

22<sup>nd</sup> ANNUAL STATE OF LOGISTICS REPORT

# A bumpy ride

**The cost of the U.S. business logistics system jumped up 10.4 percent in 2010, making up more than half of the preceding year's decline. But don't expect gains like this to continue as the economy begins to slow and all four transportation modes scramble to make adjustments during this period of unprecedented volatility.**

BY PATRICK BURNSON, EXECUTIVE EDITOR

When the transportation and logistics market's chief prognosticator, analyst Rosalyn Wilson of Declan Consulting, gave *Logistics Management* some early insight into her findings for the 22nd Annual State of Logistics Report (SoL), she was still wrestling with a title.

"We had given some thought to calling this report 'Coming in on a wing and a prayer,' but felt that would be too negative," says Wilson. "After more thought we decided to call it 'Navigating through the recovery.'" But after the official release in mid-June in an event sponsored by the Council of Supply Chain Management Professionals (CSCMP) and Penske, it was clear that no matter how you slice and dice the data she's collected, shippers are going to be in for bumpy ride in terms of rates, capacity, and service over the next six to eight months.

"An unstable rate and capacity environment hurt both sides, including the freight intermediaries, and it's not going to get much better for a while," says Wilson.

In her SoL report, which is designed to neatly summarize the previous calendar year in logistics and transportation spending, Wilson says that 2010 was certainly a better year for carriers and third party logistics providers (3PLs) than 2009—but it didn't turn out to be all that we had hoped. The recovery from the Great Recession has proven to be more elusive and prolonged than any other in our history, and the slow growth presented another year of challenges for the logistics industry, she notes.

"Volumes firmed up early in 2010, but dropped off in the second half," says Wilson. "Demand for capacity began to equalize with available space in many sectors, but rates continued to be constrained. Inventories began to climb, and retailers pulled back on their ordering because spending did not expand as expected."

According to Wilson, the economy began to falter in the second half of 2010 as the contribution from the various stimulus packages, put in place to jumpstart the first year of the recovery, began to fade. "We may have hit a wall," says Wilson.

All four major transportation modes are scrambling to make

adjustments during this period of volatility, and shippers may be forced to do more with less as a consequence.

## ECONOMY: THWARTED CHARGE IN 2010

Macroeconomic trends have a profound impact on the growth of logistics and transportation markets. And, consumers are not leading the charge as they have in other economic recoveries due to the fragile state of their personal wealth, says Wilson.

"Unemployment is still pervasive, new jobs are being created at a rate that does not even cover population growth, the housing market hasn't rebounded in most areas, foreclosures continue, home prices are still deflated, and fuel and food prices have been steadily rising," says Wilson. "Personal net worth plummeted for most people, causing them to adjust their view of the economy and their spending patterns," she adds.

In the three years prior to the recession, the personal savings rate in the U.S. averaged 1.9 percent, which is in line with a steady decline over the last 20 years, according to the SoL report. Since the beginning of 2008 and through 2010, the personal savings rate has averaged 5.3 percent, which is still significantly lower than the 9 percent to 10 percent average before 1990. Consumer spending and retail sales grew modestly in 2010, not igniting as expected. Most of the increase in retail sales came in the form of sales of fuel, automobiles, and food.

Manufacturing and business spending were the bright spots during much of 2010. Industrial production was up 5.3 percent in 2010, after declining 11.2 percent the year before. Industrial production and manufacturing for businesses was up, while consumer goods production was almost flat. Capacity utilization increased from 69.2 percent in 2009 to 74.5 percent in 2010, while consumer spending and retail sales grew modestly.

"These were all signs that the economy was strengthening, but by mid-year there was a slowdown and it never fully reached that level of momentum again," says Wilson. And there were other encouraging stories as we entered 2011, says Wilson. For



## The US business logistics system cost is the equivalent of 8.3% of current GDP in 2010

\$ billions

### Carrying costs - \$2.064 trillion all business inventory

Interest	4	Up 10.3%
Taxes, Obsolescence, Depreciation, Insurance	280	
Warehousing	112	
<b>Subtotal</b>	<b>396</b>	

### Transportation costs

Motor carriers		Up 10.5%
Truck (Intercity)	403	
Truck (Local)	189	
<b>Subtotal</b>	<b>592</b>	

Other carriers		Up 10.5%
Railroads	60	
Water (International 28, Domestic 5)	33	
Oil pipelines	10	
Air (International 17, Domestic 16)	33	
Forwarders	32	
<b>Subtotal</b>	<b>168</b>	

<b>Shipper related costs</b>	<b>9</b>	Up 10.4%
<b>Logistics administration</b>	<b>47</b>	

**TOTAL LOGISTICS COST 1,211**



JEAN-FRANCOIS PODEVIN

instance, the auto industry was rebounding, and recently Chrysler paid off its TARP loans seven years ahead of the due date.

