

Exit strategy?

U.S. export boom forces shippers to scramble for equipment, space aboard containerships.

BY CHRIS DUPIN



One piece of good news about the U.S. economy in 2007 was that the trade deficit for goods and services narrowed to \$711.6 billion from \$758.5 billion in 2006.

Look at just the value of goods moving by containership, and the gap is not quite as large, but the trade was still very lopsided. Containerized imports in 2007 were valued at \$551.5 billion, nearly three times containerized exports, valued at

\$185.3 billion, according to statistics compiled by STAT-USA and the U.S. Census Bureau's Foreign Trade Division. That's a hefty \$366.2 billion deficit just in containerized freight.

With that much more stuff coming into the country than going out, the last thing in the world you might expect to hear from companies is they are having trouble finding empty containers or space on containerships to carry their exports abroad.

Nevertheless, some shippers, their advocates and even container shipping executives say this is becoming an important issue, especially since last fall.

"There is no empty space on any ships



the non-vessel-operating common carrier arm of BDP, a company well known for its work with the chemical industry, though he stressed the trend is affecting a wide range of exporters.

Carriers are not only having to plan shipments weeks in advance to secure guaranteed space, they are sometimes seeing cargo rolled, forced to wait for a carrier's next ship, he said.

The problem intensified in the third quarter of 2007, Keene said.

"As the dollar continued to decline, there were favorable economics with the spike in the dollar to shift some of your production to North America," Keene said. Companies want to ramp up production in the U.S. but can't get transportation for their product.

"This has created a huge dilemma within our industry. The outbound market is full, four to six weeks out, no matter what gateway you are using," he said. "We believe it is very serious and will not subside until 2009.

"It is very frustrating to me to decline the many new opportunities from our sales and commercial end because of capacity constraints on exports out of the United States." He added carriers are losing sales, supply chains are being impacted and manufacturers can't get product to market.

"We think there is a role to play in finding a solution that incorporates carriers, shippers, ports, freight forwarders, NVOCCs and even federal government and relevant regulatory agents. We think there is needed a plan of action to remediate and resolve what we believe is becoming a national crisis for ocean export shipping," said Arnie Bornstein, BDP's executive director of marketing and communications. "It's not just the carriers — the carriers have responsibility both for a business planning standpoint as well as a responsibility to those regions and industries they serve

leaving North America, period," said Peter Friedmann, executive director of the Agriculture Transportation Coalition, in March.

"There may be empty containers, but that is because the ships are full based on the weight restrictions. We are at 100 percent capacity right now for exports, across the Atlantic and across the Pacific, both directions. There are agriculture exporters that are not able to deliver sold cargoes because they are not able to get cargo on ships."

"Right now it is most acute in the Gulf region, but we see it migrating to other major ports around the country," said Tom Keene, vice president of BDP Transport,

Peter Friedmann
executive director,
Agriculture
Transportation
Coalition



"We are at 100 percent capacity right now for exports, across the Atlantic and across the Pacific, both directions."

— but we feel there is a need for a multi-faceted approach."

Shipping company executives agree shippers may be having difficulty getting equipment at some locations or space on some vessels, though some say the problem is not as widespread or severe as Friedmann and Keene indicate.

"The devil is in the details. On specific strings, specific port pairs, specific weeks, certainly there are issues. There are also issues on availability of containers at inland locations," said Peter Keller, president of NYK North America.



Keller

"It's worse than it was a year ago because of the increases in the export market. But it is not an insurmountable problem. The overall balance indicates there is a significant amount more cargo being imported than exported," he said. "We just need to work between the shippers and rail. It is going to require assets to be moved around, and there are going to be additional costs and those costs need to be accounted for."

Carolyn Almquist, director of transpacific westbound for APL, said, "absolutely the export market has grown double digit year over year, and we are experiencing a phenomena we have not lived through on the transpacific westbound trade in all the years I've been doing it.

