Cargo supply constraints and tonnage growth

The idea of cargo supply constraint is not easily conceded by mainstream economic analysts. Typically, rising prices will lead to more supply. That is why as late as September 2007 most research houses still thought that oil prices should stabilise at around $70/80. Oil and commodity boom proponents such as Jim Rogers were mocked as "old fools" (though eventually they made an old school fortune).

Of late, the fact that there may be supply constraints in oil is gaining wider acceptance. Granted, there has been an a recent dip in oil prices from $120 to 110, but we can't agree that this constraint has been removed. Actually, supply constraint in soft commodities (which Jim Rogers thinks are at the early stages of a 10 to 15 year upward cycle) is not that hard to imagine when we think of how industries are taking away two of the most critical resources – farmland and water - from agriculture. Think of all the land that has been and is still being converted into shipyard premises in China, in the "illusionary gold rush" to get into shipbuilding, which in the past 10 years has had -5 to +8% gross margins, if the investors bother to check.

Shipbuilding is just one of the many industrial activities that China is pursuing which makes a bull case for soft commodities. We live in a world of unintended consequences: for instance, we were told that shipyards in north China will need to wash the steel plates with fresh water before they paint them, in order to comply with PSPC, which is the shorthand for Performance Standard for Protective Coating, or more simply a new coating standard. Switching to filtered, low alkaline water is also putting greater demands on water supply. North China is already in a state of acute water shortage - peasants in the whole of Hebei province have been ordered to accept very severe restrictions on the use of water in order to preserve water supplies for the Beijing Olympics.

We are subscribers to the view that there could be such cargo supply constraints for oil (see 'One Eyed Analysis', part 1, dated 18th December, 2007) and maybe also constraints for other commodities. One excellent piece we saw on coking coal is by Peter Kerr-Dineen, the joint chairman of Howe Robinson (A Maritime Ménage a Trois – Volatile Relationships at the Heart of the Freight Market Cycle). When we reach the bottleneck, the supply curve is a vertical line which doesn't react to price signals. Find this hard to imagine? Think of oil production in the past 2 years, it has been more or less constant even when oil prices have more than doubled. Should we accept the official OPEC view and blame the vertical supply curve of oil only on dollar weakness, geopolitics and speculation?

If there are constraints, then shipping will be better off if analysts spend more time studying the supply of cargo, where are the bottlenecks are and when they will be reached, rather than just on demand for cargo. Too much emphasis on demand (such as views that China will take all the iron ore there is on the face of the earth) will lead to overly optimistic forecasts - a situation that LNG market is currently experiencing.

Not all supply constraints are bad for shipping though - some lead to longer mileage per ton, which is good for shipping. And analysts should pay a lot more attention to tonnage supply, rather than taking it as a "given". Depending on scrap assumptions, tonnage growth projections differ dramatically. We have calculated two scenarios: "ceiling" which is based on maximum fleet growth (zero scrapping), and "floor" which is maximum scrapping in accordance with historical patterns. For tankers, it is not so straight forward because the phasing out of single-hull tankers is subject to revised regulations '13G', but in any case we have made proprietary fleet projections. The results for selected segments are shown as below. Please note the considerable difference between the two scenarios especially for bulk carriers.

Projected Fleet Development

Segment	Scenario	2007	2008	2009	2010	2011
Bulker (in thousand dwt)	Ceiling	395,655	419,464	478,061	566,692	620,692
		-	6.02%	13.97%	18.54%	9.53%
	Floor	392,655	347,034	392,458	471,294	510,449
		-	-11.62%	13.09%	20.09%	8.31%
	Difference	-	72,430	85,603	95,398	110,243
Container (in thousand teu)	Ceiling	10,836	12,503	14,165	15,912	17,163
		-	15.38%	13.29%	12.33%	7.86%
	Floor	10,836	11,912	13,504	15,150	16,271
		-	9.93%	13.36%	12.19%	7.40%
	Difference	-	591	661	762	892
LNG (in thousand cbm)	Ceiling	32,488	43,119	53,207	55,999	58,574
		-	32.72%	23.40%	5.25%	4.60%
	Floor	32,488	42,196	51,868	54,287	55,851
		-	29.88%	22.92%	4.66%	2.88%
	Difference	-	923	1,339	1,712	2,723
Crude Tanker (in thousand dwt)	Ceiling	259,166	277,169	314,969	348,576	361,919
		-	6.95%	13.64%	10.67%	3.83%
	Floor	259,166	269,909	306,159	338,146	349,122
		-	4.15%	13.43%	10.45%	3.25%
	Difference	-	7,260	8,809	10,430	12,797

Notes:

1. 'Ceiling' scenario is the projected maximum growth of the fleet. This scenario assumes zero scrapping for the remainder of 2008 onwards.
2. 'Floor' scenario assumes maximum scrapping in accordance with the historical pattern. The scrap age assumptions applied for the remainder of 2008 onwards are the averages calculated from WY historical data which are as follows: Bulker – 27, Container – 27, LNG – 34 and Crude Tanker – 26.
3. Tankers are not only subject to scrapping but first and foremost subject to single hull phaseout.

What is most likely is that fleet growth will lie between the 'floor' and the 'ceiling'. Apart from scrapping, growth rates will be influenced by delivery delays from yards and also conversion. We will comment briefly on each in turn:

a) Scrapping
We can't use a scrapping assumption that bulkers of 27 years of age will lead to a big drop in supply this year. This is not realistic as over 1500 ships over 27 years old are still trading today. We have taken the view that scrapping is mainly a function of technical condition and compulsory regulations, not just a function of the freight market which works as long as there is net cashflow from vintage ships;

b) Conversion
The figures given include the "confirmed" conversions, but we need to pay close attention to each and every announcement about ships being bought or sold for conversion. We think that due to technical and/or design problems, with bottlenecks at conversion yards and changing market conditions some ships intended for conversion to bulkers will show up as double-hulled tankers, or some will even make a surprise visit to the scrap yard (such as the two recent two VLCCs). Ships being converted are prone to experience delays; and the conversion book is difficult to track and simple to change.

c) Delivery delays
We contend that bulk of the delivery from greenfield yards will hit the market in big waves only in 2010, and even if delayed they have a habit of crawling back to the market in one way or another.

So we did the easy part - to establish a floor and a ceiling for tonnage growth. But the more difficult tasks of finding the particular supply bottlenecks in commodities and understanding their influence on shipping will need to be tackled by the collective wisdom of many...