



# Ocean Holds On in International Transportation

**Capacity and cost keep ocean shipping competitive with high-service air cargo.** BY DAN MCCUE

**D**espite frustrations over slow steaming, omitted port calls, and a seeming state of constant change, shippers are far from abandoning ocean transport for such alternatives as air, relying instead on the robustness of their supply chains to carry the day.

While overall air and sea freight forwarding grew by 3.1 percent in 2012, a recent report by Transport Intelligence, a logistics research and consultancy firm, found the lump sum to be obscuring an increasing divergence between the two very distinct transport sectors.

According to Transport Intelligence (TI), all of the positive growth over the past year and more has occurred in the ocean freight sector, which grew by 11.5 percent to \$63.2 billion in 2012. Meanwhile, air freight actually declined by 4.2 percent to \$62.5 billion as a result of overcapacity, rising fuel prices and other operational costs.

This, TI said, led many shippers to opt for alternative methods for transporting their goods.

"If you want to talk in terms of black and white, I would say it's still black and white," says Dominik Tichelkamp, global head of ocean freight and executive board member of CEVA Logistics.

Offering anecdotal perspectives that echo the findings of the TI report, he adds "In the age-old debate over speed and cost, air freight is still so much more expensive than ocean freight that I can't see a change in the paradigm."

"At the end of the day, your business model allows you to charge your customers extra to cover the incremental cost of air freight or it doesn't," he says.

## Still a Premium Buy

Tichelkamp comes to a conversation about ocean shipping versus air with an interesting perspective; before joining CEVA he had spent 15 years with Volkswagen. He spent most of his time at the German auto manufacturer overseeing the carmaker's global air and ocean transportation planning and procurement.



“When you have global assembly operations like Volkswagen does, obviously, you use both air and ocean as transportation modes, but with very, very few exceptions, air was and is still considered premium transportation,” he says.

“Air might be used to ship a prototype, but other than those rare instances, you really tried to avoid it,” Tichelkamp continues. “It has always been like this and it will continue to be like this.

“Now having said that, that doesn’t mean that in a bad year, my former employers wouldn’t have as much of €150 million (about \$200 million) worth of air freight expenditures, but it was never budgeted and the intention was to have the expenditures come in as a penalty that everyone would try to avoid.”

### Emergency Mode

Of course, every global OEM will opt for air if some breakdown in the supply chain results in the need to fly in a critical part to a remote location to keep an assembly plant open, but those instances are fewer and farther between in 2013, Tichelkamp says.

“When I think back to the late 1990s, it really was a different time,” he explains. “Back then, if we were in such a situation, we would fly like hell to Mexico, for instance — not even knowing if the parts were sitting in the airport — because we’d become afraid, in the absence of useful intelligence, that the ocean-borne part would arrive in time.

“Today, it is industry standard that you have visibility and that you can track the shipment of your critical parts — so much so that big OEMs like Volkswagen, which

have hundreds of assembly plants and tens of thousands of suppliers, monitor not only Tier 1 suppliers, but Tiers 2 and 3 suppliers as well.

“That change, I think, has greatly reduced the need for last-minute calls to air forwarders,” Tichelkamp says. “Visibility is there, transparency is there, and as a result, supply chain management systems are more stable and robust.

“Add the fact everybody is trying to squeeze out costs, and I don’t see a fundamental change in shipping modality occurring,” he adds.

### Little Measurable Shift

This state of affairs was confirmed on the ground by officials with the Port Authority of New York and New Jersey. Officials there said they too have not seen any discernible shift of cargo between ocean and air in response to capacity fluctuations, slow steaming or other variables.

“Notwithstanding [that], both John F. Kennedy International (JFK) and Newark Liberty International Airports continue to attract new international passenger flights from both new and existing markets on all continents,” says Evelyn Shapiro, a spokesperson for the authority.