"Historically importers have had a very easy time getting containers when and where they need them and finding space on the vessel was never an issue. But with the double-digit growth we all are having to plan in a way that is very different than 12 months ago," she said.

"With the rising rail and truck transportation and fuel, repositioning equipment is an expensive proposition. Rates are going up, but they still are not supporting that in every case," said Gordon Dorsey, a spokesman for Maersk Line. "We are working closely with customers to try and get equipment in the right amount."

Ed Zaninelli, vice president of the transpacific westbound trade for Orient Overseas Container Lines, said the core of the problem is the tremendous boom in exports, as well as the fact that the average weight of export containers leaving the United States is much heavier than for containers holding imports.

"The market is in a significant uptrend," he said.

"It was building throughout last year," Almquist said. "APL started to see the growth at the beginning of 2006, and it has been growing strongly since then. Things got very tight with the winter deployment

where the eastbound ships were reallocated to other trades" such as the Asia/Europe trade.

Niels Erich, a spokesman for the Transpacific Stabilization Agreement, said capacity on the eastbound transpacific trade has fallen 5.9 percent since the end of the third quarter of 2007. That has also reduced the capacity when the vessels return to Asia. Maersk Line, not a member of the TSA, has also reduced capacity significantly in the transpacific, seeing the volume it carries fall 17 percent last year.

It's hard to reconcile the reports that shippers are weighing out when you look at aggregate statistics for containerized import and export tonnage. In 2007 there were 145.8 billion kilograms of imported containerized cargo, compared to 86.1 billion kilograms of containerized export cargo.

Still, Zaninelli said the average weight of an inbound box is about 8.5 tons compared to 22 to 24 tons for outbound boxes.

"Your ships are built on import deadweight and TEU space, and on export you weigh out the ship," he said. If a ship can bring in 5,000 loaded import TEUs to the U.S., it can on average only take about 2,750 loaded export TEUs on its return voyage, with the remainder of the slots filled with empties.

Even on inbound voyages to the United States, ships are often unable to load to their theoretical capacity, said Paul Bingham, a shipping analyst at the consulting firm Global Insight. Ships have to take on ballast to balance the vessel, cargo capacity is reduced because of the need to arrange boxes to accommodate loading and unloading at various ports or to meet feeder vessels. Varying container sizes or the need for visibility may reduce capacity. Some ships may not be able to load fully because of draft restrictions in ports or in the Panama Canal, for example.

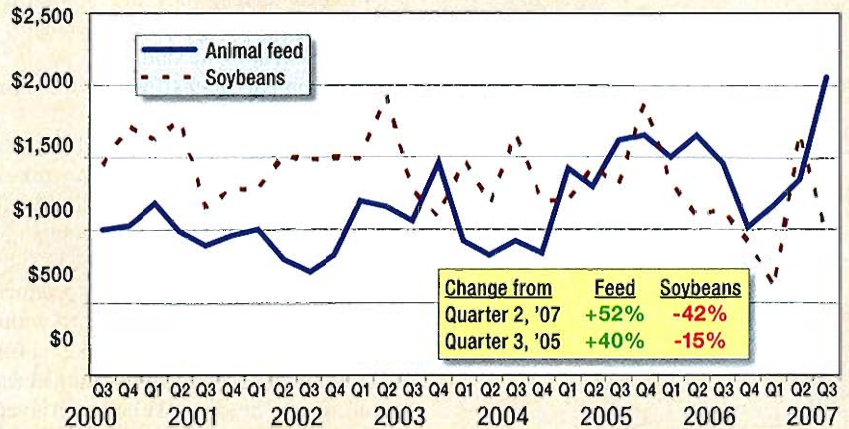
On top of that, most vessels are shared by many carriers. One carrier on the ship may still have space or weight in its allocation, but the company a shipper does business with may be maxed out.

Capt. James McNamara, president of the National Cargo Bureau, said most ships leaving the United States can only partially load because of stability considerations. If too many heavy boxes are loaded topside, the ship could run the risk of capsizing. He noted this tendency is often more pronounced with smaller containerships that may only carry a few layers of containers in the hold and many more on deck.

