

# Industry Surveys

## Transportation: Commercial

*Jim Corridore, Railroads & Trucking Equity Analyst*

SEPTEMBER 2014

|  |    |
|--|----|
| Current Environment .....                                | 1  |
| Industry Profile .....                                   | 10 |
| Industry Trends .....                                    | 12 |
| How the Industry Operates .....                          | 20 |
| Key Industry Ratios and Statistics .....                 | 28 |
| How to Analyze a Commercial Transportation Company ..... | 30 |
| Glossary .....   | 34 |
| Industry References .....                                | 36 |
| Comparative Company Analysis .....                       | 37 |

This issue updates the one dated February 2014.

**CONTACTS:**

**INQUIRIES & CLIENT SUPPORT**  
800.523.4534  
clientsupport@  
standardandpoors.com

**SALES**  
877.219.1247  
wealth@spcapitaliq.com

**MEDIA**  
Michael Privitera  
212.438.6679  
michael.privitera@spcapitaliq.com

**S&P CAPITAL IQ**  
55 Water Street  
New York, NY 10041

Please see General Disclaimers on the last page of this report.

## Topics Covered by Industry Surveys

---

*Aerospace & Defense*

*Airlines*

*Alcoholic Beverages & Tobacco*

*Apparel & Footwear:  
Retailers & Brands*

*Autos & Auto Parts*

*Banking*

*Biotechnology*

*Broadcasting, Cable & Satellite*

*Chemicals*

*Communications Equipment*

*Computers: Commercial Services*

*Computers: Consumer Services &  
the Internet*

*Computers: Hardware*

*Computers: Software*

*Electric Utilities*

*Environmental & Waste Management*

*Financial Services: Diversified*

*Foods & Nonalcoholic Beverages*

*Healthcare: Facilities*

*Healthcare: Managed Care*

*Healthcare: Pharmaceuticals*

*Healthcare: Products & Supplies*

*Heavy Equipment & Trucks*

*Homebuilding*

*Household Durables*

*Household Nondurables*

*Industrial Machinery*

*Insurance: Life & Health*

*Insurance: Property-Casualty*

*Investment Services*

*Lodging & Gaming*

*Movies & Entertainment*

*Natural Gas Distribution*

*Oil & Gas: Equipment & Services*

*Oil & Gas: Production & Marketing*

*Paper & Forest Products*

*Publishing & Advertising*

*Real Estate Investment Trusts*

*Restaurants*

*Retailing: General*

*Retailing: Specialty*

*Semiconductor Equipment*

*Semiconductors*

*Supermarkets & Drugstores*

*Telecommunications Thrifts &*

*Mortgage Finance*

*Transportation: Commercial*

## Global Industry Surveys

---

*Airlines: Asia*

*Autos & Auto Parts: Europe*

*Banking: Europe*

*Food Retail: Europe*

*Foods & Beverages: Europe*

*Media: Europe*

*Oil & Gas: Europe*

*Pharmaceuticals: Europe*

*Telecommunications: Asia*

*Telecommunications: Europe*

---

## S&P Capital IQ Industry Surveys

55 Water Street, New York, NY 10041

CLIENT SUPPORT: 1-800-523-4534.

VISIT THE S&P CAPITAL IQ WEBSITE: [www.spcapitaliq.com](http://www.spcapitaliq.com)

S&P CAPITAL IQ INDUSTRY SURVEYS (ISSN 0196-4666) is published weekly. Redistribution or reproduction in whole or in part (including inputting into a computer) is prohibited without written permission. To learn more about *Industry Surveys* and the S&P Capital IQ product offering, please contact our Product Specialist team at 1-877-219-1247 or visit [getmarketscope.com](http://getmarketscope.com). Executive and Editorial Office: S&P Capital IQ, 55 Water Street, New York, NY 10041. Officers of McGraw Hill Financial: Douglas L. Peterson, President, and CEO; Jack F. Callahan, Jr., Executive Vice President, Chief Financial Officer; John Berisford, Executive Vice President, Human Resources; D. Edward Smyth, Executive Vice President, Corporate Affairs; and Lucy Fato, Executive Vice President and General Counsel. Information has been obtained by S&P Capital IQ INDUSTRY SURVEYS from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, INDUSTRY SURVEYS, or others, INDUSTRY SURVEYS does not guarantee the accuracy, adequacy, or completeness of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information.

Copyright © 2014 Standard & Poor's Financial Services LLC, a part of McGraw Hill Financial. All rights reserved.

STANDARD & POOR'S, S&P, S&P 500, S&P MIDCAP 400, S&P SMALLCAP 600, and S&P EUROPE 350 are registered trademarks of Standard & Poor's Financial Services LLC. S&P CAPITAL IQ is a trademark of Standard & Poor's Financial Services LLC.

# CURRENT ENVIRONMENT

---

## Driver shortage hurts trucking industry

A severe shortage of truckers, fueled by new federal trucking regulations, has been creating a crisis in the industry that transports 70%, or about nine billion tons, of all US freight annually. The United States has 3.2 million truckers, according to the trade group American Trucking Associations (ATA), but as of early 2014, there was a shortage of 30,000 qualified long-distance drivers in the country—a statistic expected to rise to more than 200,000 in the next decade. The ATA pointed out that the shortage is caused by many factors, including regulations, demographics, and the unappealing long-distance work.

In July 2013, the government announced new provisions of the Hours-of-Service rule, which limited the number of hours truckers are allowed to work and required more layovers (at least two 30-minute breaks). According to the trucking industry, this rule has curtailed productivity and increased trucking expenses, the cost of raw materials, and, consequently, the price of consumer goods. In a June 2014 study assisted by Logistics Management, a publication that covers freight transportation and supply chain, shippers expect that the rule will cut trucking productivity by 8%–9%. According to Logistics Management, truckers are bracing themselves for another potentially limiting rule, which would reduce the truck speed limit to 63–68 mph, slower than the current 70–75 mph speed limit. This rule would mean that long-haul drivers who are paid by the mile will be driving longer hours without extra pay.

Other proposed regulations underway include additional testing for drug and alcohol abuse, and electronic on-board recorders to catch mileage cheats.

*The Wall Street Journal* reported on July 7, 2014 that a number of carriers have unfilled openings despite advertising efforts across various platforms to find drivers. In an effort to hire additional truckers, some carriers are deploying recruiters every day to driving schools in certain parts of the country. In addition to difficulty in hiring, more drivers are retiring than entering the trucking industry. According to exit interviews with drivers in the article cited, being close to home outweighs earnings for many; hence younger people starting families are not interested in the long-distance life nor jobs that require them to be away from home two to three times per week. In response to this, operators are offering more flexible schedules, on top of improved health benefits and new trucks to drive.

Swift Transportation, the largest truckload carrier in North America, reported higher than expected driver turnover and unseated truck count in its second-quarter 2014 earnings. To attract drivers, the company announced that it will improve training and increase wages and benefits. For the said quarter, Swift's salaries, wages, and benefit costs rose by \$14.2 million to \$238.1 million, compared with \$223.9 million in 2013.

Other carriers are stepping up their efforts to hire more drivers. These efforts include setting up internal driving schools, recruiting ex-military personnel returning from Afghanistan and Iraq, and offering sign-up bonuses of as much as \$5,000 for those who are willing to stay with the company for at least a year. At a time when demand for commercial transportation is firming up, we think that large and small carriers need to consider ways to attract and retain truck drivers in order to maintain the same levels of service in the industry.

### **Trucking rates rising amid capacity issues; stronger demand**

An improving economy, rising freight volumes, higher equipment costs, and lack of available trucks could cause freight rates to rise. On March 5, 2014, Logistics Management highlighted three reasons for the rising freight rates in 2014: driver shortage; stagnant carrier fleets; and an increase in brokerage firms' rate, which leads to higher spot market rates.

According to the JOC Group, a global firm that provides information on trade, transportation, and logistics, truckload carriers have the advantage of picking and choosing freights that best return profits as they are fully booked due to strong demand. Loads hauled by Landstart System rose 9% year over year in the second quarter of 2014, while revenue per load increased 13% from 2013. Trucking revenue at Werner

Enterprises rose 4% year over year. The company reported that it was “overbooked” in the second quarter of 2014, *i.e.*, it had more available freight than trucks.

Transportation costs are also rising because of the extreme weather conditions that disrupted the supply chain at the onset of the year, and the pent-up demand from industrial and construction activities coming from an improving economy.

We think the improving US economy will drive demand for transportation in 2014 via all delivery methods, but we expect strong demand in the trucking industry due to tight capacity.

### **Freight markets strengthening**

Various measures of economic activity, such as consumer spending, posted year-over-year improvements in the first half of 2014. The Purchasing Managers Index (PMI), which provided a degree of corroboration, managed to maintain readings in excess of 50%, from 51.3% in January 2014 to 57.1% in July (indicating an expansion of the overall economy). Gradually improving unemployment numbers and the housing market rebound have shifted the country away from recession, in our view, but have yet to contribute to more robust growth. In the commercial freight markets, volumes for trucking companies posted year-over-year gains, while the railroads experienced mixed volume trends as five of 10 major categories of shipments were down for 2013. Volumes for domestic air cargo in the first five months of 2014 increased by 2.0% from the same period in 2013, according to data from the Bureau of Transportation Statistics (BTS), an agency of the US Department of Transportation.

The for-hire truck freight index calculated by the ATA rose 6.2% in 2013—the best year for the index since 1998—capped by the record-level index of 131.7 in December. According to the ATA, an increase in heavyweight shipments—particularly those tied to frac sand (used in shale drilling operations), homebuilding materials, and auto production—drove the index performance, rather than a broader participation of goods. The ATA also explained that the tonnage acceleration in the second half of 2013 pointed to an economy that was stronger than expected. In July 2014, the ATA’s advanced seasonally adjusted index stood at 139.2, an increase of 2.9% from the same period last year.

Data from the Association of American Railroads (AAR), a trade group, indicate that, year to date through August 2014, carloadings were up 7% from a year ago. In 2013 (through December 28) carloadings were down 0.5% versus the same period in 2012. Although shipments for the year through December 21, 2013, exceeded the prior-year levels in five of the 10 major carloading categories tracked by the AAR, they were more than offset by sharp reductions in coal and grain shipments. Among the categories showing gains were petroleum products, motor vehicles, chemicals, and lumber and wood products. Total intermodal unit traffic was up 4.6% for 2013 through December 28, following a 3.2% increase in full-year 2012. As of August 2014, year-to-date intermodal traffic was up 9% year over year.

Revenue ton-miles for the domestic air cargo sub-industry were up 0.49% during 2013 compared with the year-earlier period, according to the latest data from the BTS.

By our analysis, the volume data are not signaling an accelerating pace of growth, but they are in line with economic forecasts from Standard & Poor’s Economics (which operates separately from S&P Capital IQ). We note that real gross domestic product (GDP) increased 2.3% in 2012, and 2.2% in 2013. It decreased 2.1% in the first quarter of 2014 and increased at an annual rate of 4.0% in the second quarter, according to the latest estimate from the US Bureau of Economic Analysis (BEA). As of August 2014, Standard & Poor’s Economics was forecasting a growth rate of 4.0% in the second quarter and 3.6% in the third quarter.

Retailers and manufacturers appear to have settled into a pattern of ordering and producing only at levels in line with demand. This is evident in the various inventory-to-sales ratios for manufacturers and retailers starting in 2011. We think purchasing managers, at both the factory and retail levels, remain unsure about the pace of economic recovery, and thus are hesitant to build inventories much above the current rate of orders and/or sales.

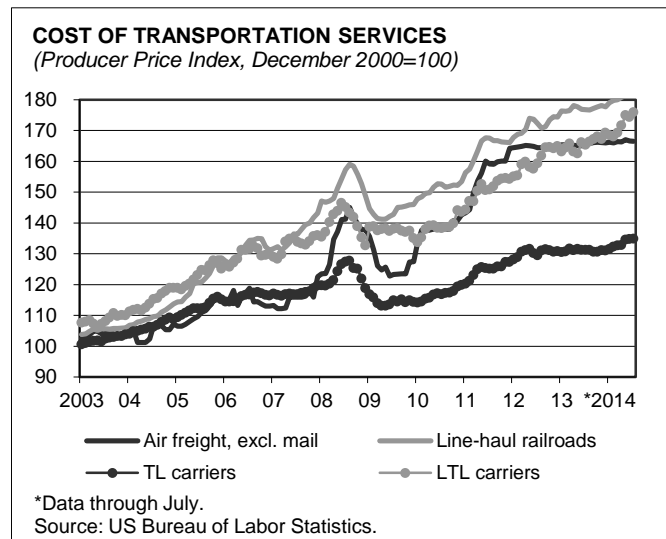
## TOP-LINE GROWTH OFFSET BY RISING OPERATING EXPENSES

Carriers have been trimming costs from their operations since 2008, but the focus has shifted. During 2008 and 2009, they were cutting capacity as business levels declined. Carriers then shifted their focus to optimizing utilization of existing assets and shedding poorly priced freight as volumes stabilized. At the same time, improving fuel mileage and lowering fuel expenses became increasingly important. However, with freight traffic still tepid and employee counts slowly rising, we think future margin expansion is dependent on price increases and the ability of all carriers (trucks, railroads, air cargo) to hold down operating costs.

### Prices moving higher

According to the producer price indexes (PPI) produced by the Bureau of Labor Statistics (BLS), a fact-finding agency within the US Department of Labor, average prices received by the various freight transportation providers have been rising since early 2010. Large swings in fuel prices have contributed to equally large moves in the fuel surcharge component of revenues.

The price index for truckload (TL) freight improved 0.5% in 2013 following a 4.6% increase in 2012, according to the BLS. As of July 2014, prices were up 2.8% compared with July 2013.



than-truckload (LTL) freight-prices increase dropped to 3.4% in 2013 after an increase of 6.2% in 2012. As of July 2014, the index was up 6.4% from the July 2013 level. Based on comments from the companies themselves, large trucking companies are making small gains when repricing contracts, which are just enough to cover increases in operating costs. We think increases in core pricing will average between 1% and 2% for most truckload carriers during 2014, following an expected increase of 2%–3% in 2013, and a 3%–4% rise in 2012.

The BLS producer price index for railroads increased 3.1% in 2013, following an increase of 4.5% in 2012. As of July 2014, the index was up 2.6% from the July 2013 level. Statements from the Class I rails indicate, in our view, that core pricing (excluding the impact of fuel) is up about

3%. We think the railroads achieved pricing gains in the low-single digits during 2013, slightly exceeding rail cost inflation. We expect a similar level of gains for 2014. The BLS producer price index for scheduled airfreight increased 0.5% in 2013 after having increased 5.7% in 2012. As of July 2014, the index was up 0.6% compared with July 2013. Anecdotal reports from air cargo companies suggest that shippers are quite price sensitive and have shifted a portion of their volumes to ocean liners. We also think that commercial passenger airlines are again using belly capacity to carry freight.

## RAILROADS: RISING OIL VOLUMES AND RAILROAD SAFETY

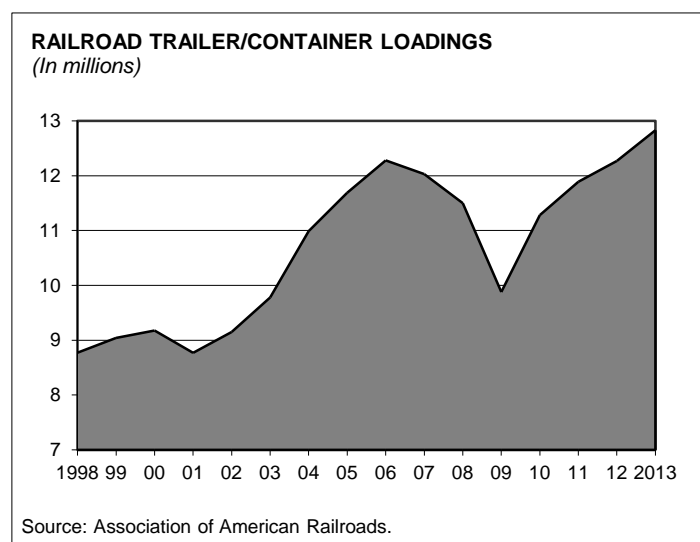
Surging oil and gas production in the US has been driving strong volumes on the rails—a trend we expect to continue over the coming years. The AAR reported in July 2014 that originated carloads of crude oil on US Class I railroads rose from 9,500 in 2008 to 407,761 in 2013 when US crude oil production rebounded to 7.5 million barrels per day, up from the 2008 level of 5.0 million barrels. The Energy Information Administration estimates that crude oil production will reach an average of 8.5 million barrels per day in 2014 and 9.0 million barrels per day in 2015. With this significant increase in volume, railroads have reviewed operations and updated practices to enhance crude oil safety. Existing pipelines lack the capacity to transport high volume; hence, the oil must travel by rail under stringent safety regulations. However, new proposed rules, which might reduce the amount of oil that tank cars can ship, are worrisome for the railroad industry.

After a series of derailments and explosions that involved trains filled with oil from the Bakken Shale—an important US shale deposit—the US government has proposed rules to upgrade safety for trains that carry flammable liquids. In 2013, 47 people died when a train full of oil from North Dakota exploded in a town in Quebec. The proposed rules would require tens of thousands of railroad tank cars carrying crude oil to be replaced, retrofitted, or phased out by 2017. Tank cars carrying ethanol would need to be upgraded by 2018, while tank cars transporting other flammable liquids that are less hazardous than oil or ethanol would need to be improved or replaced by 2020. The Railway Supply Institute estimates that about 80,000 DOT-111 railcars were built before 2011 to transport oil, ethanol, and other flammable liquids. Another 23,000 were built with improved crash-resistant features after 2011.

The Department of Transportation is soliciting comments on railcar design, which includes improved brakes and thicker steel walls. While the new design will cover all cars built after October 2015, existing cars would have to be retrofitted, retired, or used to carry less flammable liquid cargo. Upgraded trains would be allowed to travel up to 50 mph, while existing railcars would be limited to 40 mph.

We think these planned measures, on top of the existing ones, will help to increase railroad safety in the US. In July 2014, the AAR reported that US railroads have been making an effort to enhance safety through accident mitigation, emergency response, and accident preventions acts including:

- ◆ **Reinvestments.** Railroads have invested nearly \$115 billion in the past five years to improve rail networks.
- ◆ **Technological advancements.** New technologies, many of which are developed at the Transportation Technology Center in Colorado, have been incorporated in railroads to detect defects and gather data.
- ◆ **Routing.** The industry has partnered with federal agencies to develop the statistical routing model called the Rail Corridor Risk Management System to help design the safest rail routes.
- ◆ **Inspections.** The Federal Railroad Administration (FRA) issued an industry-wide safety advisory, which came into effect on March 25, 2014. The FRA inspects rails for internal defects and regulates compliance with the rules. Aside from the FRA inspections, the industry will conduct at least two automated track geometry inspections every year on main line routes that service trains carrying 20 or more carloads of crude oil.



◆ **Speed restrictions.** The industry has a self-imposed 50-mph speed limit for trains carrying 20 or more carloads of crude oil. From July 1, 2014, trains carrying 20 or more carloads of crude oil that include at least one older DOT-111 railcar are limited to a speed of 40 mph in designated urban areas.

◆ **Train braking system.** Emergency brakes are placed at the front and the rear of trains.

**Intermodal carloadings strong**

Intermodal traffic—the movement of highway trailers and marine containers by more than one mode of transportation—was more than 1.0 million containers and trailers in July 2014, up 6.3% from July 2013. The

weekly average of containers shipped was 257,232, a record high for any July in history, according to the AAR. For 2014, preliminary volume figures indicate that intermodal shipments were up 3.7% to 8.9 million units, compared with the prior-year period.

Accounting for an estimated 15% of revenue in 2013, intermodal traffic showed an increase of 3.2% to 12.8 million trailer and container units for US Class I railroads. Intermodal containers shipped via US railcars increased 5.1% to 11.3 million units in 2013, while truck trailers shipped via railcars remained at 1.5 million units. We think that the trailer unit segment of the market (often referred to as trailer-on-flat-car, or TOFL) has been weaker than the container unit segment because shippers are putting more of their freight directly into containers and using the railroads for long-haul shipments due, in part, to cost effectiveness. We view this as a structural change in the marketplace rather than a short-term market share fluctuation.

### **Automotive and energy shipments**

Energy and auto-related shipment categories have been experiencing consistent growth. Automotive shipments rose 5.1% in 2013, to represent 5.8% of total rail carloadings. In 2012, auto-related shipments were up 16.5% over 2011. Canadian National Railway's automotive revenue climbed 10% during the second quarter of 2014 due to strong import and export volume coming from the demand for finished vehicles.

Over the past three years, railroads have also been benefiting from the rapid expansion in drilling in the shale gas regions. The rails have been carrying inbound freight, such as steel piping and frac sand. Canadian National Railway noted in its second-quarter 2014 earnings call in July 2014 that carloads of frac sand grew 60% in the second quarter. Likewise, Canadian Pacific Railway Ltd. (CP) is seeing strong shipment growth in North Dakota and the Bakken region. In 2011, CP carried 13,000 carloads of crude oil on its network, 70,000 in 2012, and 90,000 in 2013. The company expects to finish 2014 with 140,000 carloads. After signing a new service agreement in January 2013 to serve a major East Coast refinery, CP thought it can double, if not triple, its crude oil carloads by the end of 2015. Just as important, these rail carriers are also benefiting from the need to carry oil from these regions to designated refineries. Petroleum product shipments were up 31.1% in 2013 and up 46.3% in 2012.

### **Although coal volumes stabilize, long-term trend is still downward**

As the railroad industry's second largest source of revenues, coal accounted for 21.0% of carloads in 2013, down from 22.4% in 2012. By our calculations, coal provided about 20% of revenues for the major railroads in 2013, down from 23.9% of revenues in 2012. About 65% of US coal output—more than 90% of which is destined for electricity generators—is shipped by rail. Carloadings of coal have been under pressure since 2010 due to lower-than-expected electricity demand, above-average coal stockpiles, and a big decline in natural gas prices, driven by improved drilling techniques leading to increased usage of natural gas by electricity generators.