“Since most planes used for international passenger flights are new wide-bodied aircraft with increased cargo carrying capacity, this has helped make our airports more attractive to the shipping community by offering competitive transportation options,” she points out. “We also have a high number of all-cargo aircraft operators offering services to key global markets, result-

Automakers like Volkswagen use air and ocean to supply global assembly lines.

Photo credit: Toyota





DHL Global Forwarding is one of the logistics companies expanding its life sciences and health care logistics services. Photo credit: DHL

ing in a sound mix of overall options to the shipping community.”

If there has been “movement” Shapiro continues, it has not been between modes, but between carriers or ports of import and export.

In light of this reality, since 2000, the Port Authority has invested \$2 billion in port infrastructure improvements, and in anticipation of the Panama Canal expansion, an additional \$1.3 billion is being invested to raise the Bayonne Bridge to allow larger vessels to pass underneath.

“From an air cargo perspective, there is always the possibility that bigger ships will take business from the air cargo industry. However, there will always be a significant difference in transit time between airport-to-airport delivery versus movement of goods from seaport-to-seaport,” Shapiro says.

The bottom line, she continues, is both industries will continue to evolve on their own terms, with competition within each industry likely to ensure that existing comparative advantages and disadvantages between air and sea transportation of goods continue into the near future.

Speaking of the future, Shapiro says of JFK specifically, redevelopment plans are currently being made to address forecasted cargo growth.

“These include a new truck stop and convenience center scheduled to open soon, while an expansive new animal handling facility is slated to open next year. Additionally, a new multi-tenant cargo facility is in the development stage that will offer nearly 650,000 square feet of new space when finished,” she adds.

## Reliable Transit Times

Andrew Wigdahl, senior product manager at Amber Road, the global trade management software firm, says companies he deals with that ship by air do so because they are moving perishables or high-value goods.

“Those companies will never go to ocean, but I do see other clients who are moving to the ocean mode because, among other things, they believe it’s more predictable,” Wigdahl says.

“Cost, of course, is always a consideration, but with the greater visibility we have today, the ability to know

where your inventory is at any given time and when it’s going to get where you need it, they feel more comfortable planning for the extra time on the ocean, rather than paying a premium for rush shipments,” he says.

To illustrate the kind of decision-making shippers are engaging in, Wigdahl points to a company that decided to do a deep analysis of its shipments between Shanghai, China and LA/Long Beach in the U.S.

“This is a company that does ship by ocean and, to some extent, by air. Armed with data you know is reliable allows you to be more creative,” he explains. “In this case, they knew their shipments to the Port of Los Angeles — which were all just-in-time deliveries of manufactured goods — always took a very predictable 17 days.

“In this case, weighing their options, they didn’t look at air, but rather what opportunities for savings they could achieve by going to Long Beach and even San Pedro and arranging their own haulage,” he says. “So, what we’re seeing is people looking more closely at these little combinations they can come up with to gain more efficiencies and savings — and, in the long run, what you see is clients procuring more lines or routes.”

“Today, I think air is being used more for small parcel and light-weight items, but the heavier stuff, it’s all going by ocean,” he adds.

## Industry Response

Transport Intelligence also found that, in light of the new market dynamics, the air and ocean carriers have undertaken contrasting strategic focuses to increase volumes and profitability.

In its report, TI says the air freight sector has experienced a significant decline in volumes due to the modal shifts resulting from the kinds of activities Wigdahl describes.

As a result, it says, air freight forwarders have begun to focus on higher-margin commodities, such as pharmaceuticals and other temperature-controlled goods. Among the examples TI cites is Kuehne + Nagel International AG, which in 2012 acquired two specialized freight forwarders within the perishables industry. DHL Global Forwarding also continued to

expand its global network of Life Science Competence Centers. Integrator UPS has also continued to push into the health care market.

Conversely, TI notes, ocean freight forwarders are expanding their less-than-container-load (LCL) offerings, particularly on Asia Pacific trade lanes. The service offers reduced shipping costs, increased flexibility and improved transit times over full-container-load (FCL) services.