“Given the weather conditions in most of the country at the start of 2011, most measures would call the first quarter a strong one for the logistics industry,” says Wilson. “In the last few months of 2011, however, volumes have been eroding, along with other key economic indicators, and there are signs that the economy is stalling and predictions for a strong 2011 may fall short.”

### HARD NUMBERS

Total logistics costs rose 10.4 percent in 2010 after tumbling in both 2008 and 2009. Transportation costs are up over 10 percent

Source: CSCMP's Annual State of Logistics Report

in 2010 due to higher freight volumes, fuel surcharges, and for some modes, rate hikes. Interest rates continued to drop, while inventory levels inched back up. Lower warehouse costs were more than offset by increases in other inventory related costs (insurance, depreciation, taxes, and obsolescence) resulting in a 10.3 percent gain in inventory carrying costs.

“Logistics as a percent of nominal GDP moved back up to 8.3 percent, still lower than any year but 2009,” says Wilson. Wilson also notes that volumes have only recovered about half the recession losses, yet industry capacity, particularly in truck and air, is close to being fully engaged. The recession had a “devastating effect” on total industry capacity, which is much lower than it was in 2007, the report says.

“The recovery is not being felt evenly in the economy, and 2010 did little to shore up precarious carriers who have been hanging on hoping to be rescued by a resurgence,” says Wilson.

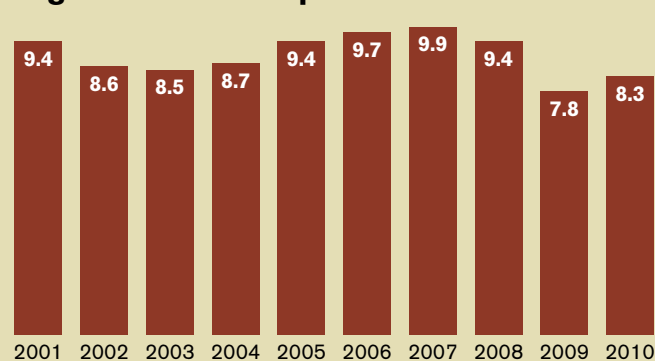
Business inventories increased in all quarters except the second, which experienced a slight dip. By the third quarter, inventory levels were heading back to levels experienced at the start of the recession, ending the year at the highest point since third quarter 2008. The average investment in all business inventories (agriculture, mining, construction, services, manufacturing, wholesale, and retail trade) increased to almost \$2.1 trillion in 2010, a jump of \$199 billion as stock was replenished in the first quarter of 2011.

Holiday shopping volumes were reportedly higher than in 2009, but final sales figures showed that people weren't buying as much as anticipated. And, says Wilson, many waited until late in the season to buy to take advantage of discounted merchandise.

#### “UGLY” DETAILS

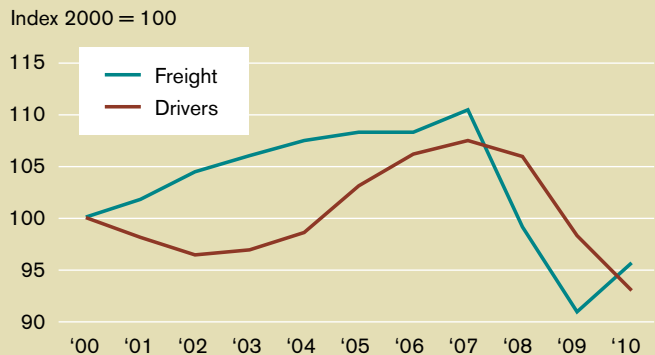
Wilson concludes her report on a decidedly candid and downbeat note, telling us

### Logistics cost as a percent of GDP



Source: CSCMP's Annual State of Logistics Report

### Number of truck drivers vs. freight carried



Source: Bureau of Labor Statistics, Bureau of Transportation, author estimates

that “the ugly details” show how vulnerable the recovery actually is, which will translate into one of the more volatile periods shippers and carriers have ever seen.