Very large containerships have more beam, so they have more stability than smaller, narrower containerships, noted

Ocean rates¹ for containerized shipments to some Asian countries

(2000-2007, per 20-foot container)



¹Rates are weighted by shipping line market share and destination country. Rates provided are publicly filed tariff rates, not those negotiated in a confidential service contract.

Asian countries' share by commodity: Animal Feed: Bangkok-Thailand (1%), Busan-Korea (30%), Hong Kong (17%), Kaohsiung/Keelung-Taiwan (32%), Tokyo-Japan (20%). Soybeans: Kaohsiung/Keelung-Taiwan (98%), Tokyo-Japan (2%).

Source: Ocean Rate Bulletin, third quarter, 2007, Transportation and Marketing Programs/ Agricultural Marketing Service/U.S. Department of Agriculture.

Chang Guan, professor at the U.S. Merchant Marine Academy. They're more like barges than canoes.

But he explained that there are also limitations in how heavy containers can be in each stack of containers, because too much weight can stress the structure of the ship, whether they are resting on a hatch cover or the bottom of the ship.

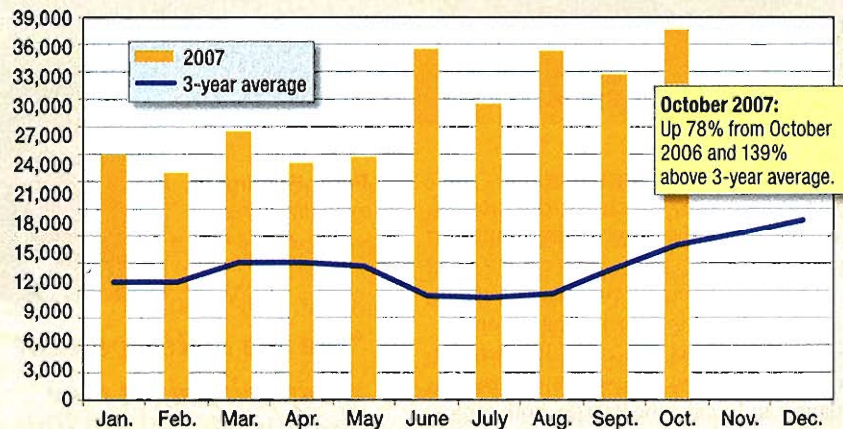
His colleague at the academy, Jon Helmick, said accounting for all these factors makes stowing a ship like solving a Rubik's Cube.

Zaninelli said another problem for export cargo is that inbound cargo is often destined for very different parts of the country than where outbound cargo originates.

For example, there may be a surplus of

Monthly shipments of containerized grain to Asia

(2007, total 20-foot containers per month)



Container ocean freight rates: average rate per TEU weighted by shipping line market share and trade route.

During 2006, containers were used to transport 3 percent of total U.S. grain exported, and 5 percent of total U.S. grain exported to Asia.

Source: U.S. Department of Agriculture/PIERS.

empty containers in Chicago or Los Angeles, where many distribution centers and transload facilities are located. But that is not much help to a grain or soybean exporter in Missouri, Kansas or the Dakotas, trying to get an empty box to fill with grain bound for the Far East.

Grain exports by container are exploding. In November 2007, grain exports jumped 119 percent from November 2006 and 176 percent above the three-year average.

Mike Steenhoek, executive director of the Soy Transportation Coalition in Urbana, Iowa, said the soybean industry had viewed container shipments as an attractive long-term option because of the historic availability of containers and a number of other factors. These include the sharp increase in bulk shipping rates over the last two to three years, and the fact that many customers are demanding soybeans and soy meal in smaller volumes commensurate with their operational needs.

Some buyers also have very specific demands for their soybeans, he said. They may want beans from a certain region of the United States, or soybeans of a specific quality or identity-preserved traits such as certain oil vs. protein profile, or non-genetically modified soybeans, for human consumption.

