSliner. Related to this, against the background of sky high drybulk rates, we can expect accelerated pace of cargo containerisation. We heard from several liner companies that grain is being shipped

in containers from US to Asia as lines typically have no cargo on the backhaul of transpacific trade. This would pull cargo from the hands of the drybulk players.

The other element is the size of the Japanese orderbook - it still requires considerable effort to establish exactly how many ships will be delivered from Japanese yards during 2008/2009 other than what's known (we are working hard on this). Beyond 2009, we will need to closely follow how the tanker orders will be contractually revised to bulk carriers. Our fleet figures beyond 2009 shall not be considered "accurate" as it is difficult to make assumptions for how conversion (both of existing ships and orders) will play out and future orderbook beyond 2011 is largely unknown, so we are only focused until 2009.

In the following section, let us do a quick check on a few factors on demand side (we are not doing a "rigorous" statistical model here so we are just picking a few most important ones).

It is widely recognized that one of the factors driving up demand is port congestion, which is expected to ease. According to the website of Newcastle Port corp., the queue of ships waiting outside Newcastle port to load coal has been gradually reducing: 34 vessels as of today (15th January 2008) down from 47 ships 31st December 2007, down from 53 ships 18th December, down from 79 ships 2nd July and so on and so forth.

There are other drivers such as India etc. but beyond any doubt "the" key driver for the dry market is rapid urbanization in China. Thirty years into the reform process starting from 1976, we are still in the middle of a massive urbanization process, as another 400 million Chinese are expected to move to newly built cities in the next 15 years. So there are good reasons to be bullish. But for 2008/2009, we think the rate of growth will slow. Most people believe that China will slow like Japan, Korea and Australia, which also slowed down sharply after each Olympics. But we think that this is a pure coincidence. China must slow down its breakneck pace of urbanization and investment for entirely different reasons:

1) The Chinese government is very serious about fighting inflation. This is unlike the US Federal Reserve which now has to save Wall Street from its subprime morass (some would argue that this is all the FED cares about), inflation in China will hurt the 800 million peasant population and the urban poor, who had nothing to do with the recent wealth creation boom associated with the rise and rise of the Chinese stock and real estate markets during the past two years. These people are very vulnerable. Most Chinese share a deep collective memory of run-away inflation preceding to the founding of the People's Republic of China. Therefore, fighting inflation is a top-priority, social stability issue for the next 2 years. That is why the Government raised the lending rate 6 times and commercial bank reserve ratio 10 times in 2007 (the result is staggering high interest rate of 7.5% and 14.5% reserve against the background of major currency appreciation). There will be further tightening in 2008.

2) As part of a big effort to ensure that air quality in Beijing is "acceptable" come August for the Olympic games (at the moment it is totally hopeless), Shougang (Capital Steel) shut down half of its facilities on the 5th of January. Even though it will

open a mill somewhere else far away from Beijing, Shougang has announced that it will produce 4 million tons less steel in 2008 than 2007. The above is well known, but in our view this is far more than an isolated event just for Shougang and just for the Olympics. Plans for quite a few high-profile chemical plants and hydroelectric projects have been shut down due to protests by the general public because of environmental concerns. With 16 of the world's most polluted cities in China and 2/3 of the waste water drained into the water system untreated, most Chinese leaders, businessmen and the general public realise that they can't grow at the current pace or mode of development. Rapid depletion of farm land does, by the way, contribute to inflation of food prices.

To sum up, supply will be less tight due to less port congestion, to some extent cargo containerization and most importantly conversion. As in the tanker market, the uncertainty of conversion holds the key to market balance. And we think that the rate of growth on the demand side will slow, even though there will still be considerable absolute growth. On balance, if rate of growth on tonnage supply is faster than rate of demand growth, easing of rates is inevitable. Worldyards is tracking conversions very rigorously on a daily basis.

One key debate is the argument that the dry market will hold up because some of the start-up Chinese yards can't deliver. As we have mentioned elsewhere, the private start-ups will start to deliver in significant numbers only after 2010, by which time market dynamics may well have changed. We always believe, to be fair to the shipbuilders, delays can be caused as much by the buyers as well as by the builders.

In conclusion, the dry bulk balance must consider contracted shipbuilding supply, conversions and the undercurrents on the demand side. An analyst's job has not gotten easier and the stakes appear to be higher than ever before!

Appendix

Table 1.

Capesize Historical and Projected Fleet Development (in dwt)				
Year	With Confirmed Conversion		Without Confirmed Conversion	
	DWT	Annual Growth Rate	DWT	Annual Growth Rate
1992	35,415,000	-	35,415,000	-
1993	39,370,000	11.17%	39,370,000	11.17%
1994	43,464,000	10.40%	43,464,000	10.40%
1995	48,742,000	12.14%	48,742,000	12.14%
1996	56,025,000	14.94%	56,025,000	14.94%
1997	62,169,000	10.97%	62,169,000	10.97%
1998	63,956,000	2.87%	63,956,000	2.87%
1999	66,835,000	4.50%	66,835,000	4.50%
2000	71,653,000	7.21%	71,653,000	7.21%
2001	75,433,000	5.28%	75,433,000	5.28%
2002	77,890,000	3.26%	77,890,000	3.26%
2003	81,915,000	5.17%	81,915,000	5.17%
2004	88,207,000	7.68%	88,207,000	7.68%
2005	95,118,000	7.83%	95,118,000	7.83%
2006	103,585,000	8.90%	103,585,000	8.90%
2007	105,922,329	2.26%	105,922,329	2.26%
2008	108,017,047	1.98%	107,149,929	1.16%
2009	126,818,747	17.41%	125,951,629	17.55%
2010	154,900,526	22.14%	154,033,408	22.30%
2011	162,359,521	4.82%	161,492,403	4.84%
2012	159,729,181	-1.62%	158,862,063	-1.63%

Notes/Assumptions:

- Figures in blue are Worldyards Projections using this formula;
Fleet = current fleet plus scheduled deliveries less scrap plus conversions
- Scrap age assumption is at 27 years which is the average scrap age taken from the WY historical data.