The first quarter 2011 GDP growth rate was revised downward in the latest release, with preliminary estimates coming in at just 1.8 percent, well short of the 3.1 percent projection. Consumer spending was revised downward, hitting a six-month low while inventories climbed higher.

“The current economic picture is not indicative of a strong recovery,” she says, “in fact it appears that the recovery is losing momentum. Originally robust estimates for second quarter GDP have been cut dramatically to between 2.5 and 3 percent.”

She points to the fact that the public sector continues to shed jobs as budgets are chopped. A recent survey by ADP, the payroll processing company, showed a sharp decline in the rate of job creation at private businesses. Firms added only 38,000 jobs in May, compared with 179,000 jobs added in April. Also, the number of people filing new claims for

unemployment insurance benefits is on the rise again. Pervasive unemployment undercuts GDP growth by reducing consumer demand, which in turn makes it harder to create jobs.

“It used to take six months for the employment situation to get back to normal after a recession,” says Wilson. “This time around the Federal Reserve Board Chairman has said that he expects it could take as long as five years to get back to a pre-recession level.”

Although many industry observers are predicting strengthening of logistics services as we head to the second half of 2011, Wilson says that the pieces are not falling into place to support anything more than weak growth.

For example, retail sales rose in May, but were well below what had been forecast for May and lower than April's numbers. The Consumer Confidence Index dropped sharply in May from 66.0 to 60.8, reflecting consumer uncertainty and rising pessimism about inflation, their income prospects, and the housing market.

This uncertainty is translating into a slowdown in purchasing. Business spending and manufacturing are declining as well. New orders and production declined in May, 10.7 and 9.8 percent respectively. The Purchasing Managers Index recorded its steepest drop since 1984, plunging 6.9 percent in May. Imports and exports are also forecast to be flat or even a little down in May.

Wilson says starkly: “By the end of 2011 we will see a different looking freight picture. Shippers may be dodging about in a search for capacity during sudden surges in demand, and carriers will continue to look for a sustainable revenue model.

“Which scenario will play out?” she asks. “It could go either way at this point, but my money is on the innovators in the logistics industry who are navigating through the recovery.” □

—Patrick Burnson is Executive Editor of Logistics Management



# Less-than-truckload: Time to cash in on rates?

Less-than-truckload (LTL) trucking has been less than profitable for many of the top carriers in this \$27.5 billion sector that has been plagued by overcapacity, high overhead costs, and staggering losses from its largest players.

The parent companies of the two largest national, unionized LTL carriers—YRC Worldwide and Arkansas Best Corp.—continue to bleed red ink even as the national economy and U.S. manufacturing sector recovers from the worst recession in 70 years.

YRC has lost in excess of \$2.7 billion the last four years, including \$102 million in the first quarter this year. Its chief rival, ABF Freight System, contributed to a \$12.8 million loss to its parent company in the first quarter, on top of \$158 million in losses the two previous years.

“We see evidence that the economy, though not increasing as quickly as we would have hoped, still is growing,” outgoing YRC Chairman and CEO Bill Zollars said when releasing his company’s first quarter financial report. “The economy is soaking up the excess capacity.”

Analysts estimate that there still could be as much as 15 percent excess capacity in the LTL sector. That would be roughly the amount of capacity operated by YRC’s national and regional

units. Some analysts, including David Ross of Stifel Nicolaus, are predicting that YRC could run out of sufficient cash by the middle of next year unless there is a surge in freight demand and rates rise dramatically.

Zollars and other YRC officials scoff at such predictions, and insist their financial restructuring is on target.

The YRC national and regional carriers endured the worst pricing yields in the LTL industry, according to figures compiled by Stifel Nicolaus. While sector leader Old Dominion Freight Line—the only publicly held LTL carrier with an operating ratio as low as 91—enjoyed more than 11 percent year-over-year yield improvement in the first quarter of this year, the YRC units and ABF could manage yield improvements of barely 2 percent year-over-year. Zollars recently told analysts and investors that would change soon.