One area that warrants continued attention, in our view, is the long-range planning by utilities regarding new power plants and the specified fuel. NRG Energy Inc. has said that by 2014 it will close 1,455 megawatts of coal-fired capacity that it acquired through its late-2012 merger of GenOn Energy Holdings. In December 2013, the company announced that it would shut down over 1,200 megawatts of coal-fired capacity in Maryland in 2017. The Tennessee Valley Authority's (TVA) Integrated Resource Plan, dated March 2011, examined the generating capacity the company will need over the next 20 years to meet projected customer needs. As part of the plan, the TVA is looking to use more environmentally friendly power sources. As a result, it plans to retire between 2,400 and 4,700 megawatts (17% to 32% of its coal-fired generating capacity) by 2017. More recently, the TVA's plans included spending \$350 million to improve energy efficiency at existing coal-fired units, plus the retirement of 2,700 megawatts by 2017, with possibly more to follow. In November 2013, the TVA announced plans to retire eight coal-powered plants. Another company moving away from coal-fired plants is Progress Energy (now a subsidiary of Duke Energy), which closed three units in 2012.

We also expect that the process for obtaining new building permits for coal-fired plants will become increasingly difficult in coming years because of the EPA's more aggressive stance regarding greenhouse gases, including carbon dioxide. The EPA proposed a new set of rules concerning coal and emissions from coal-fired power plants in late September 2013, which would effectively prevent the building of any new coal-fired plants in the US due to stringent emission thresholds.

### **Grain volumes decline**

Year to date through August 23, 2014, total carloads were up 6% over 2013, with grain carloadings up 39% from the same period in 2013, according to data from the AAR. However, grain witnessed a big decline in carloadings in 2013 and 2012. Data from the AAR indicated that grain shipments were down 5.0% in 2013 and 13% in 2012 compared with the previous year. Through December 28, 2013, total shipments were almost flat at 1% year over year, and grain accounted for 5.6% of total carloadings. Carloads declined 2% in 2012, following another 2% drop in 2011. The decline in carloads was attributed to a sharp reduction in the corn harvest as a result of the severe drought during the summer of 2012. The US Department of Agriculture (USDA) has called it the worst drought in at least 25 years, affecting around 80% of US agricultural land. However, data from the USDA indicated that corn production for 2013 increased to approximately 14.1 billion bushels, up 32% from the 10.7 billion bushels harvested in 2012. As of August 12, 2014, the USDA forecast 14.0 billion bushels for 2014.

### **AIR CARGO: IMPROVING DEMAND**

Domestic air cargo activity bottomed in February 2009, when monthly revenue ton-miles totaled 860.2 million, according to data from the US Department of Transportation. After that, monthly comparisons generally improved until October 2010, when they began to decline once again, hitting a new low of 853.3 million revenue ton-miles in February 2011. Domestic revenue ton-miles in 2011 totaled 12.13 billion, down 3.2% from 2010. However, in 2012, monthly revenue ton-miles improved and totaled 12.37 billion, up 2.0% from 2011. The recovery continued, albeit slowly in 2013 when it reached 12.43 billion, up 0.49% from 2012. Year to date through May 2014, revenue ton-miles were up 2.03% from the prior-year period.

In our view, a general resumption in economic growth and sharp declines in jet fuel prices that made airfreight less expensive drove the recovery in 2009. However, we think that completion of the inventory restock period and a renewed rise in fuel prices contributed to a decline in domestic revenue ton-miles from late 2010 through much of 2011. S&P thinks that an increasing portion of freight has been shifted to less expensive (and less fuel-intensive) modes of transportation; namely, trucks and rails. Both of these modes have worked hard to expand their next-day and two-day delivery options, in direct competition with airfreight. In our view, the improvement in cargo ton-miles during 2012 and through 2013 can be attributed to a general recovery in the US, similar to reports from the trucking and rail markets. We expect volumes to continue to recover as the global economy continues to strengthen, but we think that some mix-shift issues are likely to persist, as shippers have learned they can effectively cut transportation costs by using slower delivery methods.

Through May 2014, domestic freight accounted for 20.4% of total air cargo revenue ton-miles, versus 20.3% in the same period of the previous year. This indicates a slight improvement in the domestic freight share of total air cargo. The domestic freight share was 20% in 2013, 19.8% in 2012, 18.8% in 2011, and 19.3% in 2010.

According to estimates from the Federal Aviation Administration (FAA), all-cargo carriers, such as FedEx Corp. and United Parcel Service, flew 79.7% of the combined domestic and international cargo revenue ton-miles in 2013.

### **International volumes up for half of 2014**

Year to date through May 2014, the international segment of the air cargo industry reported revenue ton-miles of 13.22 billion, up 1.5% from a year ago. In 2013, international revenue ton-miles were 32.83 billion, up from 32.72 in 2012, and down from 34.57 billion in 2011, according to the BTS. Traffic between the US and Europe, which represents about 11% of total international ton-miles, decreased 3.03% in 2013, but was up 4.6% in the first five months of 2014. Traffic between the US and Asia decreased 4.0% in 2013, but was up 0.3% in the first five months of 2014. We expect volumes to continue to be shifted to the ocean shipping companies in 2014 due to lower prices, and improvements in their time-definite delivery services in association with rail carriers or trucking companies.

Considerable capacity was taken out of the domestic cargo markets during the recession, but carriers are cautiously bringing it back. According to data from the FAA, the total fleet of cargo aircraft in the US

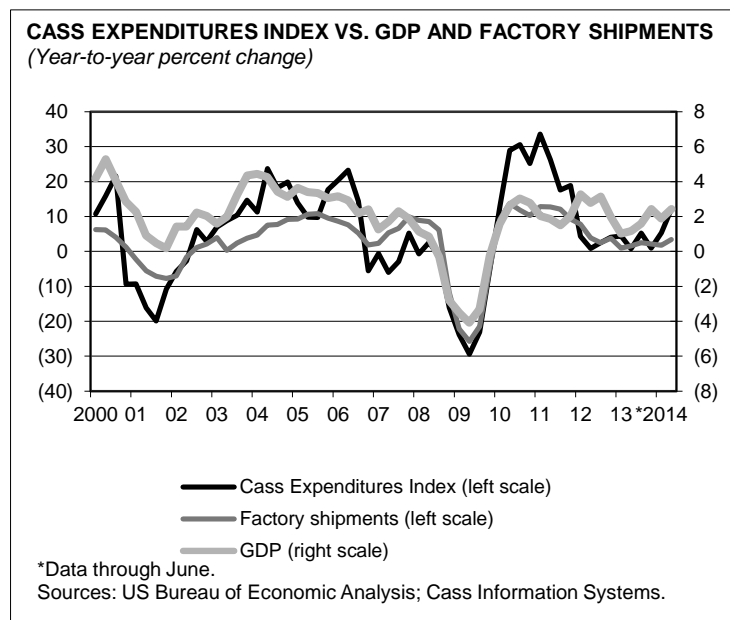


shrank to 841 in 2009 from 960 in 2008 and more than 1,000 in 2005. However, the fleet size improved to 850 in 2010 and to 870 in 2011, before slipping to 838 in 2012 and an estimated 740 in 2013. This was due to consolidation among regional carriers and retirements of smaller jets and aircrafts resulting from high fuel prices. In December 2013, the International Air Transport Association (IATA), a trade organization for the global airline industry, forecast that international airfreight tonnage would rise 3.2% annually, reaching approximately 34.5 million tons by 2017.

## TRANSPORTATION REVIEW AND OUTLOOK

### Trucking

As of August 2014, our fundamental outlook for the S&P Trucking sub-industry for the next 12 months was neutral. Freight volumes have generally been improving since mid-2009. However, the rate of increase slowed during 2012 and 2013. Commentaries during January from the various carriers suggested that load counts strengthened more than what is typical during December. However, severe weather conditions may have contributed to supply-chain distortions. Carriers are making progress in raising rates, but most of the gain is offset by increases in driver pay and inefficiencies caused by the July 2013 change in hours-of-service regulations. We expect the severe winter weather across much of the US to pressure first quarter margins too. While carriers face increased competition from the railroads, we think the larger, better-capitalized truckers are taking market share from the small players. The group, which has historically underperformed during periods of slowing economic growth, is frequently one of the first to turn as the market anticipates an economic recovery, although it is important to keep in mind that past performance is not necessarily an indicator of future results.



The general trend among truckload (TL) carriers in the fourth quarter of 2013, based on earnings reports, has been an approximate 2.0% increase in core prices, excluding fuel surcharges. Volumes were slightly below the year-ago period, as large carriers culled unprofitable shipments. Among the largest carriers, the focus has been on asset optimization and client profitability. Earnings before interest, taxes, depreciation, and amortization (EBITDA) for the group showed a 6.9% increase, on average, versus the fourth quarter of 2012. On the less-than-truckload (LTL) side, carriers felt pricing discipline is being maintained, with volume improving modestly for those that reported through late January.

The Cass Information Systems' Freight Indexes showed a 1.0% increase in

expenditures (including fuel) but a 3.2% decrease in shipments during December 2013, versus December 2012. Carriers expect cost pressures to remain elevated but believe they can move rates accordingly. Diesel fuel prices generally trended lower during 2013, and appear to be stabilizing.

The S&P Trucking Index increased 18.2% year to date through September 12, versus a 0.15% increase in the S&P 1500 Composite Stock Index. In 2013, the sub-industry index increased 36.5%, compared with a 30.1% increase for the S&P 1500. Valuations for the group are mostly below the midpoint of their historical ranges.

## **Railroads**

As of August 2014, our fundamental outlook for the S&P Railroads sub-industry was neutral. We think average freight rates, excluding fuel, will rise at a 3% pace during the next 12 months due to price escalators built into current contracts, as well as revised terms on renewals. Weekly volumes, while adhering to seasonal patterns, appear to be in an uptrend, with the exception of coal where power plants are converting to natural gas instead of coal and generally flat electricity usage. Completion of the fall harvest is contributing to a strong recovery in grain shipments. Commentary from railroads during their January earnings calls was optimistic. They continue to believe the US economy is growing, but the pace of growth varies by shipment type. We see neutral valuation indications, with most railroad stocks trading above their historical averages.

We calculate that rail revenues increased about 5% in 2013 for the Class I rails, while EBITDA for the group improved about 7%. We estimate that traffic, measured in ton miles (weight times distance), was flat for the year, with the Eastern railroads posting small gains and modest losses for the Western railways. Carloadings decreased 0.5% in 2013, and were up 0.9% year to date through January 25, 2014. Strength in petroleum and grain shipments are more than offsetting early weakness in metal and auto shipments. Coal traffic is flat year-over-year. Intermodal volumes rose 4.6% in 2013, to 12.8 million trailers or containers, and increased 1.8% through the first four weeks of 2014.

Our longer-term outlook for railroads is favorable due to the industry's greater fuel efficiency and smaller environmental footprint relative to other transportation modes. These factors, along with highway congestion and driver availability, will drive more industrial and intermodal shipments to the rails, in our view. While government transportation policy will likely foster more rail usage in the long term, we view the current regulatory environment as negative. Proposed laws that seek more oversight and control over the railroads and their pricing practices are being introduced repeatedly. At the same time, efforts to fight climate change and reduce power plant emissions are increasingly targeting coal, which contributes about 22% of industry revenues.

The S&P Railroads Index increased 17.9% year to date through September 12, versus a 0.9% gain for the S&P 1500.

## **Airfreight and logistics**

As of August 2014, we had a positive fundamental outlook for the airfreight and logistics industry for the next 12 months. We think fundamentals in domestic shipping are likely to strengthen over the next year and think the valuations of many logistics companies are likely to expand on improved investor sentiment should signs emerge that the US and global economies are improving. Although customers are currently using lower-priced delivery methods, we see improving volume and yield trends on expanding shipping demand and improved pricing over the next year. We expect demand for international shipping over the next several years to be driven by export activity out of Asia and developing economies throughout the world.

We think the volume of activity coming out of Asia, and particularly China, should act as a natural support to airfreight volumes over the next couple of years. Airfreight companies United Parcel Service and FedEx Corp. are both increasing their presence in these markets by adding facilities and flights to and from Asia. In our view, the current expansion in these markets could continue for longer than many investors think. In addition, most carriers have been successful in pushing through price increases and recouping rising fuel costs through fuel surcharges.

According to data from the US Board of Transport Statistics, total cargo (measured in revenue ton-miles) rose 1.3% in 2014 through March, with international up 2.2% and domestic up 0.4%. In 2012, cargo fell 3.6%, with international down 5.4% and domestic up 1.9%.

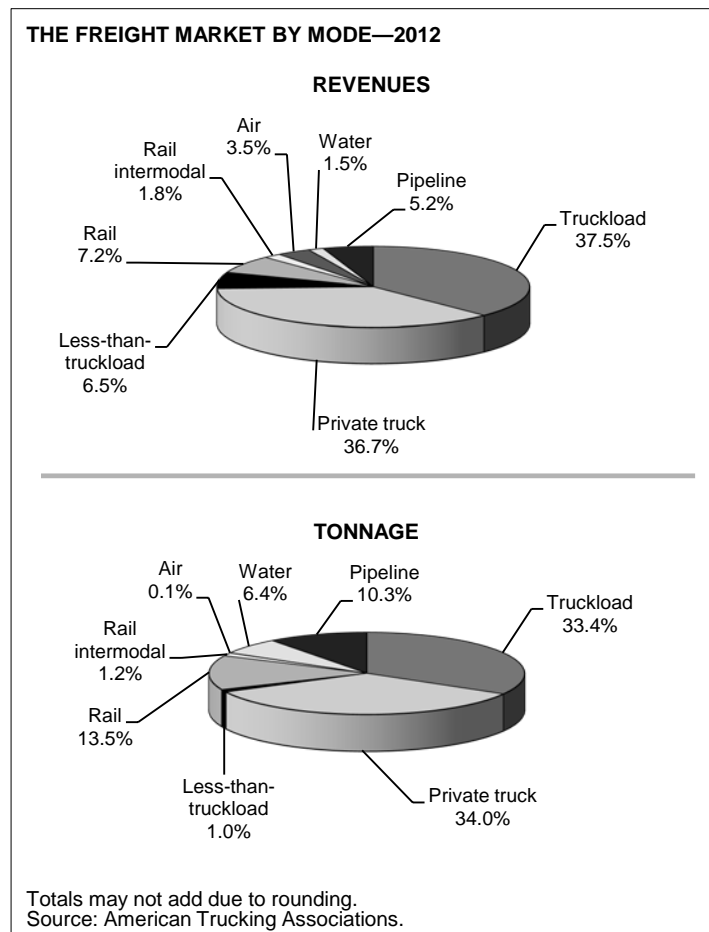
We think the strongest performers in the industry will be those companies offering total logistics and information services to their customers. We think they are best positioned to capitalize on the strengthening demand we foresee, and we think these companies would be able to offset higher fuel costs with rate increases and/or fuel surcharges.

Year to date through Septemeber 12, the S&P Air Freight and Logistics Index was down 1.3%, versus a 0.68% rise for the S&P 1500. In 2013, the Air Freight and Logistics Index was up 37.8%, versus a 30.1% increase in the S&P 1500. ■

# INDUSTRY PROFILE

## Capitalizing on efficiency gains to restore long-term profitability

This *Survey* focuses on trucking, railroads, and airfreight. S&P Capital IQ (S&P) estimates that aggregate revenues for the US commercial freight transportation market—including the trucking, rail, air, water, and pipeline sectors—reached about \$795.6 billion in 2012 (latest available). Our estimates are based on data from the American Trucking Associations (ATA), a trucking industry trade group; the Association of American Railroads (AAR), a railroad industry group; and Cass Information Systems Inc., a company that provides information on logistics issues.



### TRUCKING

With a market valued at \$681.7 billion in 2013, the trucking (or motor carrier) business claimed about 81.2% of the US commercial freight transportation market. This represents a 6.2% rise from 2012, when domestic revenues for the industry were approximately \$642.1 billion. The increase can largely be attributed to a record 6.2% increase in tonnage, reflecting good performance in the tangible goods economy. The US Census Bureau estimated that general freight trucking revenues increased 5% in 2013, and another 6.3% through June 2014. The trucking total is divided between two sectors: private carriage and for-hire.

#### Private carriage

Private carriers are a major part of motor carriage operations. Although little financial information is available on private carriage, the ATA estimates that companies running their own shipping operations provided services valued at some \$292.0 billion in 2012 (latest available), or about 45.5% of the trucking market.

According to estimates from the National Private Truck Council, a trade group, private fleets operate more than two million trucks,

make up about 82% of the medium- and heavy-duty trucks registered in the US, and account for around 56% of all-freight tonnage carried by medium- and heavy-duty trucks. Based on the latest data available, *Transport Topics*, a weekly magazine about the transportation industry, rated PepsiCo Inc., Sysco Corp., and Coca-Cola Co. as the industry's three top private carriers by number of tractors (as of August 2014). These three companies together operate approximately 30,177 tractors, 35,147 trailers, and another 55,191 straight trucks, pickups, and vans.

#### For-hire carriers

The for-hire category generated revenues of \$350.1 billion in 2012 (latest available), or about 54.5% of the motor carrier business. Of that amount, some \$298.6 billion (85% of for-hire trucking revenues) came from truckload (TL) shipments (those exceeding 10,000 pounds). The balance (\$51.5 billion; 15%) was

generated by less-than-truckload (LTL; a designation for shipments weighing 10,000 pounds or less) and package (ground) delivery.

◆ **Truckload (TL).** National for-hire TL companies garnered the majority of the TL sector's estimated \$298.6 billion in revenues for 2012 (latest available). The remainder was shared among tens of thousands of small companies.

| LEADING PUBLICLY TRADED TL & LTL CARRIERS<br>(Ranked by 2013 revenues) |                       |                       |                       |                       |                 |                 |                  |                 |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|-----------------|------------------|-----------------|
|  | REVENUES              |                       | OPERATING INCOME      |                       | OPERATING RATIO |                 | OPERATING MARGIN |                 |
|  | ----- (MIL. \$) ----- | ----- (MIL. \$) ----- | ----- (MIL. \$) ----- | ----- (MIL. \$) ----- | ----- (%) ----- | ----- (%) ----- | ----- (%) -----  | ----- (%) ----- |
|  | 2012                  | 2013                  | 2012                  | 2013                  | 2012            | 2013            | 2012             | 2013            |
| <b>LEADING TL CARRIERS</b>   |                       |                       |                       |                       |                 |                 |                  |                 |
| J.B. Hunt Transport Services   | 5,055                 | 5,585                 | 513.4                 | 571.4                 | 89.8            | 89.8            | 10.2             | 10.2            |
| Swift Transportation   | 3,493                 | 4,118                 | 306.2                 | 334.3                 | 91.2            | 91.9            | 8.8              | 8.1             |
| Landstar Systems   | 2,793                 | 2,665                 | 204.3                 | 175.1                 | 92.7            | 93.4            | 7.3              | 6.6             |
| Werner Enterprises   | 2,036                 | 2,029                 | 150.9                 | 123.3                 | 92.6            | 93.9            | 7.4              | 6.1             |
| Knight Transportation  | 936                   | 969                   | 103.4                 | 106.4                 | 89.0            | 89.0            | 11.0             | 11.0            |
| Covenant Transportation  | 674                   | 685                   | 18.3                  | 19.6                  | 97.3            | 97.1            | 2.7              | 2.9             |
| Heartland Express  | 546                   | 582                   | 79.8                  | 79.0                  | 85.4            | 86.4            | 14.6             | 13.6            |
| <b>LEADING LTL CARRIERS</b>  |                       |                       |                       |                       |                 |                 |                  |                 |
| UPS Freight †  | 54,127                | 55,438                | 2,295.0               | 7,073.0               | 95.8            | 87.2            | 4.2              | 12.8            |
| FedEx Freight*   | 44,287                | 45,567                | 3,211.0               | 3,446.0               | 92.7            | 92.4            | 7.3              | 7.6             |
| Con-way Transport  | 5,580                 | 5,473                 | 228.8                 | 209.0                 | 95.9            | 96.2            | 4.1              | 3.8             |
| YRC Worldwide  | 4,851                 | 4,865                 | 14.4                  | 32.5                  | 99.7            | 99.3            | 0.3              | 0.7             |
| Old Dominion Freight Line  | 2,110                 | 2,338                 | 285.3                 | 332.7                 | 86.5            | 85.8            | 13.5             | 14.2            |
| Arkansas Best  | 1,908                 | 2,066                 | 9.8                   | (12.4)                | 99.5            | 100.6           | 0.5              | (0.6)           |
| SAIA Inc.  | 1,099                 | 1,139                 | 58.4                  | 73.7                  | 94.7            | 93.5            | 5.3              | 6.5             |
| Vitrans Corp.  | 703                   | 193                   | (38.1)                | (1.4)                 | 105.4           | 100.7           | (5.4)            | (0.7)           |

NA-Not available. \*Fiscal year ends May; data in table uses 12-months ended November 2012 and 2013. †LTL operations are consolidated in the Supply Chain & Freight segment, and represent 25% of segment revenue.

Sources: S&P Capital IQ Compustat; company reports.

Landstar System Inc. (\$2.67 billion; \$1.50 billion), and Werner Enterprises Inc. (\$2.03 billion; \$1.03 billion). The majority of TL carriers—about 30,000 of an estimated 45,000 companies—have annual revenues of less than \$1 million.

◆ **Less-than-truckload (LTL).** The American Trucking Associations estimates that the LTL market generated revenues of \$51.5 billion in 2012 (latest available). The regional LTL segment accounted for about 55% of this total; the national segment accounted for 45%. Revenues among seven of the largest publicly traded carriers increased about 5% in 2013. Included in this group are carriers like Con-way Inc. (with \$5.47 billion in revenues from the LTL segment in 2013 and \$2.86 billion in the first six months of 2014), Arkansas Best (\$2.07 billion; \$1.24 billion), and YRC Worldwide Inc. (\$4.87 billion; \$2.53 billion).

## RAILROADS

The railroad industry accounted for some \$71.8 billion (9.0%) of the freight movements in the US market during 2012. According to data from the AAR, industry revenues grew approximately 4.2% in 2012.

The four largest railroads are Union Pacific Railroad Co. (a unit of Union Pacific Corp.; total revenues in 2013 of \$20.7 billion and \$11.7 billion in the first six months of 2014), BNSF Railway Co. (a unit of Berkshire Hathaway Inc.; \$22.0 billion and \$11.2 billion), CSX Transportation Inc. (a unit of CSX Corp.; \$12.0 billion and \$6.3 billion), and Norfolk Southern Railway Co. (a unit of Norfolk Southern Corp.; \$11.2 billion and \$5.7 billion). The smallest publicly traded US Class I railroad, the Kansas City Southern

The TL sector is privately owned, for the most part, with the exception of some of the largest companies.

Revenues for some of the largest publicly traded TL carriers increased 7.1% in 2013.