TI also says its analysis found companies developing expedited multimodal offerings such as sea and road transport to provide a door-to-door service and a combined air and sea service which reduces costs, but still provides the air freight advantage of faster transit time.

### High Tech Shift

One sector Dominik Tichelkamp sees moving from air to ocean in this climate is technology.

"I think as time has gone on, the big tech guys have become a little bit smarter about supply chain management and are not flying just anything and everything anymore," he says.

Tichelkamp cautions this does not mean the tech sector will ever entirely abandon air shipments, "after all, an iPad costs a lot less to fly to market than a desktop computer, and if you're talking about a new product that's launching, I think that will probably be flown to market as well.

"But when it comes to restocking, depending on the markets, I think they may consider putting a bigger portion into ocean than into air," he says.

If Tichelkamp's comments and role as CEVA's head of global ocean freight make him seem like an ocean partisan, he is quick to dispel that notion.

"I never see my job as the global head of ocean as just a silo for ocean," he says. "I always look at the company holistically ... and if I run into somebody who is historically an air customer, I still try to analyze their needs and do anything I can to help them in that regard.

"The analysis of what modes a client should use always starts with their needs," he continues. "They tell us what they think they need. Looking at the data, we either confirm their assumption saying, 'That's exactly what you need,' or we counter and say, 'Maybe you can do this with less.' Or, we might tell them, 'You know, you actually need more of this mode or the other.'"

Tichelkamp continues, saying that the bottom line, regardless of mode, is that what shippers need — even more than visibility and transparency — is reliability.

"That's what we are really trying to achieve for them at the end of the day," he says. "That's the ultimate measure — performance port to port or airport to airport — and what we have found in the case of our customers is that ultimately, the reliability of their supply chain is more important than mere speed."

### LCL Opens Opportunities

Another perspective is offered by the forwarder A.N. Derringer Inc., which is not only a global practitioner in its field, but regularly conducts market research on the freight sector.



According to Matt Parrott, the firm's director of transportation, demand has been mainly for ocean transportation services — especially in light of the growing availability of less-than-container load (LCL) services.

While time, of course, is always a factor in shipping decisions, price is still a bigger concern when it comes to deciding between modes.

"Often customers will want both air and LCL rates to compare, so Derringer will provide both quotes. [But] in the end, the decision is based on the supply chain needs — time versus money," says Lindsey Walker, a senior marketing analyst with the firm.

In fact, what Derringer has observed is that in light of such the continued large discrepancy between air and ocean rates, many customers will make concessions, changing other aspects of their supply chain, and take the increased shipping time over a shift to the advantages of air.

That said, there's no denying the ocean container industry is in flux. As Walker notes, four of the top 20 carriers operated at a loss in 2012. And this year, rates have been all over the board as carriers have tried "to increase rates with back-to-back general rate increases (GRIs), despite slow demand," she says.

"The carriers are collaborating to create additional efficiencies, both operational and in cost, including more coalitions, vessel sharing, slow steaming, and scrapping less-efficient vessels, but that won't necessarily translate to customer savings," she says.

In such an environment, company officials say, Derringer has been vigilant in monitoring the needs of customers, keeping abreast of changes in the market.

Surveying the current landscape, Matt Parrott adds, "Some industries will continue to prioritize air transport, but price remains a constant concern. Derringer offers competitive air and ocean transportation services, but we don't foresee the rise of air cargo over ocean in the near future."

**3PLs are combining services to provide reliable, cost-effective solutions.**

Photo credit: CEVA Logistics



## Looking for Bright Spots

If there is a bright spot for air, it may well be in the new opportunities presented by shippers pressing further into emerging markets.

In fact, Cathy Roberson, lead author of the TI report, says she and her colleagues believe the air freight forwarding market will recover over the next few years for that very reason.

But neither Tichelkamp nor Wigdahl express such confidence.