Zollars said YRC is getting pickier on its accounts and said the days of rock-bottom LTL rates, circa 2007-2010, are over. “It’s always a judgment call. Every account is different,” he said. “We think we are making good decisions around volume and price.”

Most of the LTL carriers are in the same boat on pricing as YRC, although



not suffering nearly the level of losses. Except for Old Dominion, most of the other leading LTLs had lackluster first quarter figures. UPS Freight had an operating ratio of around 100, ABF was a 105.6, and Vitran was at 99.4. Through strong cost controls, Con-way reported a 97.3 operating ratio, its best quarter since the recession began, according to their financial reports.

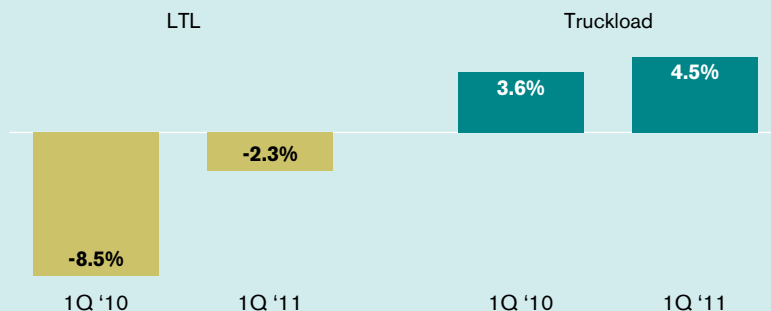
Con-way’s operation could be a harbinger for the sector. Its year-over-year improvement in the first quarter was because of a conscious decision by top management to jettison some unprofitable accounts. Con-way and other carriers are getting tougher and insisting on full freight surcharges, which are currently running about 22 percent to 24 percent in the LTL space.

In the LTL industry, the mantra for profitability remains freight density, cost control, and pricing discipline. If LTL carriers can understand their costs, they can price business to earn an appropriate return.

Carrier executives say privately that the time to gain solid returns is now. That’s because once pricing is firm and established and adequate returns are assured, then carriers can benefit from additional volumes by being able to leverage their network density. This occurs when freight demand is robust, which historically has been in the late second, third, and early fourth quarters of a calendar year. In other words, the future is now.

—By John D. Schulz,  
Contributing Editor

## Weighted average operating margin for public carriers by segment



Source: SJ Consulting Group, Inc

# Truckload: Tight capacity, more regulation, major concerns

The truckload (TL) sector, which supplies some 95 percent of capacity in the \$403 billion for-hire intercity trucking industry, is enjoying a renaissance after three years of financial doldrums.

Profitability is up at the major truckload carriers. When analysts consider top TL carriers among the publicly held operations, names like Swift Transportation, Werner Enterprises, U.S. Xpress, J.B. Hunt, Knight Transportation, and Celadon Group often top their recommendations.

“The overall health of the truckload sector has improved year over year,” says Mark Rourke, president of truckload services for privately held Schneider National. “We’re continuing to expand our regional truckload business footprint as well as bring new transportation solutions to the marketplace.”

As the latest data shows, the TL carriers have enjoyed a higher weighted-average operating margin for the most recent quarters than their colleagues in the less-than-truckload sector. Overall,

TL carriers have enjoyed a 4.5 percent average increase in margins in the first quarter of 2011, compared with a 2.3 percent decline among LTL carriers surveyed by SJ Consulting, a leading trucking analyst firm.

“Why is that? They all use the same trucks. They all pay the same for fuel. They all use the same drivers,” remarks Satish Jindel, principal of the firm. The answer lies in the nimbleness of the non-union TL carriers. They’re able to shed capacity faster than LTL carriers, which often have complex hub-and-spoke terminal networks requiring significantly more overhead than TL carriers, which go point-to-point with their loads.

But even with those inherent advantages, many TL carriers are concerned about possible threats to capacity and costs of doing business.

An increase in container ship transloading also could affect domestic capacity, according to some intermodal experts and analysts. A global container shortage is causing some ocean carriers



to transload an increasing percentage of their shipments at the ports of Long Beach and Los Angeles.