Among the largest publicly traded companies with large truckload operations are J.B. Hunt Transport Services Inc. (with total revenues of \$5.59 billion in 2013 and \$2.96 billion in the first six months of 2014), Swift Transportation Co. (\$4.12 billion; \$2.08 billion),

Railway Co. (a unit of Kansas City Southern), had systemwide revenues of \$2.4 billion in 2013 (\$1.3 billion in the first six months of 2014). Two Canadian railroads also operate in North America: Canadian National Railway Co. (revenues of US\$8.7 billion in 2013 and US\$5.3 billion in the first six months of 2014) and Canadian Pacific Railway Ltd. (US\$5.6 billion; US\$2.9 billion).

#### DISTRIBUTION OF RAIL REVENUES BY CATEGORY—2013

(In millions of US dollars)

| CATEGORY                                | BURLINGTON |          |          | KANSAS |          |          | UNION<br>PACIFIC | TOTAL  | CATEGORY<br>AS % OF<br>TOTAL |
|---|------------|----------|----------|--------|----------|----------|------------------|--------|------------------------------|
|   | NORTHERN   | CANADIAN | CANADIAN | CSX    | CITY     | NORFOLK  |                  |        |                              |
|   | SANTA FE   | NATIONAL | PACIFIC  |        | SOUTHERN | SOUTHERN |                  |        |                              |
| Agricultural, food and consumer         | 10,578     | 1,468    | 1,186    | 1,809  | 384      | 1,467    | 3,267            | 20,158 | 24.4                         |
| Automotive                              | NA         | 501      | 368      | 1,217  | 202      | 984      | 2,077            | 5,347  | 6.5                          |
| Chemicals                               | NA         | 1,768    | 520      | 1,896  | 427      | 1,667    | 3,501            | 9,779  | 11.8                         |
| Coal, coke, and<br>other energy-related | 4,986      | 632      | 572      | 2,895  | 327      | 2,543    | 3,978            | 15,932 | 19.3                         |
| Industrial, forest,<br>and construction | 5,703      | 2,398    | 1,600    | 2,115  | 584      | 2,200    | 3,822            | 18,421 | 22.3                         |
| Intermodal and related                  |            | 1,976    | 1,211    | 1,697  | 357      | 2,384    | 4,030            | 11,655 | 14.1                         |
| Other                                   | 747        | NA       | 138      | 397    | 90       | NA       |                  | 1,372  | 1.7                          |
| Total                                   | 22,014     | 8,743    | 5,593    | 12,026 | 2,369    | 11,245   | 20,674           | 82,665 | 100.0                        |
| Company as % of total                   | 26.6       | 10.6     | 6.8      | 14.5   | 2.9      | 13.6     | 25.0             | 100.0  | ...                          |

Note: Numbers may not add due to rounding.

Sources: Company reports; S&P Capital IQ estimates.

## AIRFREIGHT

Cargo revenue, as reported to the Bureau of Transportation Statistics (BTS), an agency of the US Department of Transportation, was \$28.0 billion in 2012 (latest available), up from \$26.2 billion in 2011. The domestic airfreight market claimed some 3.5% of the US commercial freight transportation market in 2012. The lines separating the air express, forwarding, international postal services, and global logistics markets are becoming increasingly blurred.

#### US DOMESTIC AIR EXPRESS TRAFFIC—FIVE MONTHS

(Ranked by 2014 volume, in millions of pounds)

| CARRIER               | VOLUME        |       | MARKET            |       |
|-----------------------|---------------|-------|-------------------|-------|
|                       | (MIL. POUNDS) |       | --- SHARE (%) --- |       |
|                       | 2013          | 2014  | 2013              | 2014  |
| Federal Express       | 4,589         | 4,648 | 56.5              | 55.6  |
| United Parcel Service | 2,338         | 2,473 | 28.8              | 29.6  |
| Atlas Air             | 222           | 209   | 2.7               | 2.5   |
| ABX Air               | 175           | 179   | 2.2               | 2.1   |
| Delta Air Lines       | 111           | 108   | 1.4               | 1.3   |
| Other                 | 683           | 739   | 8.4               | 8.8   |
| Total                 | 8,117         | 8,356 | 100.0             | 100.0 |

Sources: US Bureau of Transportation Statistics.

The largest player in the domestic air express market is FedEx Express, a unit of FedEx Corp. FedEx Express generated revenues of about \$27.1 billion from its domestic express service in the fiscal year ended May 2014, compared with the previous year. In the six months ended November 2013, domestic revenues were flat, year over year, at \$6.7 billion. United Parcel Service Inc. (UPS) is the largest transportation company in the United States, with total revenues of \$55.4 billion in 2013. UPS primarily handles ground parcels, but, in 2013, it derived some \$6.4 billion from domestic next-day air package delivery services. In the first half of 2014, its total revenues were \$28 billion, and domestic next-day air package delivery revenues amounted to \$3.2 billion.

## INDUSTRY TRENDS

One hundred years ago, shipments took several months for delivery and cost a fortune. Now shipments can be delivered overnight for a reasonable sum. The primary long-term trend in commercial transportation is to improve speed, service, flexibility, and area served, with costs declining as a proportion of the value of delivered goods. Each segment of the transportation industry plays an important role in delivering these improvements.

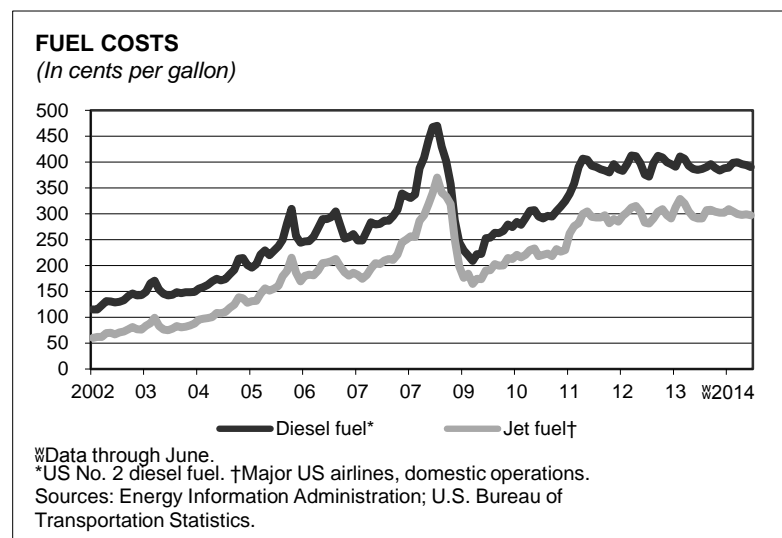
Progress can be observed even on a year-to-year basis. Companies that advance these transportation improvements more than their competitors tend to win higher revenue market share. They do so by designing new methods of organization, employing technology more effectively, using resources efficiently, providing new and better client service, and expanding their geographic reach. These kinds of companies also adapt to external trends, such as rising Internet-sourced and tracked deliveries, increasing global trade and offshore manufacturing, and the US economy's shift from heavy industry and low-value-added products to products more oriented to the consumer and with higher added value.

We think that all segments of the US transportation industry are increasingly affected by, and adjusting to, globalization of the economy. The impact of globalization is most obvious on the airfreight industry, which operates numerous international routes; faster-growing international traffic has recently surpassed purely domestic ton-miles. However, the railroad and trucking industries are also adjusting to the increasingly global nature of their customers' supply and distribution chains.

For example, increasing quantities of goods are being manufactured in Asia, transported in containers across the Pacific Ocean, transferred from ship to train at West Coast ports, carried by rail across North America, and then hauled by truck to "big box" retailers. Thus, international intermodal container shipments have been among the fastest-growing freight categories, boosting both railroad and trucking volumes at the companies that best serve this trend.

## INDUSTRY INFLUENCED BY FUEL EXPENSES

There has been a general uptrend in fuel prices since 2002, although they have experienced some corrections along the way. According to the Energy Information Administration (EIA), an agency of the US Department of Energy, average nationwide diesel fuel prices peaked near \$4.72 per gallon during May 2008. While the price of jet fuel does not correlate perfectly with diesel fuel, it followed a similar upward trajectory, peaking near \$155 per barrel in July 2008, up from an average price of \$88.28 per barrel in 2007.



As the accompanying chart shows, the on-highway retail price for diesel fuel had risen to about \$3.86 per gallon at the end of 2011, up 19% from \$3.24 at the end of 2010. Since that time, the retail price has remained relatively stable, ending December 2012 at \$3.96 per gallon, and November 2013 at \$3.93 per gallon. Similarly, the per-gallon price for jet fuel was \$2.85 at the end of 2011, up 24% from \$2.30 at the 2010. The jet fuel price rose to \$2.91 in December 2012 and to \$3.29 in February 2013, before declining to \$3.04 in October.

In light of fuel prices stabilizing at levels well above the historical average, we think shippers and carriers are much more conscious of the fuel component in their transportation expenses than was the case seven or 10 years ago. With fuel prices expected to rise as the global economy strengthens, we see many of the fuel-saving practices implemented over the past two years remaining in place.

## GREENING THE SUPPLY CHAIN

As companies in the US and around the world examined the carbon footprint of their operations, many began to realize that the transportation component of their business was a leading contributor. As a result, these companies, sometimes prodded by their customers, began efforts to reduce the carbon footprint of

their supply chain. Initiatives include the following: reducing the size and amount of packaging materials for retail goods; using more renewable energy in their operations, as well as for powering vehicles; and using more online interfaces for bill payment and invoicing. Other companies reexamined how their products were shipped, in some case changing from using less-than-truckload (LTL) carriers to multi-stop truckload, which cut mileage considerably.

Wal-Mart Stores Inc. set aggressive targets for its supply chain as part of its broader sustainability and environmental stewardship efforts launched in 2005. According to a survey of private truck fleets published in mid-2013 by *Transport Topics*, a weekly publication covering trucking and freight transportation, Wal-Mart operates the fourth largest private fleet. As of June 2014, the company has 6,121 tractors for hauling, and its 7,175 drivers collectively log about 700 million miles annually. Using 2005 as the baseline, Wal-Mart set a goal of doubling the efficiency of its company-owned tractor fleet, in terms of both the miles its trucks travel per gallon of fuel, as well as the number of cases carried per gallon of fuel. The targeted gains would be achieved through changes to its fleet and operating procedures, as well as by working with suppliers to reduce both product and packaging size. Its commitment to buy only concentrated detergent for its stores is a widely known example of the latter effort.

In addition to replacing the oldest tractors with newer, more fuel-efficient ones, Wal-Mart has been working with manufacturers to test hybrid engines. These efforts include electric engines, liquid natural gas-powered ones, as well as engines powered by waste cooking grease that its own stores generate. A greater number of its tractors now have auxiliary power units (APUs), which reduce the need for drivers to idle their engines. More trailers are now equipped with aerodynamic skirting as well. Further, Wal-Mart has experimented with how products are loaded on its trailers, in an effort to carry more cases while not increasing freight damage. According to the company, these different measures helped the company deliver 658 million more cases of products in 2012, compared with 2007, while driving nearly 300 million fewer miles.

#### **Potential for natural gas vehicles**

Other companies, including Wal-Mart, are exploring ways to use alternative fuels to achieve meaningful savings on fuel costs and to be more responsible to the environment. Ryder System Inc. is participating in a \$38.7 billion public-private partnership with San Bernardino Associated Governments (SANBAG) to launch a heavy-duty natural gas truck rental and leasing operation in Southern California. It is also overhauling three maintenance facilities in the area to support the natural gas initiative. In October 2013, Ryder noted that the new program has replaced 3.1 million gallons of diesel fuel annually with natural gas. In March 2014, the company achieved a milestone for its 500 natural gas vehicles in service surpassing 20 million miles.

To encourage the use of alternative fuels, a bill was introduced in April 2011 in the US House of Representatives called the New Alternative Transportation to Give Americans Solutions (NAT-GAS) Act (H.R. 1380). Likewise, a bill with the same name (S. 1863) was introduced in the Senate in November 2011. These bills, which died in committees, aimed to reduce the country's dependence on oil imports by using various tax credits, subsidies, and incentives to encourage the use of natural gas-powered vehicles. In March 2013, the New Alternative Transportation to Give Americans Solutions Act of 2013 (H.R. 1364), which would encourage alternative energy investments, was referred to a congressional committee for study. As of August 2014, no progress had been made on the bill.

#### **Economics of natural gas vehicles**

The rising spread between diesel fuel and natural gas prices, not to mention the general shift toward more environmentally friendly business practices, is prompting fleet owners to take a closer look at the economics of converting their trucks to natural gas. As we noted earlier, diesel fuel is the second largest cost item for carriers, behind labor.

According to the Department of Energy (DOE), the average price for diesel fuel in July 2014 was \$3.91 per gallon, while the price for compressed natural gas (CNG) was \$2.11 per gallon. To accommodate the fact that natural gas, in either the compressed (CNG) or the liquified (LNG) form, contains less energy per unit than diesel, prices are often discussed using a diesel gallon equivalent energy basis. Using DOE data, the average price for CNG in diesel gallon equivalent was \$2.40.



Commercial fleets have been slow to convert to natural gas, despite it being considered the cleanest-burning fossil fuel. This is due to several factors, including incremental equipment costs, lack of fueling and servicing infrastructure, as well as limited availability of equipment. Once these factors are taken into consideration, there needs to be about a \$1.25 spread between the price for a gallon of diesel fuel and the diesel gallon equivalent price for natural gas for an average carrier to break even on the switch to natural gas, according to several industry and academic studies. We think this breakeven price, however, varies widely based on factors like fleet size, average miles per tractor per day, and level of government subsidy incorporated into either the equipment price or selling price of the fuel.

From an equipment perspective, engines and supporting fuel systems for LNG and CNG can add anywhere from 400 to 1,000 pounds of weight to a tractor, according to an ATA study. Each fuel has unique storage characteristics that require thicker-walled tanks or specially insulated cooling units. In some cases, the added weight from the fuel tanks will result in smaller loads, as trucks seek to stay within the various state-imposed weight restrictions.

Further, the modifications to the engine and the tractor body contribute to higher average tractor costs. Depending on the engine configuration, natural gas tractors can cost between \$30,000 and \$70,000 more than the equivalent diesel-powered vehicle. Add to this the cost of the changes to engine emission standards that took effect in 2011, which raised the price of a typical diesel engine by \$10,000 to \$15,000 per truck.

Another factor that has slowed the adoption of natural gas trucks is the more frequent refueling required. Natural gas has a lower energy equivalence per gallon, which means more of the fuel is required to travel the same distance as diesel. With weight already an issue for CNG and LNG storage, there is a limit to the size of fuel tanks that can be put on a heavy-duty truck. This effectively reduces the range that a natural gas-powered truck can drive before refueling.

Long-haul truckers that need to stop en route for refueling face the problem of the small number of gas stations that offer CNG and LNG. According to data from the EIA, there were approximately 160,000 gas stations in the US in 2012, but around 1,300 locations supplying CNG and LNG fuel. As of December 2013, the LNG and CNG stations had increased to 1,374.

Given these constraints, it follows that some of the earliest adopters have been users of medium and light duty trucks with less need for power, and those with local delivery routes that can return to a central depot at the end of each day for refueling. Municipal bus fleets and refuse trucks were among the early converters.

United Parcel Service (UPS) is focusing on adding alternative fuel vehicles to its fleet. The company has been deploying hybrid delivery vehicles, such as hybrid electric vehicles, to its fleet to gain cost efficiency and reduce CO<sub>2</sub> emissions. As of August 2013, the company had over 2,723 vehicles that use CNG, LNG, or some other alternative source, such as hybrid electrics. In addition, UPS bought 700 gas tractors in 2013 and ordered about 300 gas-powered heavy-duty trucks in the first half of 2014. The company plans to increase this fleet to 3,300 by the end of 2014.

However, efforts by major corporations are resulting in increased use of natural gas vehicles. Wal-Mart and UPS have been leaders in testing alternative fuels, including natural gas and hybrid vehicles. Most often, these are medium- and light-duty vehicles, not the heavy-duty type.

Frito Lay, similar to Wal-Mart, set out targets to cut greenhouse gases and fuel consumption for its vehicle fleet. The company is already incorporating electric vehicles in its shorter, city routes. However, it is also looking at CNG for the tractors in its fleet, which require more power and travel longer distances.

It will be a slower adoption process among long-haul truckers, where the routes tend to be more irregular. We would expect the first tests of natural gas vehicles to occur in vehicles traveling between company terminals, where the route is fixed and fueling capabilities are established. Second, we would expect some uptake along heavily trafficked freight lanes, where the truck traffic is sufficient to support investment in refueling stations.

## AN INTERIM TRANSPORTATION LAW IS PASSED

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) expired in September 2009. This law, passed in 2005, governed surface transportation policy and funding. Congress, which is responsible for drafting the replacement legislation, effectively setting transportation policy for a six-year period, has largely focused its efforts on reforming healthcare and setting greenhouse gas emissions policy. With these initiatives taking far longer than many anticipated, the reauthorization has been delayed several times. The final extension—the ninth, which was signed in March 2012—continued funding the legacy programs through the end of June 2012. On July 6, 2012, President Obama signed into law a new two-year \$105 billion surface transportation funding and authorization bill, called the Moving Ahead for Progress in the 21st Century Act (MAP-21). The new law reauthorizes the safety and transit programs that had been authorized under the SAFETEA-LU legislation.

One of the tradeoffs from the growing focus on transportation has been increased environmental and safety constraints. For example, the Rail Safety Improvement Act of 2008 mandated the implementation of Positive Train Control (PTC) for all Class I railroads. PTC is the name given to technologies that will automatically stop or slow a train. As envisioned, the PTC system will constantly monitor a train's location and speed, with an eye to preventing derailments, train-to-train collisions, and human error, like failing to stop at a stop signal or entering unauthorized track. The legislation requires that PTC systems be installed along all mainline track used for passenger transport (*e.g.*, tracks shared with Amtrak or local commuter rail systems) or where hazardous materials are shipped, with a deadline for full implementation of December 2015. This affects up to 65,000 miles of track according to studies by the Federal Railroad Administration (FRA), a division of the US Department of Transportation. The rail industry believes it will actually affect 80,000 miles of their track.

The FRA also estimated that it would cost railroads about \$5 billion to install these systems, and at least another \$4.5 billion to maintain them over a 20-year period. Based on statements by each of the publicly traded Class I railroads, S&P estimated that some \$550 million was spent on PTC-related efforts in 2011, \$880 million in 2012, and \$1.11 billion during 2013. The rails, where capital expenditures already average between 12% and 14% of revenues, have called PTC an unfunded mandate and warned that they will need to cut investment in other areas of their network to cover the costs. The industry supports legislation that would provide tax incentives to help offset part of the cost.

### Implementing policy faces obstacles

Putting policy into practice is likely to encounter notable resistance from special interest groups. The experience of Canadian National Railway Co. (CNI) is a prime example. In September 2007, it announced plans to acquire the Elgin, Joliet & Eastern Railway Co. in an effort to reduce delays caused by congestion along Canadian National's main tracks through Chicago. Elgin, Joliet & Eastern owns a shortline network that travels around the city of Chicago.

The proposed acquisition faced considerable opposition from communities along the Elgin, Joliet & Eastern network, which feared increased traffic as trains were shifted away from downtown Chicago in favor of the route around the city. These communities succeeded in forcing a detailed environmental impact study to be undertaken, an initial draft of which was completed in July 2008. The Surface Transportation Board (STB) approved the merger in December 2008, more than a year after it was first proposed, but stipulated that the railroad reach mitigation agreements with affected communities regarding safety issues, like grade crossings. A total of 28 agreements were reached in December 2012, leading to the completion of the CNI-Elgin, Joliet & Eastern merger on January 1, 2013, although some groups still demand further studies on environmental impact and traffic monitoring.

## TRUCKING: ACCELERATING CHALLENGES

A shortage of qualified drivers (at wages that carriers are willing to pay) has vexed the trucking industry's long-haul TL segment since the early 1990s. During periods of economic expansion, when TL freight transportation and the number of trucks typically increase, trucking carriers find it more difficult to keep

their vehicles seated with drivers. Employment growth allows some drivers to enter or return to other more preferable occupations. In times of slowing economic growth, or during a recession like the one the US has just experienced, TL carriers generally experience rising driver availability.

During the recession, carriers responded to the reduced availability of loads by cutting operating costs, including moves to downsize their fleet size. Several of the largest publicly traded truckload carriers reported cuts to their tractor count, including using fewer owner-operators during both 2008 and 2009. We also think that the weak economy created a flight to quality among shippers, which made it very difficult for small trucking companies to remain financially viable.

S&P expects that attracting and retaining drivers will continue to be one of the most significant challenges facing the trucking industry over the next 10 years. Demographic trends, as well as government regulations, will lead to a reduction in the number of available drivers, in our view. (See the “Current Environment” section of this *Survey* for a discussion on the issue of trucker shortage and “How the Industry Operates” for trends and regulations.)

### **Government regulatory changes reducing pool of potential drivers**

The Federal Motor Carrier Safety Administration (FMCSA), a division of the Federal Department of Transportation, initiated its Compliance, Safety, Accountability program, known broadly as CSA, at the beginning of 2011. This new program centralizes the collection and monitoring of various carrier-level data, including inspection reports and traffic stops. The program aims to improve general highway safety by identifying carriers and drivers with a history of repeated safety violations and requiring corrective action.

In the scoring of the carrier, the new system takes into account driver-level safety violations and inspection results over a 24-month period. The prior system allowed carriers to improve their scores by firing problem drivers and hiring new ones. The violations tied to the fired driver would be dropped from the carrier’s record, while any prior violations the new driver had on his record would not carry over to the carrier. The new system takes into account a driver’s record for the prior 24 months, regardless of the carrier. Likewise, all violations remain on the carrier-level record for 24 months, even if the driver has been fired. A pre-employment screening system is also being developed to help carriers in the hiring of drivers. While considered separate from CSA, it is meant to bring a driver’s safety record into consideration.

### **Changing emission standards for trucks**

Stricter emission regulations on heavy-duty truck engines went into effect in January 2010. Established by the Clean Air Act of 1970, the regulations are administered by the US Environmental Protection Agency. At the time the new rules took effect, carriers were still reducing fleet size and had little need to purchase new trucks. This is in contrast to what occurred in 2006. At the time, carriers were unsure of the functionality and durability of the untested (and more expensive) engines. Early test results had pointed to reduced mileage per gallon of fuel. In response to this and a generally positive outlook for the economy, carriers heavily bought new trucks in advance of the rule change. In 2006, manufacturers sold 369,254 Class 8 (heavy-duty) trucks in North America, up 12.4% from 328,647 in 2005, based on data from ACT Research, an industry forecaster. Unit sales then declined 36% to 236,649 in 2007. A similar pattern of pre-buying occurred ahead of the October 2002 change in emission standards.

