

# L.H. Boyd & Company

PO Box 629 ■ Ipswich, MA 01938  
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In April of 2008, we prepared an article for Transport Trackers suggesting a global shortage in the world container fleet. The cynic's in the audience could reasonably argue that we were not looking at a shortage of containers but a surplus of ships!

In the article we estimated a production level of 3.9 million TEU (equal to 2007) and an average scraping level of 1.2 to 1.3 million TEU for 2008 making the container fleet slightly in excess of 27 million TEU. As a consequence of the economy turning for the worse, the production level was closer to 3.0 million TEU making the fleet size at year end 2008 about 26 million TEU with assumed retirements. By the end of the first quarter in 2009, there were published reports of inventory levels of idle containers being between 4 and 5 million TEU, located mostly in Asia.

In late 2008 the major container manufacturers made the decision to shutter their factories until the beginning of the second quarter 2009. This was not an earth shattering decision, as container production is cyclical, with the first calendar quarter always being a slow period regardless of economic conditions. These temporary closures have effectively lasted the entire year, and are likely to persist into 2010. As a result, we expect less than 200,000 TEU to be built in 2009 for international commercial freight service. Public statements by the two largest container manufacturers confirm this assumption.

The world container fleet historically retires approximately 5% each year, or between 1.0 and 1.3 million TEU. While this is in large part driven by corporate policies, it is based on the unchangeable fact that containers are built from a finite amount of steel and that steel rusts. Given enough time, all containers rust to the point of being unserviceable. That being said we believe that by year end 2009, the container fleet will be on the order of 25 million TEU. This is the first time in the history of containerization that the container fleet has contracted!

This raises the question of what will the ratio of container TEU to vessel slots be, and how does that reconcile with our earlier comments. The table below highlights our findings. For the purposes of this analysis we have assumed that year end 2008 all containers and vessels were working. We know from published sources and our own research that by the end of Q1 2009 there were between 4 and 5 million container TEU residing in inventory. We have also have seen reports that roughly 10% (in TEU terms) of the containership fleet has been idle for 2009. We then assumed even contraction (containers) or expansion (vessels) for the respective fleets over 2009 to achieve at adjusted container TEU to Vessel slot ratios.

It is interesting to note that the ratio as predicted dropped below 2.0 in 2009, but interestingly enough has remained roughly stable at 1.9 for 2009. There is a good case to be made that 1.9 TEU: 1 Slot is about as close to the bone as one can hope to get in terms of efficiency given the dire economic conditions during the past nine months. Given that some level of slot underutilization could exist amongst the working vessel fleet, we conclude that the minimum-working ratio is on the order of 2:1.

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<sup>1</sup> This number may not be fully realized given the volume of the idle container inventory. During periods of high storage containers that are scheduled for retirement are left in the stacks to avoid the costs associated with moving the containers in front of them.

		<b>YE 2008</b>	<b>Q1 2009</b>	<b>Q2</b>	<b>Q3 2009</b>	<b>YE 2009</b>
<b>Containers</b>	<b>Gross fleet size</b>	26 305 167	26 015 167	25 725 167	25 435 167	25 145 167
	<b>Inventory</b>		5 000 000	4 000 000	3 000 000	2 000 000
	<b>net</b>	26 305 167	21 015 167	21 725 167	22 435 167	23 145 167
<b>Vessels</b>	<b>Gross Slot Count</b>	12 361 993	12 661 993	12 961 993	13 261 993	13 561 993
	<b>Surplus</b>		1 356 849	1 356 849	1 356 849	1 356 849
	<b>net</b>	12 361 993	11 305 144	11 605 144	11 905 144	12 205 144
	<b>box:slots</b>	2.13:1	1.86:1	1.87:1	1.88:1	1.90:1

One of the interesting bits of information we gathered in the process of preparing this update were the comments made by executives within the container leasing industry. The common thread was that container inventories has been bad with fleet utilizations running between 75% and 80%, but since June the inventories had been dropping. Additionally, it was pointed out that the leased containers returning to work were doing so on longer term contracts. The recent report by TT highlighting improvements in Chinese and USWC port statistics, coupled with other reports of increased port activity support the statements made by members of the leasing industry.

Another bit of good news is that the two major container manufacturers, CIMC and Singamas believe that container prices should stabilize at USD \$ 2000 per 20' container when production re-commences. According to their published reports that should be in the second quarter of 2010. Although neither are forecasting sales expectations beyond their market share of the replacement market (approximately 1.3 million TEU).

Using the manufacturer's sales predictions for 2010, and acting on our assumption that a 2:1 ratio represents the optimum container fleet requirement, we re-calculated our table showing the expected shortfall in containers for 2009 and 2010.

	<b>Container Fleet Shortfall</b>	
	Projected fleet size	
	<b>2009</b>	<b>2010</b>
<b>Project fleet size</b>	27 136 974	30 669 766
<b>Actual</b>	25 131 667	24 909 667
<b>Shortfall</b>	2 005 307	5 760 099

Within the container industry the Great Recession of 2009 highlighted a number of changes from historical downturns in the business cycle that bear watching and further comment.

Firstly, and most significantly inventory of idle containers remained largely in Asia. In the past, surplus containers came to ground where their last revenue load left them. This created logistical and economic problems for the carriers once business began to improve, where the alternatives were to repair and re-position inventory from high cost locations such as North America and Europe, or purchase (or rent) new containers. In doing so the pickup in new container orders became a significant signal in the return to economic health.

As we have seen through 2009 the factories have remained largely closed and container requirements have been satisfied from existing inventory giving rise to the notion that new orders may no longer be on the leading edge of recovery. Given the operational shift by the lines to go from relying on balanced trade patterns to re-position containers, and to actively 'carry out everything they carry in', and resulting container operational efficiency, we believe the leading edge indicator will now be the rise and fall of idle container inventory levels. That being said, the level of container production above accepted replacement levels should become a clear indication of growth in freight demand.

Container factories have stayed closed during 2009 resisting the urge to buy business at the expense of container profit margin. For the first time in intermodal industry history the manufacturers have not shot themselves in the foot by dropping prices to below cost levels; a situation that typically took years to correct. This holds out hope that in the future stable container pricing will be the norm, and more importantly the container will be manufactured and sold as a piece of transportation equipment, and not as a conduit for steel export and hard currency import.

This is not particularly good news for the container rental industry. With the manufacturers holding pricing above the USD \$2000 per 20' container level, the opportunity to gain market share through cheap containers, (and cheap rental rates) diminishes.