This, in turn, is causing a spike in long-haul, over-the-road freight demand for TL carriers out of Southern California. This would in turn put further pressure on capacity, which is excellent for major players in the TL market such as Hunt, Swift, and Celadon, but could have an adverse effect on overall TL capacity, executives say privately.

Then there’s the unclear regulatory environment for trucking. The Obama administration, through its Federal Motor Carrier Safety Administration, is proposing what could be a double whammy through stricter enforcement of driver standards and a potential reduction of driving hours for those drivers who do survive the tougher government scrutiny.

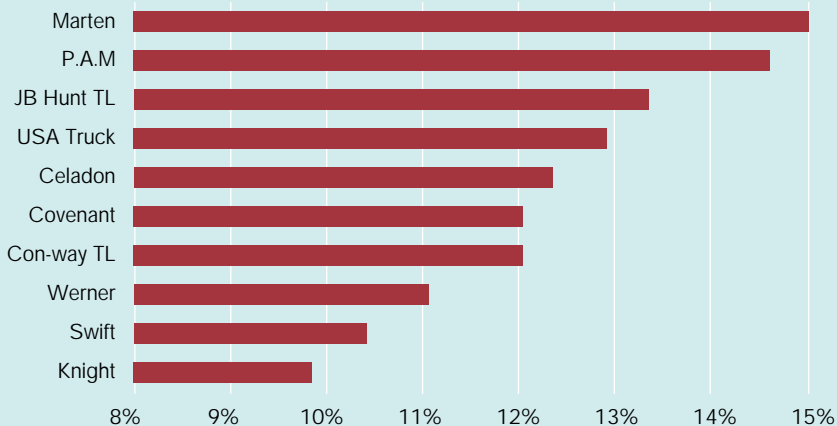
The government’s Compliance, Safety, Accountability (CSA) program could disqualify as many as 150,000 drivers. Potentially, a one-hour reduction in driving limits could exacerbate capacity. Until that rule is proposed later this year, the entire TL sector is on pins and needles.

“Regulations continue to provide uncertainty for carriers and shippers alike,” Schneider’s Rourke says. “The effects of CSA on driver capacity are already being felt.”

—By John D. Schulz,  
Contributing Editor

## Truckload yield improvement— revenue per loaded mile including FSC

(Y-O-Y % change, 1Q '11 vs. 1Q '10)



Source: SJ Consulting Group, Inc

# Rail:

## Steady growth on the rails

As the economic recovery has been riding waves of both optimism and anxiety, there's been one stable constant in the freight transportation environment: the railroad sector.

But before we examine the rails at the mid-point of 2011, we're best served by considering where the market was at this point in 2010—and that was in major recovery mode on the heels of a dismal 2009.

Since that time, it's fair to say that things are better from a volume perspective. However, volumes are still not back to the pre-recession levels witnessed in 2007. Those levels, say industry experts, won't be back for a while. But since the first half of 2010, the railroad industry appears to be back on track, with solid earnings and strong pricing clearly intact. As for volumes, rail carloads and intermodal containers and trailers are up roughly 4 percent and 10 percent, respectively, year-over-year for the first half of 2011.

"There is improved volume and improved confidence that as an economy

we have moved past recovery into whatever the next phase will be—perhaps a slow growth phase," said Tony Hatch, principal of New York-based ABH Consulting. "A year ago at this time there were questions about how sustainable things really were due to issues like the short-term economic stimulus and Cash for Clunkers."

Independent of the pace in railroad volume growth, it's clear that the uptick in confidence on the rails is also playing out in terms of capital expenditure investments being doled out by Class I railroads.

In March, the Association of American Railroads (AAR) stated that U.S.-based freight railroads are planning to spend \$12 billion in capital expenditures in 2011, following a \$10.7 billion investment in 2010. The 2011 tally would be a new record, with 2010 being the current record for railroad capital expenditures, according to the AAR.

"The railroad industry is not on the sidelines," said AAR President and CEO Ed Hamberger. "This industry

has been in the game. The \$12 billion investment for 2011 follows three years where we averaged \$10 billion per year; and up to this year they were the three highest years on record for capital expenditures, which occurred during the middle of the worst recession since the Great Depression."