Trucking companies began to invest in their tractor fleets again in 2010. While this can partly be attributed to an improved economic outlook, it should also be noted that vehicles purchased in 2005 and 2006 during the pre-buy were reaching the point where maintenance costs begin to accelerate. Fleets typically use their tractors for five to seven years, depending on cumulative mileage, and then replace them with newer models. New tractor purchases started out slowly in 2010 as fleets tested small numbers of the 2010 emissions-compliant engines. However, as they became comfortable with the new engines, and experienced few mechanical problems, they stepped up their purchases. Among 13 of the largest publicly traded trucking companies, net capital expenditures increased 24% in 2010 and 82% in 2011, with a large portion of this spending directed at tractor purchases. Net spending declined 2.1% in 2012, as fleets were farther along in the replacement process and did not add to the overall fleet size, and increased 2.1% in 2013.

Generally, the tighter emissions standards have resulted in heavier, more complex engines. This adds to the cost burden for small and mid-sized fleets, which perform their own maintenance and upkeep, and have to keep their employees trained for new equipment. For this reason, S&P considers it likely that more fleets, especially within the private carriage segment, will outsource their fleet management functions.

## **MORE EFFICIENT, EXPANDED RAILS**

Railroading is a network business, which aims to draw in freight traffic at a variety of origin points and deliver it to a pre-determined destination point for the customer.

### **Efficiency is the focus**

In September 2007, the Association of American Railroads (AAR) published a study it commissioned to examine capacity and infrastructure needs in the coming 20 years. It was based on estimates from an AASHTO study. To accommodate the projected traffic, the study estimates that investments of \$148 billion would be needed to expand the rail infrastructure (in addition to normal maintenance and repair spending). The study determined that the Class I railroads would be able to generate a little over 70% of the required funds, but the remainder would need external funding, through public-private partnerships and investment tax credits, among other sources. Although as of August 2013, legislative efforts to secure tax credits for new investment had yet to move forward, the railroads continue to implement measures to improve profitability. These include more efficient route planning, longer trains, and distributed power, among others.

Many carriers have implemented updated technology and business strategies that allow them to improve safety and speed up transport times, while at the same time reducing the work force. Information systems have been upgraded to accurately track and analyze costs versus benefits of different shipments, allowing railroads to change pricing and capacity strategies to find the most profitable mix of freight. Some railroads are even using information systems to identify and reward crews that show superior skills in controlling fuel costs, then communicating these skills to other crews. Remote-control locomotive technology and advanced train control systems are being developed and tested; these could simultaneously improve safety and reduce labor costs, although conflicts with labor unions may slow the application of these technologies.

With an eye to optimizing asset utilization rates, railroads have gradually sold off less heavily utilized branch line operations. In addition, railroads are increasingly seeking to have customers or third parties own and maintain railcars and intermodal containers. We think this allows the rail operators to increase the portion of their cost structure that is variable, as opposed to fixed. One Class I railroad calculates that 53% of its operating costs are variable in the medium term, with expense items like fuel and car hire variable over a very short time period, and locomotives and train crews adjustable within six to nine months.

### **Working to expand offerings**

In an effort to add higher-value freight and expand their market share, the rails have been adding to their service offerings in the past few years. Intermodal is a clear example of the rails moving beyond their traditional commodity-based businesses.

Generally, railroads do not deal with the end user; instead, they sell to large intermodal freight forwarders such as UPS, the US Postal Service, and some LTL carriers. A share of intermodal revenues goes to TL carriers, such as J.B. Hunt Transport Services Inc. and Schneider National Inc. (which together claim about 10% of the market), and to intermodal marketing companies (IMCs), which are third-party intermediaries. Although IMCs collect only a small portion of intermodal revenues, they originate an estimated two-thirds of loads. Important IMCs include Pacer Stacktrain Inc. (a unit of Pacer International Inc.) and Hub Group Inc. We anticipate that rails will review their approach to intermodal operations—whether to continue as wholesalers, while outsourcing the arranging and contracting. We think one or more of the companies will move to gain greater control over the process and capture an additional layer of the value chain. This is part of a broader move, in our view, by the rails to have their service not be perceived as a commodity.

Other examples of expanded service include the special refrigerated trains that Burlington Northern Santa Fe has introduced to transport produce from Washington State to the eastern US. The rails also appear to be expanding their warehousing capabilities, though this is a very small part of their business currently.

## AIR CARGO: CUSTOMERS LOOK FOR LOWER-COST ALTERNATIVES

Larger carriers are looking at alternative ways to grow their businesses, including increasing their presence in ground delivery and in second-day or extended delivery services. Through moves like this, the two largest air cargo carriers, FedEx Corp. and UPS, have been able to strengthen their respective market positions, developing new customer channels and enhancing their revenue growth. Increasingly, these companies are broadening their range of services beyond pure airfreight, to providing end-to-end supply chain solutions on a global basis. By providing a full suite of services, the so-called integrated carriers can retain customers as they trade down to lower-priced modes of transportation during periods of economic weakness, as well as during recoveries, when the customer is often more willing to pay for premium services.

### International market growing faster

Growth in international freight and express ton-miles has outpaced domestic growth. The importance of the international market for the airfreight industry's growth prospects was confirmed in 2004: international airfreight ton-miles exceeded 50% of total ton-miles that year, according to the International Air Transport Association, a trade organization. Domestic volumes have been growing no more than 4%–5% per year, while international shipments, particularly in Asia, have recently been climbing at annual rates near 20%. Airbus, in its *Cargo Global Markets Forecast 2013–2032*, anticipates that world freight traffic will grow 4.8% annually for the next 20 years.

An indication of the importance of foreign routes was demonstrated by FedEx's move in January 2010 to add nonstop service between its Memphis hub and Shanghai using Boeing Corp.'s 777 freighter (777F) aircraft. In November 2010, the company announced the launch of a second 777F route between its Memphis hub and Shenzhen to capitalize on the growing southern China market. In April 2011, another 777F was deployed to serve India. In March 2012, FedEx introduced another Boeing 777F to serve the route between its Memphis hub and Cologne, where earlier it had used a MD-11 aircraft. In July 2012, FedEx introduced two Boeing 777Fs to its hub in Cologne to serve the routes between Shanghai and Guangzhou.

UPS, which serves more than 330 cities in China, opened a Shanghai air hub in 2008 that has direct service to its other hubs in Europe, the Americas, and Asia. The company also opened an intra-Asia air hub in Shenzhen, China, in May 2010. Later in May 2011, the company completed lane enhancements on over 100 intra-Asia lanes to improve customer service in the Asia region. In September 2012, China allowed UPS, as well as FedEx, to ship intra-China express packages. As of August 2014, UPS operated 200 weekly flights that connect China to markets around the world, while FedEx operated more than 225 weekly flights to and from China.

We think that this segment will be the main source of the airfreight industry's growth for the next several years. International shipments are also more profitable than the domestic business, because they include a larger proportion of express deliveries, which command higher rates. However, mitigating this somewhat, international shippers have shifted some of their freight to slower delivery methods, which have lower costs.

### Both trucks and waterborne offerings attracting cargo

In reaction to the rise in fuel prices for air service and a decline in waterborne rates, some shippers have shifted a portion of their inbound freight to ships rather than air cargo. This is possible during periods of moderate economic growth when the risk of inventory shortages is below average. While this requires additional planning, some customers are able to take advantage of considerably lower freight rates.

In recent years, the domestic airfreight and LTL markets have begun to resemble each other. As the carriers compete in more of each other's territories, the growth rates for these two segments are beginning to converge. Airfreight's growth has slowed and become more cyclical, while LTL has enjoyed faster growth. LTL carriers are offering more overnight and second-day expedited choices, along with higher-quality service offerings to customers, while many airfreight operators are offering lower-cost options that more resemble LTL service.

Originally, air express carriers did not handle shipments weighing more than 70 pounds, a threshold they later raised to 150 pounds. Today, FedEx Express offers service for heavy express cargo of up to 2,200 pounds in the domestic market. We expect that the company's average weight per shipment will continue to rise.

## HOW THE INDUSTRY OPERATES

Commercial transportation is a service industry that moves customers' raw materials, product parts, and finished goods from point to point in the supply chain. It is an essential link among the extraction of natural resources, the fabrication of industrial, commercial, and consumer products, and the final distribution of goods to wholesalers, retailers, and end users. Based on the latest available data, S&P Capital IQ (S&P) estimates that \$796 billion was spent on domestic transportation in 2012, up from \$754 billion in 2011.

A variety of carriers engage in commercial freight transportation. For-hire transportation offered to all shippers is called "common carriage"; if provided through dedicated equipment, it is called "contract carriage."

Transportation services are segmented by type of product, length of haul, and speed of delivery. Each transportation mode—rail, truck, air, or water—tends to specialize in certain segments of the market. Multimodal competition—overlapping competition from more than one mode—exists for only certain freight. For example, railroads and motor carriers alike transport bulk commodities and manufactured goods, but they compete directly only for short hauls of bulk commodities and medium-to-long hauls for general merchandise.

Competition is increasing between less-than-truckload (LTL) motor carriers and air cargo companies, as LTL carriers are increasingly pursuing time-critical freight that was traditionally moved by air carriers, while the latter pursues heavier ground shipments. (LTL is a designation for shipments weighing 10,000 pounds or less.) As manufacturers, distributors, and retailers try to minimize inventories, transportation providers become an ever more critical link in the supply chain; ultimately, cooperation and coordination across transportation modes are required for successful transportation results.

## **TRUCKERS DOMINATE FREIGHT MARKET**

Based on value of service, trucking (excluding warehousing and logistics) accounted for 81.2% (some \$681.7 billion) of US commercial freight revenues in 2013, but for a lesser 69.1% of total tons. This is mostly attributable to the types of products transported by truck, which tend to be lightweight, high-value manufactured goods. These also tend to move 750 miles or less and require delivery within three days. Examples of this type of freight are food and consumer staples, as well as manufactured goods shipped between commercial establishments or delivered to consumers or retail outlets. In contrast, freight moved by rail and barge tends to consist of heavy, long-haul, bulk commodities.

Truckers, unlike railroads, pipelines, or water carriers, do not face geographic limits in the continental US caused by physical constraints, and they can offer door-to-door service. While they pay licensing fees and fuel taxes, the proportional cost for use of the nation's highway system is less than that paid by the railroads, which must build, maintain, and police their rights-of-way.

### **Truckload carriers**

Truckload (TL) carriers are primarily truckers that transport large shipments from point of origin to destination with no intermediate stops or handling. TL carriage is the largest part of the industry's for-hire segment—worth an estimated \$300 billion in 2013 (with the 25 largest TL carriers' revenue hitting about \$26 billion in 2013), \$298.6 billion in 2012, versus \$279.2 billion in 2011. The term "truckload" is something of a misnomer, as it originally was defined for regulatory purposes as a shipment exceeding 10,000 pounds. A full truckload, as hauled by one of today's trailers, can weigh 40,000 pounds or more, and it is not uncommon to find TL carriers hauling several separate loads weighing 6,000 to 9,000 pounds each. Most TL carriers haul for only one shipper at a time, but some mix two or three large shipments.

About half of the TL market, as measured by tons shipped, involves the movement of general packaged merchandise. Sometimes known as dry van carriers, these truckers compete with private fleets and rail intermodal, and, to a lesser extent, LTL carriers. The other 50% of the TL market includes heavy haulers, auto carriers, tankers, flatbed, bulk commodity, temperature-controlled, and other specialized carriers. These truckers tend to compete against railroads, barges, and even pipelines.

About 70% of TL hauls measure less than 500 miles. The Truckload Carriers Association, a trade group representing TL motor carriers, reports that the average length of haul for its members is 350 miles. TL carriers of bulk commodities tend to have shorter runs over regular routes. TL carriers are usually not used for long hauls, except when rail intermodal is not a viable alternative due to geography or service considerations.

The overhead cost structure for TL operators is lower than that for most other modes of transportation. Because TL shipments move directly from point of origin to destination, carriers do not need an expensive network of terminals, pricey computer systems, or a marketing staff. Equipment is relatively inexpensive: A used four-year-old Class 8 sleeper truck with less than 1,000,000 miles can be bought for approximately \$52,000, according to data from NADA.

With low barriers to entry, the TL segment tends to draw many entrepreneurial players, but most entrants lack the managerial savvy to evolve into major carriers or, in some cases, simply to survive. According to the US Census Bureau's 2007 Economic Census, details of which it only began to publish in 2009, there were more than 30,288 carriers involved in the long-distance TL market—a total that was little changed from the number of establishments counted as part of its 2002 census. At that time, there were about 3,000 carriers employing 20 or more people, and only 300 had 500 or more employees.

### **Private carriage**

Private carriers are shippers with a primary business that is not transportation, but that operate truck fleets for hauling their own raw materials or finished goods. They typically do not accept freight from other shippers. Private carriers are estimated to have provided some \$292.0 billion worth of service in 2012 to their parent companies (included in the estimated \$642.1 billion trucking industry total cited earlier).

Private fleets are found in many industries, including food distribution, manufacturing, and processing; wholesaling and retailing; and petroleum refining. Companies in these industries have a common desire to control a vital part of their business. The private fleet is seen as an extension of the parent company, with the driver doubling as a company representative. Skilled in handling special equipment and often trained to help customers with product installation or set-up, the private-fleet driver generates goodwill by limiting instances of damaged freight. Coupled with prompt and reliable deliveries, this service can prove to be a critical competitive advantage for firms selling commodity-like products.

Before industry deregulation in 1980, many companies established private fleets as a lower-cost alternative to the dominant Teamsters-organized motor carriers. Today, private carriage costs generally exceed those of for-hire TL carriers because the former involves a higher level of service, with short hauls, frequent stops, and more empty miles. Private carriers often can lower their costs by leasing equipment and outsourcing maintenance.

### **LTL: small but visible**

The entire less-than-truckload (LTL) segment, with revenues estimated at \$51.5 billion in 2012, versus \$46.8 billion in 2011, is a small part of the total trucking market. According to Logistics Management, the LTL sector is a \$35 billion industry market as of July 2014, with revenues of the 25 largest US LTL carriers hitting about \$30 billion in 2013. The Census Bureau reported there were 7,923 LTL operators in 2007 (latest available data), up from 7,534 in 2002. LTL carriers operate by consolidating small shipments—typically, 1,000 to 1,200 pounds per shipment—from numerous commercial customers. Gathered through networks of terminals, the shipments are then transported in batches.

The ground package delivery business (excluding air express) is included in the LTL industry and involves small-size shipments, including business-to-business movements and retail delivery to consumers. Package delivery services require extensive terminal systems. In recent years, the package delivery companies have branched out into air express and air cargo (heavy freight), while companies serving the overnight package market have moved into ground delivery and heavier cargo.

The transportation industry increasingly sells its service as “time-definite” or deferred. This is true now for pure LTL companies, as well as for multidimensional firms such as FedEx Express (a unit of FedEx Corp.) and United Parcel Service Inc. (UPS). These two companies are the largest US firms with an apparent long-

term goal to expand into all time and weight classes and to cover every market, whether international or domestic. In part reflecting the strength of these two companies, DHL International GmbH (a subsidiary of Deutsche Post AG) exited the US market as of February 2009 as part of a broader restructuring by its parent company.

◆ **Types of carriers.** Within the LTL segment are national carriers, which have average haul lengths of 850 miles or more. National carriers offer full coverage to all 50 states, to parts of Mexico and Canada, and, through allied partners, to overseas destinations. Regional carriers concentrate on freight that moves within one geographic market and has an average haul of between 400 and 600 miles. Some regional carriers operate in several geographic markets. Falling between the two markets is interregional freight, which is carried by both regional and national carriers. Lately, regional carrier families (groups of carriers under the same ownership) have been linking their units to form a synthetic national service.

National LTL carriers require a vast network of relay terminals to increase trailer density for long-distance movement of freight. Regional LTL carriers operate far fewer terminals and primarily deliver goods by overnight or second-day service. Despite the segment's small size, many investors are more familiar with LTL carriers than with TL carriers, because the former have been publicly traded for a longer period.

◆ **Cost structure.** The overhead cost structure for LTL carriers, particularly national companies, is very high. Although operating authority is easy to obtain, capital costs are considerable: Entrants must establish a network of terminals, road equipment, computer systems, and sales forces. Until recently, profitability was subpar, which discouraged new investment. Although no new national LTL firms have appeared since deregulation in 1980, both FedEx and UPS have acquired existing firms and provide full US coverage. With better growth and margins, some new players have been attracted to the regional LTL markets.

Labor costs are far higher in the LTL segment, particularly for national carriers, than for TL operators. This is because of the more labor-intensive freight handling, consolidation, deconsolidation, routing, and delivery services performed, and because most LTL workers have been organized by the International Brotherhood of Teamsters.

With their high capital and labor costs, national carriers traditionally focused on long-haul, high-value freight, which is the only freight that could cover their costs. In the 1990s, the popularity of just-in-time (JIT) inventory practices contributed to faster growth in regional LTL markets. This change led national carriers to restructure their terminal networks to handle more short-haul freight. LTL carriers are also positioning their businesses to handle more premium, time-definite cargo, a niche previously controlled by airfreight carriers.

## THE AIR CARGO INDUSTRY

The air cargo market can be segmented in different ways. The overnight movement of shipments via aircraft is known as “expedited” delivery. Shipments that are delivered by air cargo companies on the second or third day, which may or may not involve an aircraft, are labeled “deferred delivery.” Within these two time-defined markets are segments based on shipment weight, such as letters and documents, small packages, and heavy freight.

The air cargo industry can be defined further by geography. There are domestic and international markets, and different players dominate each market. The air cargo industry comprises air carriers, express companies, forwarders, passenger airlines that transport freight as a byproduct, and passenger airlines with dedicated freighter fleets. Heavier cargo moving exclusively within the US is handled primarily by integrated carriers (*i.e.*, those offering door-to-door delivery using a dedicated air and ground network).

The domestic air cargo segment generated revenues of about \$28.0 billion in 2012 (latest available). According to the US Department of Transportation (DOT), air cargo companies flew about 12.43 billion domestic revenue ton-miles in 2013, a slight increase from 12.37 in 2012. Through May 2014, air cargo companies flew 5.13 billion domestic revenue ton-miles, up 2.0% from the same period in the previous year.



## **By air and by ground**

Airfreight carriers, often known as integrators, are companies that operate their own aircraft as part of a network that combines both ground and air transport. They also may employ subcontractors for ground movements and may put some freight on passenger airlines.

Integrators generate an estimated 85% of total domestic airfreight revenues (or 67% of traffic by weight). Forwarders and passenger airlines account for the remaining 15%. FedEx, UPS, and the US Postal Service dominate the domestic air express/package delivery market.

Airfreight carriers focus on high-value, time-sensitive manufactured goods that move long distances. Historically, airfreight carriers have transported documents, small packages, and cargo that require overnight delivery. As air transport costs have fallen, however, increasing amounts of lower-value and heavier manufactured goods are being shipped as airfreight.

Heavy air cargo shipments tend to weigh 200 to 300 pounds, or less than a typical LTL motor carriage shipment. Air express package shipments tend to weigh three to five pounds. Most items weighing less than two pounds are documents or letters and are shipped primarily by the US Postal Service's Priority Mail (deferred delivery) and Express Mail services.

Forwarders neither own nor lease aircraft. Often, they do not own ground equipment either. Instead, they provide the service of consolidating small packages from individuals and businesses for transport by passenger airlines or airfreight carriers. Forwarders concentrate primarily on international shipments, for which they buy belly space on passenger airlines in bulk. On international routes, integrated carriers tend to operate as forwarders, since it is difficult to obtain a high or balanced aircraft utilization. As belly space on passenger airlines becomes scarce during periods of capacity reductions, airlines often will acquire or charter dedicated freighter aircraft, on which they sell space to forwarders.

## **Choice of speeds**

In the past few years, carriers have been marketing their services not as airfreight, but as time-definite transportation, in which freight may be moved by air or by truck. For a package of a given weight, pricing is based primarily on the speed of delivery and, secondarily, on the distance it travels. Depending on how quickly the shipper wants something to reach its destination, he or she may choose same-day, next-day, or deferred delivery. Within these three categories, shippers can pick morning or afternoon delivery.

In contrast, truckers' rates are set primarily by weight and distance. They, too, have substantially increased their offerings of both date-definite and time-definite services since 2004, generally at a premium to traditional LTL rates but lower than air cargo rates.

Because airfreight rates for heavy cargo have lagged behind LTL rates in recent years, the price differential between the two modes has narrowed. Consequently, more highway shipments have been tendered to air carriers and forwarders for time-definite delivery. Most of this freight moves by ground rather than by air, because it is more economical unless a shipment needs to move vast distances.

## **TRACKING THE RAILROAD INDUSTRY**

In 2013, the railroad industry took in some \$72.9 billion in revenues, according to the Association of American Railroads (AAR), a trade group representing the major freight railroads. Some 90% was generated by just four major systems: Union Pacific Corp. and Burlington Northern Santa Fe Corp. operating on the West Coast, and CSX Corp. and Norfolk Southern Corp. operating on the East Coast.

Rail service is slower than other modes, so railroads specialize in moving long-haul, low-value goods, such as coal, grain, ores, chemicals, and forest products. The railroad industry's average length of haul was 990.5 miles in 2013 (up from 912.8 miles in 2007), according to data from the AAR. In 2013, average tons per carload were 61.0 (down from 61.7 in 2007), with an average revenue per ton-mile rate of \$0.04051 (up from \$0.02990 in 2007). We think revenue per ton-mile in 2013 reflects the higher average rates and fuel surcharges that were higher, on average, than in 2007.

### Three kinds of lines

The rail industry can be divided into trunk lines (called Class I railroads), regional railroads, and shortlines. Many of the regional railroads and shortlines operating today were once pieces of larger railroad systems.

◆ **Class I railroads.** These are the larger railroads operating in the US. While Class I railroads represent about 1% of all US freight railroads, they account for about 93% of the revenue and 67% of the miles of track operated, according to the AAR.

◆ **Regional railroads.** The regional railroads generally operate on at least 350 route miles. They tend to serve regions of two to four states.

◆ **Shortlines.** These railroads provide pickup and delivery service in limited markets. The category can be divided further into local line hauls and switching and terminal providers. Shortlines can serve several industrial markets, while switching/terminal lines are limited to one metropolitan area. Switching lines are often owned jointly by the larger regional and trunk lines that connect to them.

### TRANSPORTATION INTERMEDIARIES

The commercial transportation market includes several types of intermediary firms that facilitate the movement of freight. These intermediaries provide value-added services, although they typically do not own any equipment. They include: airfreight forwarders (discussed earlier); freight brokers, which operate primarily within the trucking industry; intermodal marketing companies (IMCs), formerly known as shippers' agents, which work primarily with railroads; and third-party logistics providers, which oversee the movement of goods along a company's entire supply chain.