Table 2.

Capesize Historical and Projected Fleet Development (in Number)				
Year	With Confirmed Conversion		Without Confirmed Conversion	
	DWT	Annual Growth Rate	DWT	Annual Growth Rate
1992	232	-	232	-
1993	258	11.21%	258	11.21%
1994	285	10.47%	285	10.47%
1995	319	11.93%	319	11.93%
1996	364	14.11%	364	14.11%
1997	401	10.16%	401	10.16%
1998	412	2.74%	412	2.74%
1999	427	3.64%	427	3.64%
2000	455	6.56%	455	6.56%
2001	476	4.62%	476	4.62%
2002	489	2.73%	489	2.73%
2003	511	4.50%	511	4.50%
2004	547	7.05%	547	7.05%
2005	586	7.13%	586	7.13%
2006	634	8.19%	634	8.19%
2007	642	1.26%	642	1.26%
2008	651	1.40%	645	0.47%
2009	756	16.13%	750	16.28%
2010	913	20.77%	907	20.93%
2011	954	4.49%	948	4.52%
2012	938	-1.68%	932	-1.69%

* Notes/Assumptions are identical with Table 1.

Table 3.

VLOC Historical and Projected Fleet Development (in dwt)				
Year	With Confirmed Conversion		Without Confirmed Conversion	
	DWT	Annual Growth Rate	DWT	Annual Growth Rate
1992	13,099,000	-	13,099,000	-
1993	15,136,000	15.55%	15,136,000	15.55%
1994	15,592,000	3.01%	15,592,000	3.01%
1995	16,178,000	3.76%	16,178,000	3.76%
1996	16,600,000	2.61%	16,600,000	2.61%
1997	17,675,000	6.48%	17,675,000	6.48%
1998	17,675,000	0.00%	17,675,000	0.00%
1999	17,905,000	1.30%	17,905,000	1.30%
2000	17,905,000	0.00%	17,905,000	0.00%
2001	18,134,000	1.28%	18,134,000	1.28%
2002	18,367,000	1.28%	18,367,000	1.28%
2003	18,526,000	0.87%	18,526,000	0.87%
2004	19,802,000	6.89%	19,802,000	6.89%
2005	21,828,000	10.23%	21,828,000	10.23%
2006	24,090,000	10.36%	24,090,000	10.36%
2007	30,749,934	27.65%	28,109,547	16.69%
2008	40,557,351	31.89%	31,534,567	12.18%
2009	45,501,920	12.19%	36,479,136	15.68%
2010	51,042,148	12.18%	42,019,364	15.19%
2011	57,972,053	13.58%	48,949,269	16.49%
2012	60,476,732	4.32%	51,453,948	5.12%

* Notes/Assumptions are identical with Table 1.

Table 4.

VLOC Historical and Projected Fleet Development (in Number)				
Year	With Confirmed Conversion		Without Confirmed Conversion	
	No. of ships	Annual Growth Rate	DWT	Annual Growth Rate
1992	54	-	54	-
1993	62	14.81%	62	14.81%
1994	64	3.23%	64	3.23%
1995	66	3.13%	66	3.13%
1996	68	3.03%	68	3.03%
1997	72	5.88%	72	5.88%
1998	72	0.00%	72	0.00%
1999	73	1.39%	73	1.39%
2000	73	0.00%	73	0.00%
2001	74	1.37%	74	1.37%
2002	75	1.35%	75	1.35%
2003	76	1.33%	76	1.33%
2004	82	7.89%	82	7.89%
2005	92	12.20%	92	12.20%
2006	103	11.96%	103	11.96%
2007	132	28.16%	122	18.45%
2008	170	28.79%	136	11.48%
2009	189	11.18%	155	13.97%
2010	210	11.11%	176	13.55%
2011	235	11.90%	201	14.20%
2012	243	3.40%	209	3.98%

* Notes/Assumptions are identical with Table 1.

Table 5.

VLOC and Capesize Historical and Projected Fleet Development				
Year	With Confirmed Conversion		Without Confirmed Conversion	
	DWT	Annual Growth Rate	DWT	Annual Growth Rate
1992	48,514,000	-	48,514,000	-
1993	54,484,000	12.306%	54,484,000	12.306%
1994	59,033,000	8.349%	59,033,000	8.349%
1995	64,898,000	9.935%	64,898,000	9.935%
1996	72,602,000	11.871%	72,602,000	11.871%
1997	79,821,000	9.943%	79,821,000	9.943%
1998	81,609,000	2.240%	81,609,000	2.240%
1999	84,718,000	3.810%	84,718,000	3.810%
2000	89,536,000	5.687%	89,536,000	5.687%
2001	93,544,000	4.476%	93,544,000	4.476%
2002	96,104,000	2.737%	96,104,000	2.737%
2003	100,289,000	4.355%	100,289,000	4.355%
2004	107,856,000	7.545%	107,856,000	7.545%
2005	116,793,000	8.286%	116,793,000	8.286%
2006	127,523,000	9.187%	127,523,000	9.187%
2007	136,520,263	7.055%	133,879,876	4.985%
2008	148,422,398	8.718%	138,532,496	3.475%
2009	172,168,667	15.999%	162,278,765	17.141%
2010	205,790,674	19.529%	195,900,772	20.719%
2011	220,179,574	6.992%	210,289,672	7.345%
2012	220,053,913	-0.057%	210,164,011	-0.060%

* Notes/Assumptions are identical with Table 1.