"Despite the long-term optimistic outlook for containerized shipping, securing containers and space on vessels has been a challenge," he said.

Demand for U.S. agricultural products surged not only because of the dollar, but also because of grain shortages in a number of overseas markets, Steenhoek said.

Friedmann noted that many buyers are attracted to the high quality of U.S. food products.

Some carriers, such as Maersk Line, have eliminated routine service to some rail ramps in the Midwest and West where a combination of high costs from higher fuel and rail rates and a preponderance of low-paying cargo made service unprofitable.

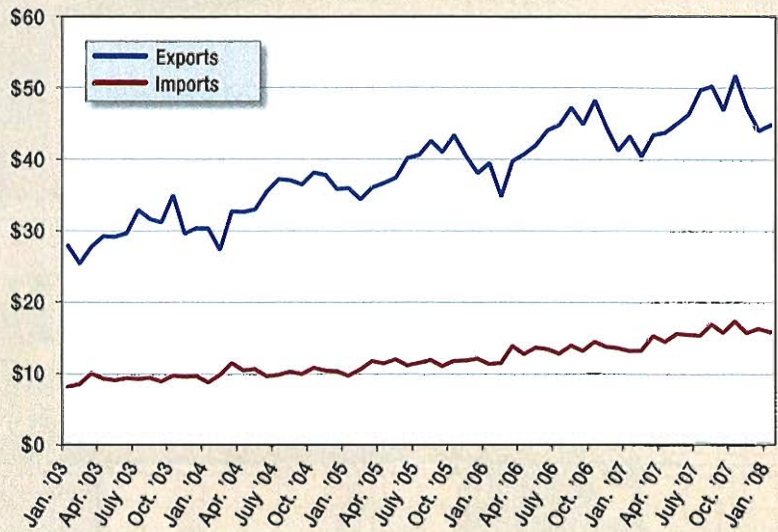
To find secure container transportation, more grain shippers are moving their cargo by covered hopper car to ports and transloading product to containers, said Jeff Maihiot, senior group manager based at the Downer's Grove, Ill. office of TSC Container Freight, an NVO that specializes in the grain business.

But Steenhoek notes some transloading facilities, in the Pacific Northwest, for example, are already at capacity.

"In response, some shippers have chosen to move grain via truck or rail to the East Coast where containers are in greater supply and shipping product via the Panama

U.S. containerized cargo by value

(January 2003-2008, in \$billions)



Source: USA Trade Online (www.usatradeonline.gov).

Canal," he said. Grain is being transloaded into containers in ports like Norfolk, even New York.

Zaninelli said transloaders have gotten extremely efficient at what they do — a container can be fully loaded in 90 seconds, with weight calibrated electronically to the pound. At the other end of the transportation chain, in Asia, hydraulic tables are common, so a container can be dumped just like a dump truck, he said.

Shippers of other types of commodities such as cotton and wastepaper are also moving their product to the port by truck because of shortages of equipment inland.

"With so much of the container business being consumer imports, we have to get our cotton where the empty containers are," said Brian McGuire, export traffic manager

at the Fresno office of Dunavant Cotton. "Three years ago they were willing to drop empties off the train from Chicago or Minneapolis in West Texas. You are lucky if they are willing to drop boxes in Dallas.