#### IMCs—the intermediary of choice

Intermodal marketing companies, or IMCs, handle about 60%–70% of all intermodal moves. The industry arose because railroads chose not to invest in the resources needed to aggressively market their intermodal services. IMCs sell rail intermodal services to shippers and buy space wholesale on rail intermodal trains. This relationship is similar to that of airfreight forwarders and passenger airlines.

Shippers often prefer IMCs to railroad marketing departments because of their superior information systems and their ability to take full responsibility for shipments that may move among several railroads or truckers in transit. Indeed, the term IMC is becoming obsolete because these firms have evolved beyond rail intermodal. Many IMCs are better defined as third-party logistics providers because they manage customers' trucking, air, and ocean transport, warehousing, and information systems for the entire supply chain from raw materials to finished goods.

The IMC industry is undergoing consolidation, as railroads choose to limit their business to a few larger players. Increasingly, IMCs have assumed ownership of the freight containers as the railroads look for ways to reduce asset intensity.

### COMMERCIAL TRANSPORT AND THE BUSINESS CYCLE

All commercial transportation modes experience business cycles to some degree, because demand for physical goods rises and falls with economic activity. Retailers have attempted to lengthen the cycles through use of sophisticated point-of-sale technology, helping them to avoid over-ordering. Consequently, inventories have become leaner over the years, and deliveries more constant.

Nevertheless, the business cycle has not been eliminated. Market activity is influenced also by monetary and fiscal policy changes, international currency values, and external shocks such as oil price hikes or war. In a typical cycle, the Federal Reserve Bank will raise interest rates if it fears an imminent upturn in inflation, and the higher cost of capital will inevitably lead to a curtailment in corporate capital investment and will force buyers out of the auto and housing markets. During periods of economic expansion, sales of new and existing homes boost the transport of everything from lumber to appliances to paint and wallpaper. Sales of

automobiles require transportation of not only new car inventory, but also intermediate movements between parts suppliers and the assembly plants, as well as the movement of iron ore and coal used by steel mills.

In contrast, when segments of the economy slow, as housing and autos did during the 2006–08 period, all modes of transportation feel the impact. Demand for transportation services is influenced by consumer sentiment and spending. Changes in tax rates, for instance, can reduce or increase the amount of income available for personal spending. A buoyant stock market tends to stimulate spending for big-ticket consumer goods. In volatile world markets, demand for US manufactured goods and raw materials can be rapidly stimulated or dampened by currency fluctuations.

### **Railroads more stable**

The least cyclical transportation modes are pipelines (not discussed in this *Survey*) and railroads. A large portion of railroads' traffic base is in coal and grain, which may be influenced more by weather than by economic activity. The Association of American Railroads (AAR) provides the data for each of the following shipment categories.

◆ **Coal.** In 2013, coal shipments generated about 40% of the rail industry's total tonnage and 20% of its freight revenues (versus 41% and 20%, respectively, in 2012). Most coal is transported to electric utilities, with their demand for power determined more by weather and population growth than by economic activity. However, the severity of the most recent economic crisis slowed electricity consumption notably in the US and contributed to rising levels of coal stockpiles at utilities around the country.

◆ **Intermodal.** The rise in intermodal shipments over the past decade has increased the group's exposure to economically sensitive segments like furniture, apparel, and other retail goods. In 2013, intermodal (mixed shipments) contributed 13% of revenues at the Class I railroads. Intermodal carloads bottomed at 9.9 million in 2009, then rose to 12.8 million in 2013.

◆ **Grain.** Agricultural- and food-related products (mostly grain traffic) represented about 15% of rail revenues in 2013, down from 16% in 2012. Grain carloadings represented 7.2% of total carloadings in 2013, up from 6.9% in 2012 when severe drought conditions afflicted farm products in the summer. Based upon a return to more normal conditions in 2013, we expect grain revenues as a percentage of total rail revenues to increase during 2014. Shipments of these products are heavily influenced by weather, politics, and relative currency values that affect export demand.

### **Truckers, airfreight more cyclical**

TL motor carriers and air carriers are the most sensitive to the business cycle. As the economy slows and inventories accumulate, manufacturers and retailers cut orders, curtailing truckers' traffic. A shipper with insufficient freight for a full TL may give the business to an LTL carrier. Although the LTL business is also cyclical, a strong secular trend favoring smaller, more frequent shipments—such as those required by JIT inventory stocking—helps to support traffic levels. For many of the large publicly traded TL carriers, shipments of consumer products and retail goods represent between 30% and 50% of revenues.

Airfreight carriers that transport heavier cargo are usually the first to notice a slowdown, as manufacturers, prompted by narrowing profit margins, divert shipments from expensive overnight delivery to slower, second-day truck movement. It is now common for air carriers to offer deferred delivery service that uses only trucks. By doing so, air carriers retain their clients' business, albeit at lower margins. Because air carriers have large international operations, their overall exposure to the US business cycle may be reduced.

### **Cost issues**

Fuel, weather, labor, and equipment are among the main determinants of transportation costs.

◆ **Fuel.** According to the Bureau of Transportation Statistics (BTS) the domestic operations of US airlines reported consumption of 10.18 billion gallons of jet fuel in 2013, down 0.6% from 10.24 billion gallons in 2012. Airlines for America, an airline trade group, estimates that 85% of airlines' fuel usage is tied to their passenger operations. Using the remaining 15%, we calculate that domestic air cargo operations consumed approximately 1.53 billion gallons of fuel in 2013.

Air cargo companies that operate their own fleets are highly sensitive to the cost of fuel, which absorbs over 35% of total revenues annually. Because changes in fuel costs are not reflected immediately in rates, they can cause margins to narrow or widen accordingly. Many air cargo companies, including FedEx and UPS, have levied fuel surcharges during the past couple of years in order to make up for higher-than-normal fuel prices.

The US trucking industry consumes enormous amounts of fuel. According to the latest figures available from the American Trucking Associations (ATA), the trucking industry consumed 52.3 billion gallons of fuel, including 37.2 billion gallons of diesel fuel, in 2011. The trade association also estimates that trucking companies spent about \$143 billion on fuel in 2011 and about \$150 billion in 2012.

Fuel costs consumed about 23% of revenues at some of the largest public TL carriers in 2012 and 24% in 2011, up from 21% in 2010 and 18% in 2009. By comparison, fuel outlays consumed approximately 12.3% of revenues for less-than-truckload carriers; the percentage was lower for some of the larger LTL carriers in 2012 and 13.3% in 2011. Truckers generally try to pass any price rise to customers through rate hikes or surcharges that fluctuate with the price of diesel; those that fail to include a fuel surcharge provision in their contracts will have to absorb any cost changes. Some truckers also try to limit their exposure to fuel price changes through heating oil swaps and fixed-price agreements. Several large TL carriers report that as much as 90% of fuel expense is hedged in some way, primarily through surcharges.

Class I railroads (those with annual operating revenue in excess of \$319 million) consumed approximately 3.8 billion gallons of diesel fuel in 2012. The amount of fuel used by each railroad varies based on type of terrain crossed by the network, average age of locomotives, as well as the weight and type of freight. Fuel absorbed about 17.4% of rail revenues in 2012, 17.7% in 2011, 14% in 2010, and 10% in 2003. Railroads have increasingly implemented fuel surcharges to pass along fuel costs to customers. Statements from the leading railroads indicate they can pass through between 90% and 95% of fuel costs due to the surcharges or other contractual mechanisms. Subtracting fuel surcharge revenue from both revenues and fuel expenses narrows the fuel burden to 6.2% in 2012 and 7.1% in 2011—considerably less volatile than the unadjusted figures. Even so, sharp rises in fuel prices, as occurred in 2008, appear to increase the demand for rail freight as traffic is diverted away from trucks to more fuel-efficient rail intermodal service.

◆ **Weather.** All commercial transportation is affected to varying degrees by the weather. Railroads, for example, pay the entire cost of snow removal on their rights-of-way, which makes snowstorms costly to them. Although truckers pay only for snow removal at their terminals, snowstorms lengthen truckers' travel time, which translates into higher labor and fuel costs. Airfreight companies pay user fees for airport services provided by private or government entities; costs of snow removal are built into those fees. In fact, once a severe snowstorm is over, it may actually boost air cargo demand, since transit times on long-haul shipments are lengthened by the clogged highways.

Rainstorms or fog may force truckers to cut driving speeds, adding to costs and diminishing employee and asset productivity. Rain and fog can also delay air carriers. Railroads do not generally suffer any consequences from these weather conditions (except in the case of flooding).

Railroads and truckers alike feel the effects of cold weather as engines are idled longer. Truck drivers in sleeper cabs may idle engines overnight to keep their heaters working. Railroads, meanwhile, are particularly vulnerable to floods, which can cause more damage than snowstorms. After a flood, miles of tracks and even bridges may have to be replaced before service is restored. For example, the Souris River flooding in North Dakota in June 2011 led to a shutdown of Canadian Pacific's track between southern Saskatchewan and the US Midwest for 23 days. As a result, the railroad reported \$16.8 million of flood-related expenses during the second quarter of 2011 as shipments were rerouted and repair efforts began.

◆ **Labor.** LTL carriers and small package express delivery firms are the most labor-intensive of all-freight transportation, with employee compensation absorbing more than half of total revenues. Large numbers of shipments must be picked up manually, consolidated into larger trucks or vans, and then delivered. A large sales staff is required, along with workers to maintain equipment and terminal facilities. Increasingly, package delivery firms are turning to the US Postal Service to handle some of their low-value residential shipments.

TL carriers also have a high labor component in their cost structure, though their labor costs are more variable than those of LTL carriers: drivers can be added or cut as demand waxes and wanes. When demand for LTL slips, those companies tend to retain employees and experience lower usage of their trucks. Based on financial reports from leading publicly traded trucking companies, compensation and benefit expenses were equal to about 49% of revenues at LTL carriers over the past eight years through 2012, and 29% for the TL carriers.

Railroads are capital- and labor-intensive. Labor costs are the largest single expense item, representing about one-third of revenues. However, with the sharp rise in diesel prices over the past two years, total fuel expenses are not much lower than labor. Railroads employ vast armies of mostly unionized workers to maintain tracks, bridges, tunnels, and equipment, to monitor freight movements, and to run the trains. Rail labor costs, like those of LTL carriers, are mostly fixed and cannot be cut back quickly to match short-term fluctuations in business activity.

◆ **Equipment.** Asset-heavy transportation companies spend a large portion of their revenue on equipment and facilities. Equipment-related expenditures include direct costs for leases, maintenance and depreciation, and indirect costs in the form of interest expense.

Railroads spend enormous sums to build, repair, and maintain tracks, signals, and yards. These obligations, combined with a lack of undeveloped land on which to lay track, serve as potent barriers to entry into the rail industry. Other than the private purchase of tracks, the sole way that a carrier (whether start-up or established) can enter new markets is through government intervention.

Asset-related costs also tend to be heavy for national LTL carriers, which require vast fleets, terminal facilities, and equipment maintenance shops. These items have discouraged would-be competitors from entering the national LTL market.

The TL market possesses relatively low entry barriers, as key assets are readily available tractors and trailers. Trucking companies typically have most of their assets invested in such transport equipment, although some contract with owner-operators who own this equipment. Anyone who can buy a used tractor can find a load through a freight broker, but success in the TL market requires sharp management skills and investment in state-of-the-art communications and information systems. Trucking carriers typically utilize a five- to seven-year replacement cycle for their tractors, selling them just before the average maintenance expenses start to rise at a faster pace. Additionally, providing newer model tractors tends to help attract drivers.

Equipment expenses are high for integrated air carriers. Few integrators buy new freighter aircraft because of the prohibitively high cost. Even with used aircraft, few new players have started an integrated air carrier operation, since it also requires control of vast fleets of ground delivery equipment.

## REGULATION

Most economic regulation of freight transporters has been phased out. Air cargo pricing was deregulated in 1977, and major rail and trucking deregulation measures were enacted in 1980. However, the government remains significantly involved in the industry via infrastructure spending decisions, antitrust rulings, taxation, pricing dispute mechanisms, and labor, safety, and health regulations.

◆ **Rail.** Federal economic regulation of the railroad industry began in 1887. Because rail was the sole means for large-scale land-based transportation, shippers demanded protection from the industry's pricing power. By the mid-1970s, however, railroads' share of national freight revenues was below 10%, and much of the industry was bankrupt or ailing. Congress then began the piecemeal deregulation of the industry, with the Staggers Rail Act of 1980 removing the industry's most crippling regulations.

The deregulation process has not ended, but it is in its terminal stage. Some regulation remains. For example, railroads must continue to file tariffs (rates) and contract summaries for agricultural products. Rail mergers remain subject to review by the Surface Transportation Board (STB), which also oversees rail rate disputes, regulates track construction and abandonment, and sets and enforces car interchange rules.

◆ **Trucking.** Truckers, unlike railroads, came to be regulated by the government to protect the industry from alleged self-destructive price-cutting. With the Motor Carrier Act of 1935, the government began regulation of rates, routes, and the number of carriers in the industry. The Motor Carrier Act of 1980 eliminated restrictions on the expansion of interstate traffic and allowed truckers to set tariffs. The Trucking Industry Regulatory Reform Act of 1994 eliminated the need to file public rate tariffs. Intrastate transportation was deregulated in 1995.

Some regulations remain. The DOT and various state and local agencies exercise broad powers over the trucking business, governing such activities as authorization to engage in motor carrier operations, safety, and insurance requirements. Truck drivers and independent contractors also must comply with the safety and fitness regulations promulgated by the DOT, including those relating to drug and alcohol testing and hours-of-service. Truckers still must file certain financial reports, obtain operating certificates, and file proof of insurance coverage with the STB. The US Environmental Protection Agency regulates the emissions requirements of most engines purchased by the trucking industry.

◆ **Airfreight.** Under the Federal Aviation Act of 1958, both the DOT and the Federal Aviation Administration (FAA) exercise regulatory authority over the industry. The FAA's regulatory authority relates primarily to operational aspects of air transportation, including aircraft standards, maintenance, and corrosion control, as well as personnel and ground facilities. The DOT's authority relates primarily to economic and security aspects of air transportation. In 2001, the Aviation and Transportation Security Act transferred responsibility for aviation security from the FAA to the Transportation Security Administration within the DOT, and, ultimately, to the Department of Homeland Security.

## KEY INDUSTRY RATIOS AND STATISTICS

The general level of industrial production affects the railroad and trucking industries. However, each transportation sector has its own set of ratios and indicators that best measures its performance.

### **TRUCKING**

◆ **Class 8 truck sales.** Class 8 tractors (more than 33,000 pounds in gross vehicle weight, or GVW) are used primarily for long-haul trucking. The number of Class 8 trucks sold, reported by Americas Commercial Transportation Research Co. LLC (ACT Research), a data and forecasting services firm for the commercial vehicle industry, is a rough indicator of incremental trucking industry capacity additions. This measure, taken together with the scrap rate, shows net additions.

Tractor sales rose sharply in both 2005 (up 26%) and 2006 (up 13%), as underlying freight trends and reasonably strong balance sheets contributed to a degree of optimism among carriers, encouraging them to order more aggressively than they would have otherwise, in our view. S&P Capital IQ (S&P) also thinks many fleet owners were wary of purchasing trucks with 2007 engines, built to comply with the new lower-emission standards, until there was more first-hand information about their operating performance and reliability. Retail sales of Class 8 trucks fell almost 35% to 241,746 units in 2007, as the pre-buying came to an end. Moreover, with the economy slowing and carriers trimming tractors from their fleets to keep utilization rates up, retail sales declined 14% in 2008 to 207,428 units. Unit sales were particularly weak in early 2009 due to the sharp economic contraction, which led to fewer loads and increased carrier bankruptcies. While several of the larger carriers had purchase agreements in place for 2009-model engines, with delivery during late 2009 and 2010 as part of their regular fleet rotation program, unit sales in 2009 declined 38% to 127,866 units.

Retail sales rebounded 19% to 152,736 units in 2010 and improved another 58% to 242,019 units in 2011, according to statistics on Class 8 trucks in North America provided by ACT Research. We see carriers more inclined to purchase tractors with well-tested engine models, where operating characteristics are known, than to buy those with the new 2010 engines that are based on a new technology following the latest emissions regulations by the Environmental Protection Agency. Retail sales were up 12.6% to 272,571 units in 2012, and up 17% to 318,908 units in 2013. Through July 2014, retail sales were 312,000 units, and are estimated to reach 325,000 units in 2014.

◆ **Cass Volume Index of Freight Expenditures and Shipments.** Cass Information Systems Inc., a company that provides information on logistics issues, calculates the Freight Index of Expenditures. S&P thinks that the Expenditures index provides a basis for comparing monthly national transportation dollar spending. The index increased through 2003 and 2004, reaching a high of 2.187 in June 2006. It generally trended lower from that point until bottoming in April 2009 at 1.396, 36% below the peak because of the recession. The index trended higher in early 2011, reaching a high of 2.423 in June, not only reflecting a greater fuel surcharge component, but also a generally improving freight environment. The index continued to trend upward in 2012, reaching 2.487 in October, and then declined slightly to 2.364 in December. The index rose slightly to 2.387 in December 2013. As of July 2014, the index stood at 2.651.

Cass also calculates the Freight Index for Shipments, a monthly report of shipper volumes. S&P thinks that the Shipments index provides a basis for comparing monthly national transportation volumes. This index was strong throughout 2004, and then peaked in February 2005 at 1.321, as volumes stalled. The index remained below that level until June 2006, when it reached 1.347, which was a 15-year high. It then steadily declined until January 2009, when it bottomed at 0.851. The index recovered in 2010–2011 and continued to improve throughout 2012, reaching 1.071 in December. In December 2013, the index was lower than the previous year at 1.037. As of July 2014, the index stood at 1.154, which is still 13% off its peak.

◆ **S&P trucking operating ratio.** This ratio, calculated by dividing operating expenses by operating revenues, is a proprietary S&P's calculation based on the financial reports of the largest public less-than-truckload (LTL) motor carriers, weighted by size.

Before deregulation in 1980, the operating ratio for leading LTL carriers generally fluctuated between 94% and 96%, as the now-disbanded Interstate Commerce Commission strove to keep trucking returns stable. After 1980, fierce competition drove the operating ratio up to an unhealthy 99.1% in 1995, indicating a profit margin of just 0.9%, the lowest in some 30 years.

In 2004, the operating ratio for leading LTL carriers was 90.9%—a profit margin of 9.1%. By 2005, the profit margin improved to 10.3% (an operating ratio of 89.7%) as weak players had been driven out and little new capacity investment had been undertaken. Freight market weakness that began in late 2006 continued through 2009, and contributed to deterioration in the operating margin to 4.9% in 2008 and overall operating losses (a –0.3% margin) for the group in 2009. The industry's operating margin weakened further in 2010 to –0.7% as pricing remained highly competitive. Then, in September 2010, several leading carriers started to raise rates. With freight traffic stabilizing and efforts by carriers to hold capacity flat, the operating margin widened to 3.1% for 2011, 6.1% for 2012, and 7.4% in 2013.

## RAILROADS

◆ **Ton-miles.** This calculation, issued by the Association of American Railroads (AAR), an industry trade group, measures total industry shipment weight times the average length of haul. We think it is the best measure of rail freight movement. Ton-miles decreased slightly by 0.9% to 1.713 trillion in 2012, from 1.729 trillion in 2011. In 2010, the figure was 1.691 trillion.

◆ **Originated tonnage.** Originated tonnage is another measure supplied by the AAR. It is the total volume handled by freight railroads. S&P estimates that originated tonnage for the Class I railroads was 1.758 billion in 2013, about flat with the 1.76 billion in 2012, compared with 1.89 billion tons in 2011 and 1.85 billion tons in 2010. Total carloads originated during 2013 by the Class I rails was 28.8 million up from 28.4 million in 2012, but down from 30.0 million in 2011 and 29.2 million in 2010. From 2002 to 2006, the growth rate for ton-miles (which measures both distance and volume) exceeded that for originated tons, indicating that rail traffic growth was coming primarily from hauling freight longer distances. Coming out of the deep slump in freight during 2008 and early 2009, tonnage has increased faster than ton-miles. We attribute this to the mix of freight.

◆ **Carloadings.** Available weekly from the AAR, this measure provides an accurate indication of short-term trends, in our view. It is not useful for analyzing long-term trends, however, because fewer cars are needed today to haul the same level of freight hauled in earlier years. Freight cars have gotten larger: The average

capacity in 2005 was about 98 tons per car, compared with 54 tons per car in 1955. Average tons per carload were down to 61.0 tons in 2013 from 62.0 in 2012 and 62.9 in 2011.

◆ **Revenue per ton-mile.** Available annually through the AAR, this indicator measures how much revenue is generated by moving one ton of freight one mile. This measure was in a downward trend since 1982, when it peaked at 3.2 cents, but it has turned upward since 2001. Revenue per ton-mile for the Class I railroads was 4.051 cents in 2013, up from 3.947 cents in 2012 and 3.748 cents in 2011. The number reported in 2012 represents a 79% increase since 2002, when revenue per ton-mile was 2.26 cents.

## AIRFREIGHT

◆ **Scheduled freight air transportation producer price index (PPI).** The US Department of Labor's Bureau of Labor Statistics (BLS) compiles the PPI, a family of indexes that measures the average change over time in the selling prices received by domestic producers of goods and services. Issued monthly, the PPI includes products of virtually every industry in the mining and manufacturing sectors of the US economy, including rates charged by air carriers to move freight, express shipments, and mail. The scheduled freight air transportation index was initiated in December 1987 at 100. At December 2011, the index was at 201.8, up from 175.3 at the end of 2010. In February 2012, the index was at 202.3, indicating that pricing had increased nearly 14% from February 2011. However, in December 2012, the index was at 202.3, almost flat from December 2011. In December 2013, the index was at 157.1, up 1.0% from December 2012. Year to date through July 2014, the index stood at 158.1, up 1.0% from the same period a year ago.

◆ **Revenue ton-miles.** The Bureau of Transportation Statistics (BTS) publishes a monthly cargo report using data collected from a variety of all-freight carriers, and from integrated carriers such as FedEx Express and UPS. The report provides data on domestic, as well as regional cargo, routes. The US air cargo industry experienced an increase in volume of 0.5% to 12.43 billion cargo ton-miles from 12.37 billion in 2012 and 12.13 billion in 2011. International routes increased 0.3% in revenue ton-miles in 2013. Pacific routes were down 4.0%, and Atlantic and Latin America routes both declined 3.0%. Through May 2014, international routes climbed 1.5% and domestic routes were up 2.0%.