Hamberger also noted that these capital expenditure investments are funded by private capital and not taxpayer funding, adding that the railroad industry owns, maintains, improves, and pays taxes on their rights-of-way. Other costs comprised in capital expenditures include



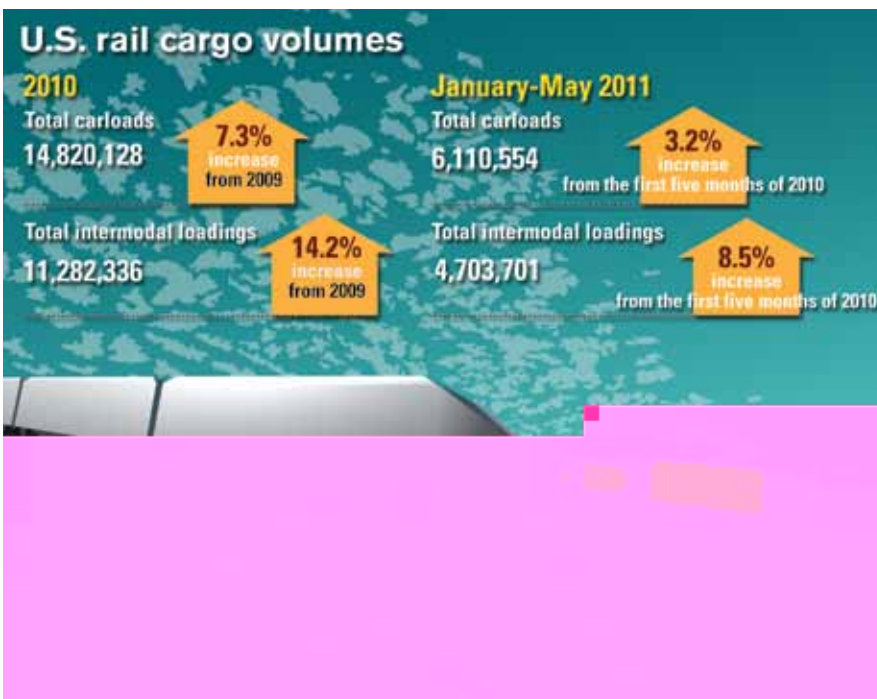
maintenance, with 20 cents of every revenue dollar going back into maintaining, expanding, and improving the U.S. rail network over the last 10 years.

Coupled with these expenses allocated towards rail investment is pricing power, which the railroads have had on a consistent basis going back to 2003. As has been the case for years, rail shippers have fought rate increases tooth and nail, citing how they are not getting enough "bang" for their railroad buck. This is especially true for captive shippers.

How the stand-off over rates between rail carriers and shippers plays out is far from settled, given the holding pattern that legislative efforts to re-regulate the industry—and re-authorize the STB—is in. However, rail shippers continue to make it clear that they are not satisfied with the status quo.

"Railroads have pricing power with captive shippers, and it is take it or leave it with rates," said Mike Snovitch, executive director of the Alliance for Rail Competition. "They are stuck with what railroads charge and filing a rate challenge case with the STB is a long costly process. Rail shippers want and need a truly friendly bill to help better meet their needs."

—By Jeff Berman,  
Group News Editor



# Ocean: Carriers get their house in order

According to analysts at IHS Global Insight, the housing crisis and continued decline in residential construction is making a major impact on containerized shipping volumes.

In his latest white paper, IHS Global Insight analyst Andrei Roudoi notes that housing market indicators, such as new starts and permits last spring, were “quite unfavorable,” and there is a substantial risk that residential construction and furniture imports will underperform.

“While falling unemployment will probably stimulate demand for housing, tighter lending regulations, as well as declining house prices combined with rising prices for construction materials, may lead to another decline in real residential construction in 2011,” says Roudoi.

Following furniture, wearing apparel and fruits and vegetables are the next two most significant containerized import categories. In 2010, wearing apparel accounted for 6.6 percent of total containerized exports, while fruits and vegetables had a 6.3 percent share.

“The recession affected these categories less than many others, such as furniture, metal products, or motor vehicle parts,” says Roudoi. “In 2010, wearing apparel imports rose 12.5 percent, exceeding the pre-recession high.”

Fruit and vegetable imports inched up 2 percent, remaining slightly below the pre-recession peak. IHS Global Insight forecasts that imports of these commodities will grow this year, 7.6 percent and 2.7 percent, respectively.