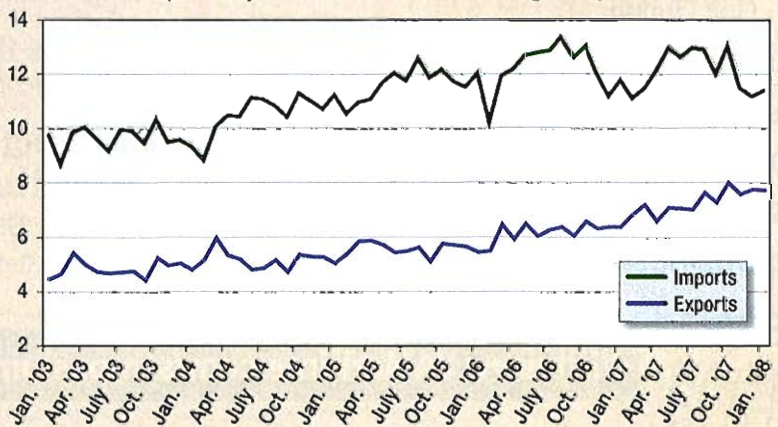
"You can't ship off the West Coast in March almost to anywhere ... because the vessels are so overbooked," he added. "That wasn't a problem even three or four months ago."

He said, at least in California, "the availability of containers is a lot easier because of the proximity of the port. Whereas my Memphis office has to select carriers based on who has equipment in places such as Dallas."

While steamship lines used to routinely position empty containers to shippers, Zaninelli said, "because of changes in the

U.S. containerized cargo by weight

(January 2003-2008, in billion kilograms)



Source: USA Trade Online (www.usatradeonline.gov).

railroad policies, they will not move empties everywhere you want them to.

"They have reasons, legitimate reasons," he said. "For their business it is a good decision. For us it is a nightmare. We used to have empties repositioned anywhere in the nation at very inexpensive rates, now it is much more expensive and a real challenge."

Similarly, chemical exporters located along the Gulf of Mexico may need containers for their outbound goods, but there are far fewer distribution centers near Gulf ports stripping inbound containers.

"If you are in the Gulf you better be married with someone at a line — married and happy," Zaninelli said. "There is no equipment in the Gulf. We don't have chemical factories near big populations."

John Chinn, project director for the U.S. Shippers Association, which works with about a dozen chemical companies and arranges the movement of about 50,000 TEUs annually, said, "The decline in the value of the dollar has caused a significant drop in imports from Europe and it has also caused a significant increase in exports."

"There are equipment shortages and space shortages in certain places," he said. "We are having to forecast and schedule ahead of time both in terms of containers and space."

Almquist said, "We are encouraging people to plan forward and take what their needs are eight weeks out where in the past we would have been able to respond to something two weeks out," she added.

Weight is sometimes an important consideration not only on a vessel, but when cargo is moving inland, Zaninelli said. Because outbound boxes are so heavy, it may not be possible to place them two-high on a stacktrain car. And if a train gets too heavy, then a railroad might have to add an additional locomotive to the coast.

"They hate that," he said.

Some exporters say the inability to get product on ships quickly and the higher cost of transportation are making their exports uncompetitive.

This winter, Brian Humble, who oversees international sales and shipping for the Halsey, Ore.-based DLF International Seeds, which grows grass seed, said the company lost a sale because it was not able to secure space quickly for a shipment to one European customer.

Humble, who arranges the movement of about 150 inbound and 400 outbound containers to locations all around the world — Asia, Europe and South America — said that getting equipment has been a growing problem for the last three years.

Equipment is in such short supply that one steamship line was unwilling even to let DLF do "street turns" at their facility, where they would pick up an inbound container at the port or railhead in Portland, unload it at its warehouse, then stuff it with export cargo and return it for shipment to the same carrier.

"At one point I had five empty containers in my yard and they wouldn't let me have any of them," he said, because other shippers were at the top of the list waiting for empty equipment. He was told he would have to wait 30 days for a container.

To him, it didn't make sense. He was allowed two days free time at the terminal to pick up his box and allowed to keep the empty containers five days before returning them. If the steamship line had allowed him to use one of the five empties, their equipment would have been turned around in two days with an export load, to boot.

Humble said while some shippers are willing to pay higher rates to get cargo quickly, others are not. For example, faced with difficulty getting a shipment, he investigated alternatives for customers. Some were willing to pay the additional freight, but one, faced with the possibility of paying \$4,000 instead of \$2,500 decided to wait until the seed could be shipped at the lower rate. ■



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