## HOW TO ANALYZE A COMMERCIAL TRANSPORTATION COMPANY

When analyzing a transportation company, S&P Capital IQ looks at both quantitative and qualitative factors.

### QUANTITATIVE FACTORS

One can find much information a company's financial statements that will help assess its health. We discuss some key items found in the income statement, the balance sheet, and the statement of cash flows.

#### **The income statement**

When conducting an income statement analysis, one should evaluate levels and changes of items on a seasonal basis—such as comparing quarterly figures to the corresponding year-earlier period—to normalize for seasonal differences. One may look at changes in less-seasonal items (*e.g.*, depreciation or interest expense) on a consecutive basis, to identify changes in the company's business environment or internal decisions. Below we highlight some worthy items on which to focus.

◆ **Revenues.** This is the starting point for a company analysis. Investors typically prefer a rising trend and lower volatility, but one should look for underlying causes for changes. Revenue growth should be compared with volume growth (such as revenue ton-miles, the volume of shipment weight times distance traveled) to determine the role that activity and price increases played, and observe measures such as revenue/trucks and revenue/rail carloads to estimate productivity trends. Volume growth can hurt profitability if related costs are too high, while revenues generated by rapid price increases could lead to future customer attrition. In addition, one should consider whether items such as temporary fuel surcharges contributed to revenues.



◆ **Operating profit margin.** The operating profit margin is calculated as revenues minus operating expenses, expressed as a percentage of revenues. Major operating expenses include salaries, fuel, purchased transportation (from others), and depreciation. Transportation companies often refer to their “operating ratio,” which is typically calculated as 1.0 minus the operating profit margin and may be adjusted for special items.

However expressed, the operating profit margin is a key indicator of underlying profitability and efficiency and should be compared among close competitors and over time for a company. Industry sectors tend to have different levels of operating profit margins, given their varying levels of asset intensity, financial leverage, and competition. Higher operating profit margins are positive for a company, but an excessive focus by management on the short-term operating profit margin can present dangers. For example, cost savings associated with low salaries or low depreciation expense (if resulting from insufficient asset investment) could later result in higher employee turnover and maintenance costs or declining on-time service.

◆ **Net profit margin.** This is calculated as net income divided by total sales. Along with operating profitability, net income reflects a company’s tax expense as well as its non-operating income and expense items, such as interest income and interest expense. Transportation companies frequently generate non-operating income or losses on the sale of assets, so one should investigate how likely these actions are to recur, and judge whether they should be assigned the same importance as operating profits or expenses. The asset-based trucking companies tend to have relatively large and recurring gains from asset sales due to the trade cycle they follow for tractors, which is a much shorter period of time than for railroads or air cargo carriers.

### **The balance sheet**

The balance sheet contains the major categories and value of assets, liabilities, and stockholder’s equity at a specific point in time. Typically, equity investors assign higher values to companies with a strong balance sheet rather than a highly leveraged one. Below are items of particular note on a transportation company’s balance sheet.

◆ **Property and equipment.** Most transportation companies own and operate significant pools of long-lived assets, so a proper analysis of these assets is important. One should find or estimate the average age of equipment—whether tractor, trailer, locomotive, railcar, or aircraft—because this will affect fuel consumption rates, expenses for maintenance and repairs, service predictability, and finance charges. An aging transportation fleet should raise red flags.

By comparing gross assets, accumulated depreciation, and annual depreciation, one may estimate the average age and average assumed useful life of a company’s assets. These measures then can be compared among peers, to see which companies may be operating with older fleets or are using more aggressive depreciation expense assumptions, which could indicate future increases in investment and depreciation.

One should investigate the degree to which a company’s transportation assets are owned, leased, or outsourced entirely. Some trucking firms limit their investment in equipment and rely heavily on independent owner-operators to move their freight. Such carriers have more sensitive rate structures than do those employing salaried drivers. During peak expansionary periods, airfreight carriers that own or lease their fleets are well positioned to gain market share. Forwarders, in contrast, can face shortages of airline belly space and escalating costs at such times. During recessions, however, airfreight carriers, with their higher fixed costs, could see margins shrink rapidly.

◆ **Deferred tax liabilities.** Many transportation companies have a significant long-term liability item, other than debt, called long-term deferred tax liability. Because federal income tax allows accelerated depreciation of transportation assets (while straight-line depreciation is used in financial statement tax expenses), this can make financial statement tax expenses higher than actual cash taxes paid in a period, contributing to a growing deferred tax liability. For analytical purposes, one should investigate the likelihood of this liability reversing in the future; if not, it may be more appropriate to treat this item similar to shareholders’ equity.

◆ **Debt-to-capital ratio.** This ratio is an indication of financial leverage, which tends to accentuate debt repayment risk; it is worth watching, given the economic exposures of most transportation companies. One

may consider adjusting this ratio upward for companies that heavily use operating leases, which moves debt-like obligations off the balance sheet.

### **The statement of cash flows**

The statement of cash flows records all changes affecting cash in the categories of operations, investments, and financing. These cash receipts and outflows are reported quarterly for domestic companies and should be followed closely by analysts.

◆ **Cash flow from operations.** This is a rough measure of the cash-generating ability of current operations. Because depreciation expense and increases in deferred tax liabilities are added back to profits here, most transport companies have cash flow from operations greater than net income; if not, one should look closely for underlying problems.

◆ **Cash flow from investing.** This measure indicates a company's cash invested in and received for assets for a particular period; the key components are usually capital expenditures and acquisitions. For most transportation companies, capital expenditures representing fleet additions and replacement are a constant necessity, but a company sometimes can boost free cash by deferring capital expenditures. One should compare capital expenditures to depreciation and assets in order to identify deviations from past normal levels.

### **QUALITATIVE FACTORS**

We review numerous qualitative factors when evaluating a company relative to its peers. Three of these factors are management quality and strategy, geographic location, and market position and reputation.

◆ **Management quality and strategy.** These play a key role in setting a transportation company's strategy and moving it toward its goals. Some management teams may focus on maximizing quarterly earnings per share numbers, while others focus on maximizing long-term return on investment, leading to significantly different choices. Corporate governance, internal controls, and the company's treatment of minority shareholders also should be assessed.

◆ **Geographic location.** Different geographic areas face varied economic conditions, levels of competition, customers, fuel prices, and employee costs. For example, a railroad with tracks winding through mountains may operate less efficiently than a train moving across flat plains.

◆ **Market position and reputation.** A large firm with a reputation for quality service typically will find it easier to win larger customers and potentially charge higher prices than it could otherwise. Smaller firms without strong track records may find it necessary to compete for business on price. In some industry segments, such as air cargo and less-than-truckload (LTL), there are potential gains from economies of scale and network effects.

### **EQUITY VALUATION**

Transportation stocks generally tend to be somewhat volatile, partly reflecting the underlying cyclicality of the business. Prospects for future profit growth are paramount in determining a company's worth. A change in management can lead to an immediate increase in the value of a transportation company's stock if investors perceive that steps will be taken to produce higher returns. At the other extreme, the stock of a carrier with the best track record may underperform other transportation equities if investors see less room for further profit improvement.

In our view, detailed discounted cash flow models with realistic long-term projections of free cash flow to a firm, incorporating the differing investment risks among companies, are a good approach to valuing transportation stocks. To supplement this, one may compare common valuation ratios among companies and through history. Below are some valuation ratios that analysts use to assess equity values. We note, however, that typical valuation ranges vary by mode of transportation, and are difficult to compare across modes.

- ◆ **Price-to-earnings (P/E) ratio.** The most common means of valuing equities, the P/E ratio is calculated as the share price divided by net earnings per share (EPS) for either the past 12 months or projected EPS for any future period. An analyst should also examine a company's or industry's historical valuations relative to a benchmark price-to-earnings ratio.
- ◆ **Enterprise value to EBITDA.** As an alternative to the standard P/E ratio, analysts compare net debt and stock market value to earnings before interest, taxes, depreciation, and amortization (EBITDA) to eliminate distortions caused by differing tax rates and leverage, and better evaluate a company's operating performance.
- ◆ **Price to sales.** For cyclical companies in particular, the ratio of share price to sales can provide another tool to gauge current versus historical valuations, and company versus industry or stock market valuations. Additional insight can be pursued by comparing price-to-sales ratios while factoring in differences in profitability, leverage, and growth. ■

# GLOSSARY

---

**Arbitraries**—Special payments made to rail workers for performing tasks considered unusual for their job classification or for enduring exceptional occupational hardships.

**B2B**—Acronym for business-to-business electronic commerce. B2B is the largest component of e-commerce by far; it has affected ordering and billing practices, but has not altered existing shipping patterns.

**B2C**—Acronym for business-to-consumer e-commerce; a smaller part of e-commerce that involves both services and goods. B2C is changing the ways in which goods are ordered and moved through the supply chain.

**Backhaul**—Return trip for a carrier, often involving empty vehicles on certain routes. (*See* Deadhead.)

**Class I motor carrier**—The US Department of Transportation (DOT) defines Class I motor carriers of property as those generating revenues of at least \$10 million annually. Class II carriers generate \$3 million to \$10 million; Class III carriers, less than \$3 million.

**Common carrier**—A motor carrier, railroad, or other transportation company that offers its services to all businesses or individuals.

**Contract carrier**—A motor carrier that generally has a limited number of shipper clients with which it contracts to provide trucks and drivers when needed.

**Deadhead**—Returning on a backhaul without a load.

**Demurrage**—A detention fee that shippers pay if a carrier's equipment has not been loaded or unloaded and returned within a specified period.

**Double-stack**—Transportation of containers piled on rail flatcars; a form of piggybacking.

**Dwell time**—Total hours that a car spends at a rail terminal; a measure of fluidity and asset utilization.

**E-commerce**—An abbreviation of electronic commerce, this term refers to sales of goods and services via the Internet.

**For-hire carrier**—A trucking firm that transports goods for monetary compensation. It may be a common or a contract carrier.

**Freight forwarder**—An independent business that handles export shipments for compensation.

**Haulage rights**—An agreement whereby one railroad pays a second carrier to transport its freight using the second carrier's crew and power equipment.

**Headhaul**—A carrier's primary trip, bringing a shipment to its destination.

**Hub-and-spoke system**—A freight distribution system used by railroads, motor carriers, and airlines to maximize equipment efficiency. Shipments are fed into consolidation centers from satellite terminals.

**Integrator**—An airfreight carrier that offers door-to-door delivery of packages and cargo, employing aircraft and ground equipment under its direct control.

**Interline**—A practice of transferring freight between carriers, sometimes performed at the shipper's request. Interlining has become less frequent as rail lines have merged.

**Intermodal**—The movement of consumer goods and light industrial products by a railroad in a trailer or container that originates and terminates with either a motor carrier or ocean shipping line.

**Intermodal marketing company (IMC)**—A transportation intermediary that buys wholesale space on railroad intermodal trains, which it then retails to individual shippers.

**Just-in-time (JIT) management**—A production management system under which inventories are kept to minimum levels through greater coordination among materials purchases, transportation, and production schedules. The practice originated in Japan, where it is known as kanban.

**Less-than-truckload (LTL) freight**—Designation for shipments weighing 10,000 pounds or less. This quantity of freight involves more intermediate handling than does truckload freight.

**Line-haul**—The longest leg of a shipment; also, the movement of freight between terminals.

**Logistics**—Management of a company's total distribution, transportation, and warehousing needs.

**Lumping**—Illegal practice whereby freelance workers are used to load or unload trucks. Although shippers and consignees are responsible for loading and unloading trailers, they sometimes require drivers to hire freelancers or to face lengthy delays in getting their vehicles back into service.

**Owner-operators**—Independent truckers who operate their own vehicles to transport exempt goods or regulated freight under a lease agreement with a common carrier or shipper.

**Piggyback**—The transporting of truck trailers or marine containers on flatbed railroad cars.

**Private carrier**—A shipper that transports its goods in truck fleets that it owns or leases.

**Regional line**—A common term for a Class II railroad. Defined by the Surface Transportation Board (STB) as a carrier with inflation-adjusted operating revenues for three consecutive years of greater than \$40 million but less than \$379 million (in 2009 dollars).

**Regular-route service**—Transportation of goods by a for-hire motor carrier over standard routes and on fixed schedules.

**Shortline**—A common term for a Class III railroad. Defined by the STB as a carrier with inflation-adjusted operating revenues for three consecutive years of less than \$40 million (in 2009 dollars).

**Sidewall**—Loading a shipment along the wall of a trailer.

**Switching**—Moving rail cars from one track to another in the process of assembling trains. Also, moving all cars from one railroad's track to a connecting carrier after a short movement.

**Tariff**—A schedule of rates charged for hauling freight a specific distance or between specific points. No longer required in the motor carrier industry, tariffs are still published by railroads.

**Ton-mile**—A measure of freight traffic equal to moving one ton of freight one mile.

**Trackage rights**—An agreement whereby one railroad pays another for the right to operate its trains over the second carrier's track. Often, the carrier yielding trackage rights has been directed by the government to do so to enhance competition.

**Transload**—Transfer of freight from one mode of transportation to another.

**Truckload (TL)**—Designation for shipments exceeding 10,000 pounds. A motor carrier may haul more than one TL shipment in a single vehicle.

**Trunk line**—Major rail systems that serve several regions and concentrate on long-haul shipments.

**Unit train**—A train that is made up of cars carrying one product (*e.g.*, coal) from one origination point to a single destination without stopping in a railyard to be assembled or disassembled. ■

# INDUSTRY REFERENCES

---

## PERIODICALS

### ***Air Cargo World***

<http://www.aircargoworld.com>

Monthly; covers air cargo transportation in the United States and overseas.

### ***Air Transport World***

<http://www.atwonline.com>

Monthly; covers airlines and airfreight carriers.

### ***American Shipper***

<http://www.americanshipper.com>

Monthly; oriented toward ocean carriers, but also covers other transport modes.

### ***Commercial Carrier Journal (CCJ)***

<http://www.etrucker.com>

Monthly; in-depth articles on the trucking industry, directed toward professionals who are responsible for running trucking companies and maintaining equipment. The website offers daily news coverage.

### ***Journal of Commerce***

<http://www.joc.com>

Weekly; in-depth coverage of international air commerce, intermodal, and shipping. The website offers daily news coverage.

### ***Logistics Management***

<http://www.logisticsmgmt.com>

Monthly; covers the major forms of freight transportation, geared toward supply chain professionals.

### ***Material Handling & Logistics***

<http://mhlnews.com>

Monthly; focuses on supply chain management.

### ***Railway Age***

<http://www.railwayage.com>

Monthly; provides in-depth articles on railroads and mass transit.

### ***Transport Topics***

<http://www.ttnews.com>

Weekly; focuses on trucking and freight transportation, published by a trucking industry trade group.

## TRADE ASSOCIATIONS

### **Airlines for America (A4A)**

<http://www.airlines.org>

Produces monthly, quarterly, and annual reports on air cargo and airlines. Formerly known as the Air Transport Association of America.

### **American Trucking Associations (ATA)**

<http://www.trucking.org>

Produces monthly, quarterly, and annual financial data on the trucking industry.

### **Association of American Railroads (AAR)**

<http://www.aar.org>

Provides weekly, monthly, quarterly, and annual data on rail traffic and financials.

### **Intermodal Association of North America**

<http://www.intermodal.org>

Represents the combined interests of the intermodal freight industry; provides quarterly and annual volume and revenue intermodal statistics.

### **International Air Transport Association**

<http://www.iata.org>

Promotes safe, reliable, secure, and economical air services, and provides industry statistics and forecasts.

## GOVERNMENT AGENCIES

### **Bureau of Transportation Statistics (BTS)**

<http://www.rita.dot.gov/bts>

Offers comprehensive database of statistics on rail, highway, air, and water modes, as well as news and research on transportation issues.

### **US Department of Transportation (DOT)**

<http://www.dot.gov>

Includes administrations and bureaus of interest, such as the National Highway Transportation Administration, the Surface Transportation Board (STB), and the Federal Motor Carrier Safety Administration, each with information on transportation issues.

# COMPARATIVE COMPANY ANALYSIS

## Operating Revenues

| Ticker                              | Company                        | Yr. End | Million \$ |            |           |           |           |           |              | CAGR (%) |       |       | Index Basis (2003 = 100) |      |      |      |      |
|-------------------------------------|--------------------------------|---------|------------|------------|-----------|-----------|-----------|-----------|--------------|----------|-------|-------|--------------------------|------|------|------|------|
|                                     |                                |         | 2013       | 2012       | 2011      | 2010      | 2009      | 2008      | 2003         | 10-Yr.   | 5-Yr. | 1-Yr. | 2013                     | 2012 | 2011 | 2010 | 2009 |
| <b>AIR FREIGHT &amp; LOGISTICS†</b> |                                |         |            |            |           |           |           |           |              |          |       |       |                          |      |      |      |      |
| AAWW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 1,656.9    | 1,646.0    | 1,398.2   | 1,337.8   | 1,051.5   | 1,607.5   | 1,383.7      | 1.8      | 0.6   | 0.7   | 120                      | 119  | 101  | 97   | 76   |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 12,752.1   | 11,359.1 A | 10,336.3  | 9,274.3   | 7,577.2   | 8,578.6   | 3,613.6      | 13.4     | 8.3   | 12.3  | 353                      | 314  | 286  | 257  | 210  |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 6,080.3    | 5,980.9    | 6,150.5   | 5,967.6   | 4,092.3   | 5,633.9   | 2,624.9      | 8.8      | 1.5   | 1.7   | 232                      | 228  | 234  | 227  | 156  |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 45,567.0   | 44,287.0   | 42,680.0  | 39,304.0  | 34,734.0  | 35,497.0  | 24,710.0 A   | 6.3      | 5.1   | 2.9   | 184                      | 179  | 173  | 159  | 141  |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 652.5 A    | 584.4      | 536.4     | 483.9     | 417.4     | 474.4 A   | 241.5        | 10.4     | 6.6   | 11.6  | 270                      | 242  | 222  | 200  | 173  |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 3,373.9    | 3,124.1    | 2,751.5 A | 1,833.7   | 1,511.0   | 1,860.6   | 1,359.6      | 9.5      | 12.6  | 8.0   | 248                      | 230  | 202  | 135  | 111  |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 55,438.0   | 54,127.0   | 53,105.0  | 49,545.0  | 45,297.0  | 51,486.0  | 33,485.0     | 5.2      | 1.5   | 2.4   | 166                      | 162  | 159  | 148  | 135  |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | 4,440.9    | 4,607.5    | 4,914.2   | 4,549.8 A | 3,567.5 A | 4,543.7 D | 1,502.9      | 11.4     | (0.5) | (3.6) | 295                      | 307  | 327  | 303  | 237  |
| <b>MARINE‡</b>                      |                                |         |            |            |           |           |           |           |              |          |       |       |                          |      |      |      |      |
| KEK                                 | † KIRBY CORP                   | DEC     | 2,242.2    | 2,112.7 A  | 1,850.4 A | 1,109.6   | 1,082.2   | 1,360.2   | 613.5        | 13.8     | 10.5  | 6.1   | 365                      | 344  | 302  | 181  | 176  |
| MATX                                | § MATSON INC                   | DEC     | 1,637.2    | 1,560.0 D  | 1,722.0 D | 1,646.0 D | 1,405.0 D | 1,896.6 D | 1,233.0 D    | 2.9      | (2.9) | 4.9   | 133                      | 127  | 140  | 133  | 114  |
| <b>RAILROADS‡</b>                   |                                |         |            |            |           |           |           |           |              |          |       |       |                          |      |      |      |      |
| CSX                                 | [] CSX CORP                    | DEC     | 12,026.0   | 11,756.0   | 11,743.0  | 10,636.0  | 9,041.0 D | 11,255.0  | 7,793.0 C    | 4.4      | 1.3   | 2.3   | 154                      | 151  | 151  | 136  | 116  |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 1,569.0    | 875.6 A    | 829.1 A   | 630.2 A   | 544.9 D   | 602.0 A   | 244.8 A      | 20.4     | 21.1  | 79.2  | 641                      | 358  | 339  | 257  | 223  |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 2,369.3    | 2,238.6    | 2,098.3   | 1,814.8   | 1,480.2   | 1,852.1   | 581.3        | 15.1     | 5.0   | 5.8   | 408                      | 385  | 361  | 312  | 255  |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 11,245.0   | 11,040.0   | 11,172.0  | 9,516.0   | 7,969.0   | 10,661.0  | 6,468.0      | 5.7      | 1.1   | 1.9   | 174                      | 171  | 173  | 147  | 123  |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 21,963.0   | 20,926.0   | 19,557.0  | 16,965.0  | 14,143.0  | 17,970.0  | 11,551.0 C,D | 6.6      | 4.1   | 5.0   | 190                      | 181  | 169  | 147  | 122  |
| <b>TRUCKING‡</b>                    |                                |         |            |            |           |           |           |           |              |          |       |       |                          |      |      |      |      |
| ARCB                                | § ARCBEST CORP                 | DEC     | 2,299.5    | 2,066.0 A  | 1,907.6   | 1,657.9   | 1,472.9 A | 1,833.1   | 1,527.5      | 4.2      | 4.6   | 11.3  | 151                      | 135  | 125  | 109  | 96   |
| CGI                                 | § CELADON GROUP INC            | JUN     | 613.6 A    | 599.0      | 568.2 C   | 523.5     | 490.3     | 565.9     | 367.1        | 5.3      | 1.6   | 2.5   | 167                      | 163  | 155  | 143  | 134  |
| CNW                                 | † CON-WAY INC                  | DEC     | 5,473.4    | 5,580.2    | 5,290.0   | 4,952.0   | 4,274.6   | 5,036.8   | 5,104.3      | 0.7      | 1.7   | (1.9) | 107                      | 109  | 104  | 97   | 84   |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 582.3 A    | 545.7      | 528.6     | 499.5     | 459.5     | 625.6     | 405.1        | 3.7      | (1.4) | 6.7   | 144                      | 135  | 130  | 123  | 113  |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 5,584.6    | 5,055.0    | 4,526.8   | 3,793.5   | 3,203.3   | 3,731.9   | 2,433.5      | 8.7      | 8.4   | 10.5  | 229                      | 208  | 186  | 156  | 132  |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 969.2      | 936.0      | 866.2     | 730.7     | 651.7     | 766.9     | 340.1        | 11.0     | 4.8   | 3.5   | 285                      | 275  | 255  | 215  | 192  |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 2,664.8 D  | 2,793.4    | 2,649.1   | 2,400.2   | 2,008.8 A | 2,643.1   | 1,596.6      | 5.3      | 0.2   | (4.6) | 167                      | 175  | 166  | 150  | 126  |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 2,337.6    | 2,110.5    | 1,882.5   | 1,481.0   | 1,245.0   | 1,537.7   | 667.5        | 13.4     | 8.7   | 10.8  | 350                      | 316  | 282  | 222  | 187  |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 1,361.4 A  | 1,073.4 A  | 843.6 A   | 632.0     | 450.4     | 537.4     | NA           | NA       | 20.4  | 26.8  | **                       | **   | **   | **   | NA   |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 6,419.3    | 6,257.0    | 6,050.5 A | 5,136.4 A | 4,887.3 D | 6,203.7   | 4,802.3      | 2.9      | 0.7   | 2.6   | 134                      | 130  | 126  | 107  | 102  |
| SAIA                                | § SAIA INC                     | DEC     | 1,139.1    | 1,098.7 A  | 1,030.2   | 902.7     | 849.1     | 1,030.4   | 827.4        | 3.2      | 2.0   | 3.7   | 138                      | 133  | 125  | 109  | 103  |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 2,029.2    | 2,036.4    | 2,002.8   | 1,815.0   | 1,666.5   | 2,165.6   | 1,457.8      | 3.4      | (1.3) | (0.4) | 139                      | 140  | 137  | 125  | 114  |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |            |            |           |           |           |           |              |          |       |       |                          |      |      |      |      |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 9,941.7    | 9,961.8    | 8,878.8   | 8,289.5   | 7,042.3   | 6,929.7 A | 4,553.1 A    | 8.1      | 7.5   | (0.2) | 218                      | 219  | 195  | 182  | 155  |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 5,765.7    | 5,719.0    | 5,091.5   | 4,977.0 C | 4,113.6   | 4,029.1   | 2,832.7      | 7.4      | 7.4   | 0.8   | 204                      | 202  | 180  | 176  | 145  |

Note: Data as originally reported. CAGR-Compound annual growth rate. †S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year. \*\*Not calculated; data for base year or end year not available. A - This year's data reflect an acquisition or merger. B - This year's data reflect a major merger resulting in the formation of a new company. C - This year's data reflect an accounting change. D - Data exclude discontinued operations. E - Includes excise taxes. F - Includes other (nonoperating) income. G - Includes sale of leased depts. H - Some or all data are not available, due to a fiscal year change.