Furthermore, IHS maintains that world trade has mostly recovered from the recession. Analysts estimate that after plunging 10 percent in 2009, global trade volume (measured in tons) increased 8.5 percent in 2010. In 2011, it is expected to grow 6.9 percent.

“Thus, the volume will exceed the pre-recession level, and the recovery will be generally completed,” says Roudoi. “At the same time, volumes in some major trade segments—notably, U.S. containerized import volume—will remain below the pre-recession numbers.”

Ocean carrier executives, meanwhile, are taking nothing for granted, and the tired old cliché “thinking outside the box” takes on new meaning when invoked by the world’s leading container shipping company.

In addition, the container shipping industry may be standing on the brink of an “era-defining moment” as it faces fundamental challenges, says Maersk Line CEO, Eivind Kolding. He adds that if carriers are to secure their right

to operate in the future, the industry needs to change now.

He notes that containerization—often referred to as the engine of globalization—revolutionized world trade. The potential it unlocked by connecting producers and consumers across the world enabled both shipping lines and their customers to develop their businesses in ways that previously had seemed impossible.

“However, container shipping is also the story of an established business model that often disappoints customers: one in every two containers is late, shipping lines can be complex



to do business with, and the industry, even while being the most environmentally-friendly transportation mode, still lacks transparency and common goals,” Kolding says.

With examples from the automotive, aviation, portable music players, and mobile phone industries, Kolding adds that just because an industry is established, it may only be a “few years from being completely overtaken” by new technology.

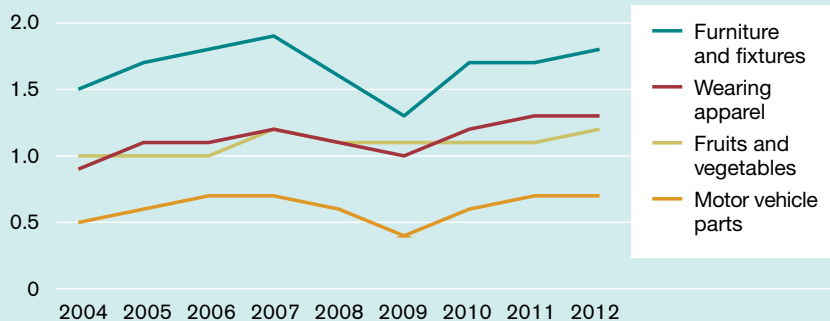
“Market and customer behavior is forcing companies to never lose sight of what customers really want—including the needs that they are not even aware of.”

Finally, Kolding asks: “Why not see these as fantastic opportunities? What if we could guarantee that cargo would be on time, every time? What if placing a shipping order was as easy as buying an airline ticket? What if the shipping industry was known for beating environmental expectations—not struggling to meet them?”

—By Patrick Burnson,  
Executive Editor

## U.S. containerized imports of several important categories

(Millions of TEUs)



Source: Zepol



# Air Freight: Challenges remain, but carriers prove resilient

When the Council of Supply Chain Management Professionals (CSCMP) released its State of Logistics Report for 2011 in Washington, DC on June 15, its message was not as upbeat across the transportation modes as was originally thought. For air cargo, the report found that despite the fact that air freight revenues rose 11.2 percent in 2010, the sector hit the wall by the end of the year.

Most of that growth was in first half 2010, but by mid-year it retracted as retailers, facing disappointing sales projections, turned largely to moving shipments by ocean.

In its own data, the International Air Transport Association (IATA) refers to last year's results as "the best year of the decade" whereby air freight saw an \$18 billion profit, but realized a "pathetic" 3.2 percent profit margin.

CSCMP reports that air carriers continued to see business dwindle during the first half of 2011 as customers, facing higher transportation costs due to rising oil prices, continued to go with cheaper options whenever possible. During his State of the Industry speech on June 6, departing IATA Director General Giovanni Bisignani revealed IATA expects the profit margin for 2011 to be a very disappointing 0.7 percent with overall profits coming in at \$4 billion, down a hefty 78 percent from 2010.