According to Wigdahl, "At this point, there are really very few options other than ocean in many emerging markets. The way the infrastructure has historically developed in many of these regions, it's easier to rail something than to transport it by road, and it's easier to rail something to a port as opposed to railing it to an airport."

For his part, Tichelkamp does not believe emerging markets will change anything fundamentally in terms of the relative position of ocean and air.

"For example, we work with many large OEMs in the manufacturing sector who are moving increasingly into India, and they wouldn't even consider supplying their Indian plants with materials from Europe by air — except where an emergency delivery is needed to keep an assembly plant going.

"But that's the result of a shortfall or some kind of unforeseen event. Other than those exceptions, I think

the fundamental assumption underlying their supply chain planning is that it will always be based on ocean," he says.

Transport Intelligence suggests the overall freight forwarding market will grow by 6.8 percent between 2012 and 2016, with the ocean freight forwarding market continuing to develop faster than the air sector.

However, Roberson, cautions, "Despite double-digit growth in 2012, the sea freight forwarding market is still vulnerable to long-term overcapacity and erratic rates. Forwarders have benefited from the modal shifts experienced in 2012, but there could be serious problems if these issues are not addressed.

"Although the air freight market was weaker in 2012, airlines are removing capacity across the world. If it wishes to continue its impressive growth, the sea freight sector should not continue to ignore these problems," she says.

Tichelkamp also believes the shipping industry needs to address the issues that have caused the sometimes drastic fluctuations and overcapacity in the market.

"Look at it this way," he says. "Even if, as many people predict, an even bigger shift from air to ocean occurs, what will that really mean?"

"It may lead to a stalling of the air freight sector on a global basis, but that does nothing for ocean. Not really, because even if you could take all the capacity out of air and put it on the ocean, it wouldn't come

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close to putting a dent in the glut of ocean capacity.”

He continues, “One theme that always makes us scratch our heads is how come, when we already have a glut of capacity, we still have new orders for ships coming in from owners or operators of the shipping lines?”

“I don’t have the magic answer to that, but when we think about that, and think about how to solve those issues, we have to look beyond the Maersks and Hapag-Lloyds and MSCs, and look at the bigger picture,” he says. “Obviously, for instance, banks are involved in this because part of their business model has been in financing ships. The other actors in this, obviously, are the shipyards that lure potential customers with deep, deep discounts.

“You know, when they saw the boom coming to an end, they all of a sudden began offering discounts of 20, 30 or more percent, and that makes the operators think, ‘Maersk paid \$180 million for a ship that I can now get for \$150 million ... what does that do for me in terms of slot costs? Will it actually give me a capacity edge over one of my main competitors?’ In the present climate, I find that kind of thinking very interesting.”

Tichelkamp continues, “Another point that I think is relevant to this discussion is that, along with all the other things that are going on, we’re also seeing a different kind of procurement behavior emerging among our customers.”

He points out, “The increased visibility of the past several years has resulted in shorter procurement cycles. When I did my apprenticeship in this business, procurement would be done in five-year cycles, then it went to a two-year cycle, a one-year cycle. Now, on some trade lanes, procurement cycles are down to less than a year. This is one of the things I talk about whenever somebody asks me about the state of ocean.

“One of the things that is interesting to consider is how people are dealing with procurement and what it does to the market. In some cases you have people procuring a percentage of total open, but leaving a strategic reserve open for spot business,” he says.

“Now, this is something that’s probably more appealing to forwarders than it might be to carriers; because carriers by and large are still more interested in having a more stable, term business, so they can plan

their capacity. Spot business is a market that’s always more appealing to forwarders.

“But this is a situation we’re seeing and it means a continuation of cost pressure, and that whatever the relative position of air and ocean, market volatility will remain,” Tichelkamp says. **WT**

For reprints of this article, please contact Cindy Williams at [williams@bnpmmedia.com](mailto:williams@bnpmmedia.com) or 610-436-4220 ext. 8516.



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