**Net Income**

| Ticker                              | Company                        | Yr. End | Million \$ |         |         |         |         |         |         | CAGR (%) |        |        | Index Basis (2003 = 100) |       |      |      |       |
|-------------------------------------|--------------------------------|---------|------------|---------|---------|---------|---------|---------|---------|----------|--------|--------|--------------------------|-------|------|------|-------|
|                                     |                                |         | 2013       | 2012    | 2011    | 2010    | 2009    | 2008    | 2003    | 10-Yr.   | 5-Yr.  | 1-Yr.  | 2013                     | 2012  | 2011 | 2010 | 2009  |
| <b>AIR FREIGHT &amp; LOGISTICS†</b> |                                |         |            |         |         |         |         |         |         |          |        |        |                          |       |      |      |       |
| AAVW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 93.8       | 129.9   | 96.1    | 141.8   | 77.8    | 63.7    | (101.0) | NM       | 8.1    | (27.8) | NM                       | NM    | NM   | NM   | NM    |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 415.9      | 593.8   | 431.6   | 387.0   | 360.8   | 359.2   | 114.1   | 13.8     | 3.0    | (30.0) | 364                      | 520   | 378  | 339  | 316   |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 348.5      | 333.4   | 385.7   | 344.2   | 240.2   | 301.0   | 122.0   | 11.1     | 3.0    | 4.5    | 286                      | 273   | 316  | 282  | 197   |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 2,097.0    | 1,561.0 | 2,032.0 | 1,452.0 | 1,184.0 | 98.0    | 838.0   | 9.6      | 84.5   | 34.3   | 250                      | 186   | 242  | 173  | 141   |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 54.5       | 52.7    | 47.2    | 32.0    | 9.8     | 42.5    | 25.8    | 7.8      | 5.1    | 3.4    | 211                      | 204   | 183  | 124  | 38    |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 69.1       | 68.0    | 58.2    | 43.5    | 34.3    | 59.2    | 8.4     | 23.4     | 3.1    | 1.7    | 820                      | 806   | 690  | 516  | 406   |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 4,372.0    | 807.0   | 3,804.0 | 3,488.0 | 2,152.0 | 3,003.0 | 2,898.0 | 4.2      | 7.8    | 441.8  | 151                      | 28    | 131  | 120  | 74    |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | (76.7)     | (100.5) | 72.5    | 69.9    | 41.1    | (12.2)  | 44.8    | NM       | NM     | NM     | (171)                    | (224) | 162  | 156  | 92    |
| <b>MARINE‡</b>                      |                                |         |            |         |         |         |         |         |         |          |        |        |                          |       |      |      |       |
| KEX                                 | † KIRBY CORP                   | DEC     | 253.1      | 209.4   | 183.0   | 116.2   | 125.9   | 157.2   | 40.9    | 20.0     | 10.0   | 20.8   | 618                      | 512   | 447  | 284  | 308   |
| MATX                                | § MATSON INC                   | DEC     | 53.7       | 52.0    | 55.0    | 59.0    | 12.0    | 96.0    | 69.0    | (2.5)    | (11.0) | 3.3    | 78                       | 75    | 80   | 86   | 17    |
| <b>RAILROADS‡</b>                   |                                |         |            |         |         |         |         |         |         |          |        |        |                          |       |      |      |       |
| CSX                                 | [] CSX CORP                    | DEC     | 1,864.0    | 1,859.0 | 1,822.0 | 1,563.0 | 1,137.0 | 1,365.0 | 189.0   | 25.7     | 6.4    | 0.3    | 986                      | 984   | 964  | 827  | 602   |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 271.3      | 52.6    | 119.5   | 78.7    | 59.9    | 72.7    | 28.7    | 25.2     | 30.1   | 416.3  | 945                      | 183   | 416  | 274  | 209   |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 351.4      | 377.3   | 330.3   | 180.2   | 68.0    | 183.9   | 3.3     | NM       | 13.8   | (6.9)  | NM                       | NM    | NM   | NM   | 2,061 |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 1,910.0    | 1,749.0 | 1,916.0 | 1,496.0 | 1,034.0 | 1,716.0 | 411.0   | 16.6     | 2.2    | 9.2    | 465                      | 426   | 466  | 364  | 252   |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 4,388.0    | 3,943.0 | 3,292.0 | 2,780.0 | 1,898.0 | 2,338.0 | 1,056.0 | 15.3     | 13.4   | 11.3   | 416                      | 373   | 312  | 263  | 180   |
| <b>TRUCKING‡</b>                    |                                |         |            |         |         |         |         |         |         |          |        |        |                          |       |      |      |       |
| ARCB                                | § ARCBEST CORP                 | DEC     | 15.8       | (7.7)   | 6.2     | (32.7)  | (127.9) | 29.2    | 46.1    | (10.2)   | (11.5) | NM     | 34                       | (17)  | 13   | (71) | (277) |
| CGI                                 | § CELADON GROUP INC            | JUN     | 27.3       | 25.5    | 15.3    | 4.7     | 2.6     | 6.5     | 3.6     | 22.5     | 33.1   | 6.8    | 760                      | 712   | 425  | 130  | 71    |
| CNW                                 | † CON-WAY INC                  | DEC     | 99.2       | 104.5   | 88.4    | 4.0     | (107.7) | 65.4    | 92.0    | 0.7      | 8.7    | (5.2)  | 108                      | 114   | 96   | 4    | (117) |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 70.6       | 61.5    | 69.9    | 62.2    | 56.9    | 70.0    | 57.2    | 2.1      | 0.2    | 14.7   | 123                      | 108   | 122  | 109  | 100   |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 342.4      | 310.4   | 257.0   | 199.6   | 136.4   | 200.6   | 95.5    | 13.6     | 11.3   | 10.3   | 359                      | 325   | 269  | 209  | 143   |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 69.3       | 64.1    | 60.2    | 59.1    | 50.6    | 56.3    | 35.5    | 6.9      | 4.3    | 8.1    | 195                      | 181   | 170  | 167  | 143   |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 108.9      | 129.8   | 113.0   | 87.5    | 70.4    | 110.9   | 50.7    | 7.9      | (0.4)  | (16.1) | 215                      | 256   | 223  | 173  | 139   |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 206.1      | 169.5   | 139.5   | 75.7    | 34.9    | 68.7    | 27.6    | 22.3     | 24.6   | 21.6   | 747                      | 614   | 505  | 274  | 126   |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 49.0       | 37.5    | 25.9    | 3.6     | 0.2     | (3.8)   | NA      | NA       | NM     | 30.6   | **                       | **    | **   | **   | NA    |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 243.2      | 200.9   | 171.4   | 124.6   | 90.1    | 199.9   | 135.6   | 6.0      | 4.0    | 21.1   | 179                      | 148   | 126  | 92   | 66    |
| SAIA                                | § SAIA INC                     | DEC     | 43.6       | 32.0    | 11.4    | 2.0     | (9.0)   | (19.7)  | 14.9    | 11.3     | NM     | 36.1   | 292                      | 215   | 76   | 13   | (61)  |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 86.8       | 103.0   | 102.8   | 80.0    | 56.6    | 67.6    | 73.7    | 1.6      | 5.1    | (15.8) | 118                      | 140   | 139  | 109  | 77    |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |            |         |         |         |         |         |         |          |        |        |                          |       |      |      |       |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 2,455.6    | 2,691.3 | 2,416.4 | 2,102.1 | 1,772.3 | 1,548.2 | 568.0   | 15.8     | 9.7    | (8.8)  | 432                      | 474   | 425  | 370  | 312   |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 822.6      | 486.0   | 560.6   | 650.1   | 585.4   | 505.7   | 308.5   | 10.3     | 10.2   | 69.2   | 267                      | 158   | 182  | 211  | 190   |

Note: Data as originally reported. CAGR-Compound annual growth rate. †S&P 1500 index group. []Company included in the S&P 500. ‡Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year. \*\*Not calculated; data for base year or end year not available.



| Ticker                              | Company                        | Yr. End | Return on Revenues (%) |      |      |      |      | Return on Assets (%) |      |      |      |      | Return on Equity (%) |      |      |      |      |
|-------------------------------------|--------------------------------|---------|------------------------|------|------|------|------|----------------------|------|------|------|------|----------------------|------|------|------|------|
|                                     |                                |         | 2013                   | 2012 | 2011 | 2010 | 2009 | 2013                 | 2012 | 2011 | 2010 | 2009 | 2013                 | 2012 | 2011 | 2010 | 2009 |
| <b>AIR FREIGHT &amp; LOGISTICS‡</b> |                                |         |                        |      |      |      |      |                      |      |      |      |      |                      |      |      |      |      |
| AAWW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 5.7                    | 7.9  | 6.9  | 10.6 | 7.4  | 2.7                  | 4.7  | 4.4  | 7.7  | 4.7  | 7.2                  | 10.7 | 8.8  | 14.7 | 9.9  |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 3.3                    | 5.2  | 4.2  | 4.2  | 4.8  | 14.8                 | 24.0 | 20.9 | 20.2 | 19.8 | 34.0                 | 43.1 | 35.2 | 33.9 | 33.0 |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 5.7                    | 5.6  | 6.3  | 5.8  | 5.9  | 11.7                 | 11.5 | 13.9 | 13.8 | 10.9 | 16.9                 | 16.5 | 20.6 | 20.9 | 16.5 |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 4.6                    | 3.5  | 4.8  | 3.7  | 3.4  | 6.3                  | 4.9  | 7.1  | 5.6  | 4.8  | 12.8                 | 9.7  | 13.6 | 10.0 | 8.6  |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 8.3                    | 9.0  | 8.8  | 6.6  | 2.3  | 12.0                 | 14.2 | 13.7 | 9.6  | 3.1  | 13.8                 | 16.5 | 17.4 | 13.3 | 4.4  |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 2.0                    | 2.2  | 2.1  | 2.4  | 2.3  | 7.0                  | 7.7  | 7.9  | 7.2  | 6.2  | 13.0                 | 14.5 | 14.3 | 11.9 | 10.2 |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 7.9                    | 1.5  | 7.2  | 7.0  | 4.8  | 11.6                 | 2.2  | 11.1 | 10.7 | 6.8  | 78.6                 | 13.8 | 50.7 | 44.7 | 29.9 |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | NM                     | NM   | 1.5  | 1.5  | 1.2  | NM                   | NM   | 3.3  | 3.5  | 2.3  | NM                   | NM   | 7.9  | 8.3  | 5.6  |
| <b>MARINE‡</b>                      |                                |         |                        |      |      |      |      |                      |      |      |      |      |                      |      |      |      |      |
| KEX                                 | † KIRBY CORP                   | DEC     | 11.3                   | 9.9  | 9.9  | 10.5 | 11.6 | 6.9                  | 6.3  | 7.7  | 6.8  | 8.0  | 13.7                 | 13.4 | 14.1 | 10.5 | 13.0 |
| MATX                                | § MATSON INC                   | DEC     | 3.3                    | 3.3  | 3.2  | 3.6  | 0.9  | 4.4                  | 2.8  | 2.2  | 2.4  | 0.5  | 17.4                 | 7.4  | 4.9  | 5.3  | 1.1  |
| <b>RAILROADS‡</b>                   |                                |         |                        |      |      |      |      |                      |      |      |      |      |                      |      |      |      |      |
| CSX                                 | [] CSX CORP                    | DEC     | 15.5                   | 15.8 | 15.5 | 14.7 | 12.6 | 6.0                  | 6.2  | 6.3  | 5.7  | 4.3  | 19.1                 | 21.3 | 21.3 | 17.8 | 13.5 |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 17.3                   | 6.0  | 14.4 | 12.5 | 11.0 | 5.1                  | 1.3  | 5.5  | 4.2  | 3.6  | 14.8                 | 3.9  | 13.4 | 10.4 | 10.3 |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 14.8                   | 16.9 | 15.7 | 9.9  | 4.6  | 5.1                  | 6.0  | 5.6  | 3.0  | 1.0  | 10.9                 | 12.9 | 12.7 | 7.6  | 2.9  |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 17.0                   | 15.8 | 17.2 | 15.7 | 13.0 | 6.1                  | 5.9  | 6.8  | 5.4  | 3.9  | 18.1                 | 17.8 | 18.6 | 14.2 | 10.4 |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 20.0                   | 18.8 | 16.8 | 16.4 | 13.4 | 9.1                  | 8.5  | 7.5  | 6.5  | 4.6  | 21.4                 | 20.5 | 18.1 | 16.0 | 11.7 |
| <b>TRUCKING‡</b>                    |                                |         |                        |      |      |      |      |                      |      |      |      |      |                      |      |      |      |      |
| ARCB                                | § ARCBEST CORP                 | DEC     | 0.7                    | NM   | 0.3  | NM   | NM   | 1.5                  | NM   | 0.7  | NM   | NM   | 3.2                  | NM   | 1.3  | NM   | NM   |
| CGI                                 | § CELADON GROUP INC            | JUN     | 4.4                    | 4.3  | 2.7  | 0.9  | 0.5  | 4.7                  | 5.4  | 4.4  | 1.7  | 0.9  | 13.0                 | 13.9 | 9.4  | 3.2  | 1.8  |
| CNW                                 | † CON-WAY INC                  | DEC     | 1.8                    | 1.9  | 1.7  | 0.1  | NM   | 3.1                  | 3.4  | 2.9  | 0.1  | NM   | 10.0                 | 13.1 | 11.2 | 0.5  | NM   |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 12.1                   | 11.3 | 13.2 | 12.5 | 12.4 | 11.8                 | 12.4 | 13.6 | 11.8 | 10.3 | 20.5                 | 19.5 | 20.7 | 17.7 | 15.7 |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 6.1                    | 6.1  | 5.7  | 5.3  | 4.3  | 13.0                 | 13.1 | 12.2 | 10.5 | 7.5  | 38.0                 | 45.7 | 45.1 | 32.8 | 23.3 |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 7.1                    | 6.8  | 7.0  | 8.1  | 7.8  | 8.7                  | 8.4  | 8.5  | 8.7  | 7.6  | 13.3                 | 13.3 | 12.2 | 11.5 | 10.1 |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 4.1                    | 4.6  | 4.3  | 3.6  | 3.5  | 11.8                 | 15.4 | 15.1 | 13.1 | 10.7 | 26.1                 | 38.2 | 40.9 | 33.7 | 27.0 |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 8.8                    | 8.0  | 7.4  | 5.1  | 2.8  | 11.3                 | 10.5 | 10.1 | 6.3  | 3.1  | 18.3                 | 18.0 | 18.3 | 12.0 | 6.1  |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 3.6                    | 3.5  | 3.1  | 0.6  | 0.0  | 6.2                  | 6.0  | 5.8  | 1.1  | 0.1  | 11.0                 | 10.9 | 9.2  | 1.9  | 0.2  |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 3.8                    | 3.2  | 2.8  | 2.4  | 1.8  | 2.8                  | 2.5  | 2.4  | 1.9  | 1.4  | 14.5                 | 14.4 | 12.6 | 8.8  | 6.5  |
| SAIA                                | § SAIA INC                     | DEC     | 3.8                    | 2.9  | 1.1  | 0.2  | NM   | 7.7                  | 6.4  | 2.5  | 0.4  | NM   | 15.6                 | 13.5 | 5.3  | 1.0  | NM   |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 4.3                    | 5.1  | 5.1  | 4.4  | 3.4  | 6.5                  | 7.8  | 8.4  | 6.9  | 4.6  | 11.7                 | 14.3 | 14.7 | 11.7 | 7.8  |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |                        |      |      |      |      |                      |      |      |      |      |                      |      |      |      |      |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 24.7                   | 27.0 | 27.2 | 25.4 | 25.2 | 8.9                  | 10.3 | 9.5  | 8.5  | 7.7  | 21.1                 | 25.0 | 22.2 | 19.1 | 18.3 |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 14.3                   | 8.5  | 11.0 | 13.1 | 14.2 | 5.3                  | 3.4  | 4.1  | 4.6  | 4.3  | 14.0                 | 10.0 | 11.9 | 11.6 | 10.4 |

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

| Ticker                              | Company                        | Yr. End | Current Ratio |      |      |      |      | Debt / Capital Ratio (%) |      |      |      |      | Debt as a % of Net Working Capital |       |       |       |       |
|-------------------------------------|--------------------------------|---------|---------------|------|------|------|------|--------------------------|------|------|------|------|------------------------------------|-------|-------|-------|-------|
|                                     |                                |         | 2013          | 2012 | 2011 | 2010 | 2009 | 2013                     | 2012 | 2011 | 2010 | 2009 | 2013                               | 2012  | 2011  | 2010  | 2009  |
| <b>AIR FREIGHT &amp; LOGISTICS‡</b> |                                |         |               |      |      |      |      |                          |      |      |      |      |                                    |       |       |       |       |
| AAWW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 1.4           | 1.9  | 1.4  | 2.7  | 4.5  | 47.7                     | 42.6 | 34.1 | 25.4 | 35.4 | 870.5                              | 376.8 | 561.2 | 85.3  | 89.3  |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 1.3           | 1.4  | 1.8  | 1.9  | 1.8  | 33.1                     | 0.0  | 0.0  | 0.0  | 0.0  | 126.7                              | 0.0   | 0.0   | 0.0   | 0.0   |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 2.8           | 2.8  | 2.9  | 2.5  | 2.5  | 0.0                      | 0.0  | 0.0  | 0.0  | 0.0  | 0.0                                | 0.0   | 0.0   | 0.0   | 0.0   |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 1.8           | 2.0  | 1.7  | 1.7  | 1.6  | 21.4                     | 12.6 | 7.4  | 9.1  | 10.2 | 108.4                              | 49.6  | 33.9  | 49.0  | 63.2  |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 6.4           | 7.1  | 4.1  | 5.3  | 3.6  | 0.0                      | 0.0  | 0.1  | 16.3 | 18.5 | 0.0                                | 0.0   | 0.3   | 43.0  | 67.4  |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 1.5           | 1.7  | 1.5  | 2.0  | 2.0  | 3.5                      | 3.4  | 4.2  | 0.0  | 0.0  | 15.1                               | 11.6  | 16.2  | 0.0   | 0.0   |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 1.9           | 1.9  | 1.9  | 2.0  | 1.5  | 58.4                     | 70.2 | 55.4 | 51.6 | 49.3 | 173.0                              | 154.0 | 192.3 | 185.1 | 285.5 |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | 1.3           | 1.5  | 1.4  | 1.3  | 1.3  | 27.5                     | 24.9 | 20.3 | 8.1  | 13.0 | 93.4                               | 66.7  | 56.7  | 27.3  | 44.8  |
| <b>MARINE‡</b>                      |                                |         |               |      |      |      |      |                          |      |      |      |      |                                    |       |       |       |       |
| KEX                                 | † KIRBY CORP                   | DEC     | 1.6           | 1.7  | 1.5  | 2.7  | 2.2  | 22.7                     | 33.5 | 30.5 | 12.6 | 13.8 | 378.3                              | 443.6 | 447.4 | 75.3  | 122.8 |
| MATX                                | § MATSON INC                   | DEC     | 1.7           | 1.2  | 1.0  | 0.7  | 1.0  | 29.2                     | 36.3 | 24.8 | 19.8 | 21.2 | 184.5                              | 743.7 | NM    | NM    | NM    |
| <b>RAILROADS‡</b>                   |                                |         |               |      |      |      |      |                          |      |      |      |      |                                    |       |       |       |       |
| CSX                                 | [] CSX CORP                    | DEC     | 1.1           | 1.1  | 1.1  | 1.1  | 1.4  | 32.0                     | 34.6 | 35.2 | 33.8 | 33.8 | NM                                 | NM    | NM    | NM    | NM    |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 1.2           | 1.1  | 0.9  | 0.7  | 1.5  | 33.8                     | 39.1 | 31.3 | 30.5 | 31.1 | NM                                 | NM    | NM    | NM    | 517.6 |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 1.3           | 1.2  | 1.5  | 1.4  | 1.5  | 29.6                     | 27.9 | 30.7 | 34.4 | 42.1 | 876.7                              | NM    | 781.5 | 971.0 | 941.8 |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 1.3           | 1.1  | 1.0  | 1.2  | 1.3  | 31.3                     | 32.7 | 30.2 | 27.4 | 28.5 | NM                                 | NM    | NM    | NM    | NM    |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 1.1           | 1.2  | 1.1  | 1.2  | 1.4  | 20.0                     | 21.1 | 21.9 | 23.5 | 25.6 | NM                                 | NM    | NM    | NM    | 965.5 |
| <b>TRUCKING‡</b>                    |                                |         |               |      |      |      |      |                          |      |      |      |      |                                    |       |       |       |       |
| ARCB                                | § ARCBEST CORP                 | DEC     | 1.4           | 1.3  | 1.7  | 1.7  | 1.6  | 12.2                     | 18.3 | 8.8  | 7.9  | 2.5  | 74.7                               | 130.8 | 25.8  | 25.7  | 9.0   |
| CGI                                 | § CELADON GROUP INC            | JUN     | 1.4           | 1.2  | 0.8  | 1.4  | 1.6  | 48.3                     | 44.3 | 26.2 | 9.7  | 18.8 | 827.0                              | 780.5 | NM    | 64.3  | 139.3 |
| CNW                                 | † CON-WAY INC                  | DEC     | 1.6           | 1.6  | 1.6  | 1.7  | 1.4  | 34.8                     | 45.0 | 49.1 | 47.8 | 52.0 | 159.2                              | 168.9 | 165.0 | 169.6 | 266.6 |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 1.6           | 4.2  | 4.7  | 4.0  | 2.6  | 14.0                     | 0.0  | 0.0  | 0.0  | 0.0  | 134.6                              | 0.0   | 0.0   | 0.0   | 0.0   |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 1.0           | 1.1  | 1.2  | 0.9  | 1.5  | 22.4                     | 30.7 | 39.2 | 32.2 | 36.4 | NM                                 | NM    | 931.9 | NM    | 458.4 |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 2.6           | 3.0  | 3.2  | 4.1  | 4.5  | 5.2                      | 11.2 | 8.1  | 0.0  | 0.0  | 37.2                               | 73.2  | 50.0  | 0.0   | 0.0   |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 1.8           | 1.7  | 1.7  | 1.5  | 1.6  | 14.0                     | 20.0 | 25.6 | 26.5 | 19.0 | 24.1                               | 38.4  | 52.2  | 69.7  | 40.7  |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 1.4           | 1.2  | 1.6  | 1.3  | 1.2  | 9.9                      | 14.6 | 18.8 | 23.6 | 28.5 | 154.4                              | 403.8 | 180.9 | 445.6 | NM    |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 1.9           | 1.6  | 1.5  | 1.9  | 1.4  | 24.6                     | 25.2 | 27.7 | 9.0  | 51.5 | 178.9                              | 227.1 | 288.6 | 63.1  | 648.1 |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 0.9           | 0.8  | 0.9  | 0.9  | 1.0  | 54.5                     | 56.6 | 56.0 | 48.1 | 47.9 | NM                                 | NM    | NM    | NM    | NM    |
| SAIA                                | § SAIA INC                     | DEC     | 1.2           | 1.0  | 1.1  | 1.5  | 1.3  | 15.7                     | 11.1 | 15.8 | 22.9 | 26.9 | 237.2                              | NM    | 274.6 | 152.6 | 283.2 |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 2.1           | 1.8  | 1.7  | 1.8  | 1.9  | 3.8                      | 6.9  | 0.0  | 0.0  | 0.0  | 22.0                               | 49.0  | 0.0   | 0.0   | 0.0   |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |               |      |      |      |      |                          |      |      |      |      |                                    |       |       |       |       |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 0.8           | 0.8  | 1.1  | 0.8  | 1.2  | 25.9                     | 27.6 | 28.7 | 25.2 | 28.1 | NM                                 | NM    | NM    | NM    | NM    |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 1.5           | 1.1  | 0.7  | 0.9  | 1.0  | 31.9                     | 39.2 | 42.1 | 37.3 | 30.7 | 720.0                              | NM    | NM    | NM    | NM    |