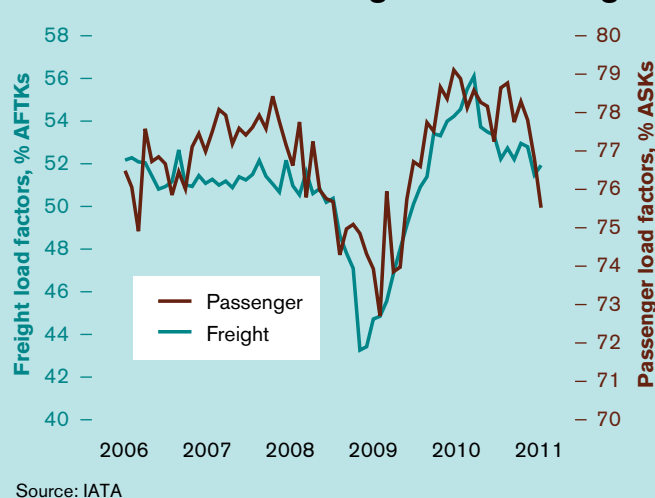
Events affecting the air cargo industry this year seem almost biblical: tornadoes, earthquakes, tsunamis, terrorism, wars, revolutions, volcanoes, as well as failing economies and continued sky rocketing oil prices. Already in the first half of 2011, the industry is being hit by more disasters, say nothing of oil spiking above \$110 per barrel.

Nevertheless, it's worth noting that

the airline industry still shows remarkable resilience. "A decade ago, we needed oil below \$25 just to break even," says Bisignani. "It's a tribute to every airline that we expect a \$4 billion profit at today's oil prices."

The Japanese earthquake and subsequent tsunami alone knocked 1 percent off global traffic and depressed

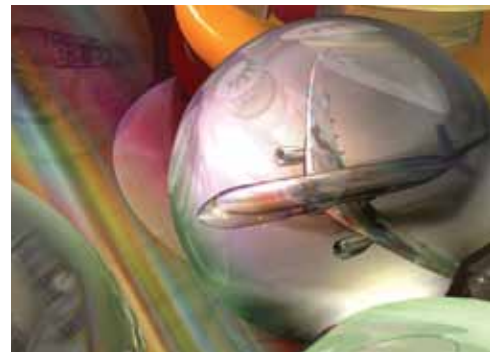
## Load factors are declining from record highs



an important market that generates 10 percent of the industry's \$600 billion in revenues, reports IATA. The political unrest in the Middle East and North Africa has slowed growth in both regions and resulted in oil prices skyrocketing.

Last year, with oil at \$79.4 per barrel, the fuel bill was slated at \$139 billion. This year the forecast is for oil to average \$110 a barrel with that total fuel bill hitting \$176 billion. Consequently, IATA predicts cargo growth to fall from 18.3 percent in 2010 to 5.5 percent in 2011 with yield growth at 4 percent.

In fact, yields remain an issue on several major trade lanes, particularly North America and Asia as well as Europe and Asia where countries have trade imbalances with China. Consequently, carriers flying westbound from



North America and eastbound from Europe to Asia are unable to operate to capacity.

"This puts pressure on yields," says Joe Lawrence, president of Airline Services International, Inc. "For airlines to gain revenue they need to raise prices." But with more cargo moving to steamship lines, air carriers are lowering rates to try and attract business.

Still there are markets where yields remain high. IATA reports that with China today representing 26 percent of all global air traffic, China is air cargo's largest market. IATA expects that by 2014 China will represent 30 percent of all global traffic, a fact that will continue to have an impact on rates and yields. In fact, both China and India are growing by double digits.

And, South America, Australia, and South Africa are seeing increased cargo demands. In Brazil, demand for goods outstrips supply. Many manufacturers in China, particularly in the high tech sector, ship goods there by air.

Despite today's challenges, today's air carriers are positioning themselves for these markets by acquiring more modern and fuel efficient fleets. Carriers are also integrating with other airlines to gain capacity. Lufthansa, for example, integrated with Austrian Airlines, re-integrated its grounded MD-11 fleet, and increased the fleet of AeroLogic to eight aircraft.

"This year we have announced the order for five Boeing 777 freighters that will be delivered between 2013 and 2015," reports Michael Goentgens, Lufthansa Cargo spokesman.

—By Karen E. Thuermer,  
Contributing Editor