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

| Ticker                              | Company                        | Yr. End | Price / Earnings Ratio (High-Low) |        |        |        |        | Dividend Payout Ratio (%) |      |      |      |      | Dividend Yield (High-Low, %) |          |          |          |           |
|-------------------------------------|--------------------------------|---------|-----------------------------------|--------|--------|--------|--------|---------------------------|------|------|------|------|------------------------------|----------|----------|----------|-----------|
|                                     |                                |         | 2013                              | 2012   | 2011   | 2010   | 2009   | 2013                      | 2012 | 2011 | 2010 | 2009 | 2013                         | 2012     | 2011     | 2010     | 2009      |
| <b>AIR FREIGHT &amp; LOGISTICS†</b> |                                |         |                                   |        |        |        |        |                           |      |      |      |      |                              |          |          |          |           |
| AAWW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 14- 10                            | 12- 8  | 20- 8  | 11- 6  | 11- 3  | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 26- 20                            | 20- 14 | 31- 24 | 34- 22 | 29- 17 | 53                        | 36   | 46   | 44   | 45   | 2.6- 2.1                     | 2.6- 1.9 | 1.9- 1.5 | 2.0- 1.3 | 2.6- 1.6  |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 28- 21                            | 30- 22 | 31- 21 | 35- 20 | 34- 21 | 36                        | 35   | 27   | 25   | 34   | 1.7- 1.3                     | 1.6- 1.2 | 1.3- 0.9 | 1.2- 0.7 | 1.6- 1.0  |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 21- 13                            | 20- 17 | 15- 10 | 21- 15 | 24- 9  | 9                         | 11   | 8    | 10   | 12   | 0.7- 0.4                     | 0.7- 0.6 | 0.8- 0.5 | 0.7- 0.5 | 1.3- 0.5  |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 25- 19                            | 21- 16 | 22- 15 | 27- 20 | 77- 40 | 22                        | 19   | 17   | 25   | 82   | 1.1- 0.9                     | 1.1- 0.9 | 1.2- 0.8 | 1.3- 0.9 | 2.1- 1.1  |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 22- 18                            | 20- 15 | 26- 16 | 32- 18 | 31- 16 | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 23- 16                            | 97- 83 | 20- 16 | 21- 16 | 28- 18 | 53                        | 271  | 54   | 54   | 83   | 3.3- 2.4                     | 3.3- 2.8 | 3.4- 2.7 | 3.4- 2.5 | 4.7- 3.0  |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | NM- NM                            | NM- NM | 34- 17 | 30- 18 | 39- 24 | NM                        | NM   | 8    | 9    | 15   | 0.4- 0.3                     | 0.5- 0.3 | 0.5- 0.2 | 0.5- 0.3 | 0.6- 0.4  |
| <b>MARINE‡</b>                      |                                |         |                                   |        |        |        |        |                           |      |      |      |      |                              |          |          |          |           |
| KEX                                 | † KIRBY CORP                   | DEC     | 22- 14                            | 19- 11 | 20- 13 | 21- 14 | 17- 8  | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| MATX                                | § MATSON INC                   | DEC     | 23- 17                            | 44- 16 | 42- 25 | 28- 20 | NM- 54 | 49                        | 76   | 95   | 88   | 434  | 2.9- 2.1                     | 4.7- 1.7 | 3.8- 2.3 | 4.4- 3.1 | 8.0- 3.5  |
| <b>RAILROADS‡</b>                   |                                |         |                                   |        |        |        |        |                           |      |      |      |      |                              |          |          |          |           |
| CSX                                 | [] CSX CORP                    | DEC     | 16- 11                            | 13- 11 | 16- 11 | 16- 10 | 18- 7  | 32                        | 30   | 27   | 24   | 30   | 2.9- 2.0                     | 2.9- 2.3 | 2.5- 1.7 | 2.3- 1.5 | 4.3- 1.7  |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 20- 16                            | 68- 42 | 21- 15 | 26- 14 | 21- 10 | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 39- 26                            | 24- 18 | 23- 15 | 30- 17 | 57- 20 | 27                        | 23   | 0    | 0    | 0    | 1.0- 0.7                     | 1.3- 0.9 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 15- 10                            | 14- 10 | 14- 10 | 16- 11 | 20- 10 | 33                        | 36   | 30   | 34   | 49   | 3.3- 2.2                     | 3.5- 2.5 | 2.9- 2.1 | 3.0- 2.2 | 5.1- 2.5  |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 18- 13                            | 16- 12 | 16- 11 | 17- 11 | 18- 9  | 31                        | 30   | 28   | 23   | 29   | 2.3- 1.8                     | 2.4- 1.9 | 2.5- 1.8 | 2.2- 1.4 | 3.2- 1.6  |
| <b>TRUCKING‡</b>                    |                                |         |                                   |        |        |        |        |                           |      |      |      |      |                              |          |          |          |           |
| ARCB                                | § ARCBEST CORP                 | DEC     | 61- 16                            | NM- NM | NM- 62 | NM- NM | NM- NM | 20                        | NM   | 52   | NM   | NM   | 1.3- 0.3                     | 1.9- 0.5 | 0.8- 0.4 | 0.6- 0.4 | 3.8- 1.7  |
| CGI                                 | § CELADON GROUP INC            | JUN     | 18- 14                            | 16- 10 | 24- 12 | 80- 45 | NM- 37 | 7                         | 5    | 0    | 0    | 0    | 0.5- 0.4                     | 0.5- 0.3 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| CNW                                 | † CON-WAY INC                  | DEC     | 27- 16                            | 21- 14 | 26- 13 | NM- NM | NM- NM | 23                        | 21   | 25   | 500  | NM   | 1.4- 0.9                     | 1.5- 1.0 | 1.9- 0.9 | 1.5- 1.0 | 3.1- 0.8  |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 24- 16                            | 22- 17 | 23- 16 | 25- 20 | 27- 19 | 10                        | 150  | 10   | 157  | 13   | 0.6- 0.4                     | 8.7- 7.0 | 0.6- 0.4 | 8.0- 6.3 | 0.7- 0.5  |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 27- 21                            | 23- 17 | 23- 16 | 26- 18 | 32- 17 | 15                        | 27   | 24   | 30   | 41   | 0.7- 0.6                     | 1.6- 1.2 | 1.5- 1.1 | 1.6- 1.2 | 2.4- 1.3  |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 21- 17                            | 24- 17 | 27- 17 | 32- 25 | 33- 20 | 28                        | 92   | 32   | 138  | 31   | 1.6- 1.3                     | 5.4- 3.9 | 1.9- 1.2 | 5.6- 4.4 | 1.6- 1.0  |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 25- 21                            | 21- 17 | 21- 15 | 26- 20 | 30- 20 | 15                        | 26   | 9    | 11   | 12   | 0.7- 0.6                     | 1.6- 1.2 | 0.6- 0.4 | 0.5- 0.4 | 0.6- 0.4  |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 22- 14                            | 18- 13 | 17- 11 | 24- 13 | 41- 20 | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 23- 13                            | 16- 12 | 20- 15 | NM- 86 | NA- NA | 0                         | 0    | 0    | 0    | 0    | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | NA- NA    |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 16- 11                            | 15- 8  | 18- 10 | 22- 13 | 29- 12 | 28                        | 31   | 34   | 44   | 59   | 2.6- 1.8                     | 3.7- 2.1 | 3.3- 1.9 | 3.3- 2.0 | 5.1- 2.1  |
| SAIA                                | § SAIA INC                     | DEC     | 20- 8                             | 12- 6  | 25- 13 | NM- 94 | NM- NM | 0                         | 0    | 0    | 0    | NM   | 0.0- 0.0                     | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0 | 0.0- 0.0  |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 21- 18                            | 19- 15 | 19- 14 | 22- 17 | 27- 16 | 17                        | 121  | 50   | 162  | 184  | 0.9- 0.8                     | 8.2- 6.4 | 3.5- 2.6 | 9.4- 7.3 | 11.5- 6.8 |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |                                   |        |        |        |        |                           |      |      |      |      |                              |          |          |          |           |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 20- 16                            | 15- 12 | 15- 12 | 15- 11 | 15- 8  | 28                        | 24   | 25   | 23   | 24   | 1.8- 1.4                     | 2.0- 1.6 | 2.1- 1.6 | 2.1- 1.5 | 3.0- 1.6  |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 33- 22                            | 36- 23 | 21- 14 | 17- 12 | 16- 7  | 29                        | 48   | 35   | 27   | 25   | 1.3- 0.9                     | 2.0- 1.3 | 2.6- 1.7 | 2.2- 1.5 | 3.5- 1.6  |

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year.

| Ticker                              | Company                        | Yr. End | Earnings per Share (\$) |        |      |        |        | Tangible Book Value per Share (\$) |        |        |       |        | Share Price (High-Low, \$) |                |               |               |               |
|-------------------------------------|--------------------------------|---------|-------------------------|--------|------|--------|--------|------------------------------------|--------|--------|-------|--------|----------------------------|----------------|---------------|---------------|---------------|
|                                     |                                |         | 2013                    | 2012   | 2011 | 2010   | 2009   | 2013                               | 2012   | 2011   | 2010  | 2009   | 2013                       | 2012           | 2011          | 2010          | 2009          |
| <b>AIR FREIGHT &amp; LOGISTICS‡</b> |                                |         |                         |        |      |        |        |                                    |        |        |       |        |                            |                |               |               |               |
| AAWW                                | § ATLAS AIR WORLDWIDE HLDG INC | DEC     | 3.67                    | 4.92   | 3.66 | 5.50   | 3.59   | 51.28                              | 47.22  | 41.72  | 38.70 | 33.06  | 50.98 - 36.24              | 57.00 - 38.22  | 73.19 - 29.50 | 62.00 - 35.01 | 38.26 - 9.84  |
| CHRW                                | [] C H ROBINSON WORLDWIDE INC  | DEC     | 2.65                    | 3.68   | 2.63 | 2.35   | 2.15   | (0.15)                             | 3.28   | 5.22   | 4.92  | 4.14   | 67.93 - 53.74              | 71.76 - 50.81  | 82.61 - 62.30 | 81.02 - 51.16 | 61.69 - 37.36 |
| EXPD                                | [] EXPEDITORS INTL WASH INC    | DEC     | 1.69                    | 1.58   | 1.82 | 1.62   | 1.13   | 10.25                              | 9.79   | 9.40   | 8.16  | 7.26   | 46.90 - 34.83              | 47.48 - 34.20  | 56.19 - 38.25 | 57.15 - 32.36 | 38.10 - 23.86 |
| FDX                                 | [] FEDEX CORP                  | # MAY   | 6.82                    | 4.95   | 6.44 | 4.61   | 3.78   | 43.26                              | 45.88  | 38.94  | 40.55 | 36.77  | 144.13 - 90.61             | 97.19 - 82.79  | 98.66 - 64.07 | 97.75 - 69.78 | 92.59 - 34.02 |
| FWRD                                | § FORWARD AIR CORP             | DEC     | 1.81                    | 1.82   | 1.62 | 1.11   | 0.34   | 10.07                              | 9.80   | 7.60   | 6.25  | 5.02   | 44.57 - 35.28              | 37.39 - 29.65  | 36.32 - 23.70 | 30.30 - 21.92 | 26.29 - 13.48 |
| HUBG                                | § HUB GROUP INC -CL A          | DEC     | 1.88                    | 1.83   | 1.58 | 1.17   | 0.92   | 7.58                               | 5.81   | 4.10   | 3.68  | 3.03   | 41.18 - 33.10              | 37.47 - 27.26  | 40.86 - 25.77 | 37.13 - 21.53 | 28.47 - 14.63 |
| UPS                                 | [] UNITED PARCEL SERVICE INC   | DEC     | 4.65                    | 0.84   | 3.88 | 3.51   | 2.16   | 3.80                               | 1.97   | 4.52   | 5.35  | 4.97   | 105.37 - 75.02             | 81.79 - 69.56  | 77.00 - 60.74 | 73.94 - 55.77 | 59.75 - 37.99 |
| UTW                                 | § UTI WORLDWIDE INC            | # JAN   | (0.73)                  | (0.97) | 0.71 | 0.70   | 0.41   | 2.13                               | 3.39   | 3.93   | 3.64  | 3.02   | 17.70 - 13.34              | 17.92 - 12.31  | 24.05 - 11.94 | 21.21 - 12.25 | 15.96 - 10.03 |
| <b>MARINE‡</b>                      |                                |         |                         |        |      |        |        |                                    |        |        |       |        |                            |                |               |               |               |
| KEX                                 | † KIRBY CORP                   | DEC     | 4.46                    | 3.75   | 3.35 | 2.16   | 2.34   | 24.97                              | 19.42  | 17.20  | 17.31 | 15.30  | 99.41 - 61.41              | 70.61 - 42.78  | 66.36 - 43.29 | 45.78 - 30.83 | 39.16 - 19.46 |
| MATX                                | § MATSON INC                   | DEC     | 1.26                    | 1.23   | 1.32 | 1.43   | 0.29   | 7.17                               | 5.85   | 25.92  | 26.34 | 25.34  | 29.47 - 21.51              | 53.71 - 19.96  | 55.50 - 33.09 | 40.54 - 28.92 | 35.63 - 15.73 |
| <b>RAILROADS‡</b>                   |                                |         |                         |        |      |        |        |                                    |        |        |       |        |                            |                |               |               |               |
| CSX                                 | [] CSX CORP                    | DEC     | 1.83                    | 1.79   | 1.68 | 1.37   | 0.97   | 10.33                              | 8.74   | 8.00   | 7.75  | 7.44   | 28.80 - 20.01              | 23.71 - 18.88  | 27.06 - 17.69 | 21.60 - 14.02 | 16.93 - 6.90  |
| GWR                                 | † GENESEE & WYOMING INC -CL A  | DEC     | 5.00                    | 1.13   | 2.99 | 2.02   | 1.66   | 16.87                              | 4.03   | 13.42  | 10.02 | 6.90   | 102.20 - 78.11             | 77.04 - 47.08  | 63.73 - 44.38 | 53.42 - 28.41 | 34.26 - 16.42 |
| KSU                                 | [] KANSAS CITY SOUTHERN        | DEC     | 3.19                    | 3.44   | 3.04 | 1.69   | 0.61   | 12.70                              | 10.54  | 8.10   | 5.96  | 2.78   | 125.96 - 84.52             | 84.16 - 61.36  | 70.48 - 45.63 | 50.07 - 29.52 | 34.57 - 12.25 |
| NSC                                 | [] NORFOLK SOUTHERN CORP       | DEC     | 6.10                    | 5.42   | 5.52 | 4.06   | 2.79   | 36.55                              | 31.08  | 30.00  | 29.85 | 28.06  | 93.17 - 62.65              | 78.50 - 56.05  | 78.40 - 57.57 | 63.67 - 46.18 | 54.55 - 26.69 |
| UNP                                 | [] UNION PACIFIC CORP          | DEC     | 4.74                    | 4.16   | 3.39 | 2.79   | 1.88   | 23.27                              | 21.17  | 19.35  | 18.07 | 16.77  | 84.12 - 63.66              | 64.64 - 52.04  | 53.94 - 38.87 | 47.89 - 30.20 | 33.37 - 16.64 |
| <b>TRUCKING‡</b>                    |                                |         |                         |        |      |        |        |                                    |        |        |       |        |                            |                |               |               |               |
| ARCB                                | § ARCBEST CORP                 | DEC     | 0.59                    | (0.31) | 0.23 | (1.30) | (5.12) | 14.27                              | 11.95  | 18.06  | 18.74 | 19.83  | 35.96 - 9.50               | 22.79 - 6.43   | 28.53 - 14.22 | 33.52 - 18.84 | 34.56 - 15.84 |
| CGI                                 | § CELADON GROUP INC            | JUN     | 1.20                    | 1.15   | 0.69 | 0.21   | 0.12   | 8.97                               | 7.80   | 6.89   | 5.97  | 5.64   | 21.99 - 16.29              | 18.10 - 11.75  | 16.80 - 8.18  | 16.80 - 9.50  | 12.49 - 4.40  |
| CNW                                 | † CON-WAY INC                  | DEC     | 1.75                    | 1.87   | 1.60 | 0.08   | (2.33) | 13.54                              | 8.38   | 6.97   | 8.12  | 5.85   | 46.52 - 28.33              | 38.78 - 25.97  | 42.38 - 20.56 | 40.34 - 26.15 | 48.32 - 12.99 |
| HTLD                                | § HEARTLAND EXPRESS INC        | DEC     | 0.83                    | 0.72   | 0.78 | 0.69   | 0.62   | 3.20                               | 3.37   | 3.89   | 3.63  | 4.00   | 19.74 - 12.98              | 15.52 - 12.43  | 18.12 - 12.75 | 17.18 - 13.48 | 16.96 - 11.89 |
| JBHT                                | † HUNT (JB) TRANSPRT SVCS INC  | DEC     | 2.92                    | 2.64   | 2.16 | 1.60   | 1.08   | 8.64                               | 6.74   | 4.85   | 4.72  | 5.06   | 78.65 - 60.05              | 61.18 - 43.94  | 49.12 - 34.42 | 41.21 - 29.45 | 34.78 - 18.14 |
| KNX                                 | § KNIGHT TRANSPORTATION INC    | DEC     | 0.87                    | 0.80   | 0.74 | 0.71   | 0.61   | 6.75                               | 6.02   | 5.87   | 5.94  | 6.12   | 18.66 - 14.86              | 18.94 - 13.74  | 20.12 - 12.63 | 22.38 - 17.50 | 19.98 - 12.17 |
| LSTR                                | † LANDSTAR SYSTEM INC          | DEC     | 2.37                    | 2.78   | 2.38 | 1.77   | 1.38   | 9.31                               | 6.93   | 5.20   | 4.06  | 4.19   | 59.97 - 50.39              | 59.02 - 46.01  | 49.66 - 36.64 | 46.23 - 34.86 | 41.65 - 27.21 |
| ODFL                                | † OLD DOMINION FREIGHT         | DEC     | 2.39                    | 1.97   | 1.63 | 0.90   | 0.42   | 14.05                              | 11.65  | 9.68   | 7.69  | 6.78   | 53.34 - 34.58              | 35.13 - 25.54  | 27.73 - 18.27 | 21.49 - 11.71 | 17.22 - 8.31  |
| RRTS                                | § ROADRUNNER TRANS SVCS HLDGS  | DEC     | 1.36                    | 1.21   | 0.85 | 0.12   | 0.01   | (1.32)                             | (1.83) | (2.57) | 0.58  | (7.33) | 30.98 - 17.63              | 19.13 - 14.16  | 17.40 - 12.48 | 15.05 - 10.34 | NA - NA       |
| R                                   | [] RYDER SYSTEM INC            | DEC     | 4.67                    | 3.93   | 3.34 | 2.38   | 1.62   | 27.01                              | 19.52  | 16.74  | 19.08 | 21.93  | 73.97 - 50.41              | 57.63 - 32.76  | 60.38 - 34.28 | 52.80 - 31.86 | 46.58 - 19.00 |
| SAIA                                | § SAIA INC                     | DEC     | 1.81                    | 1.35   | 0.48 | 0.08   | (0.45) | 12.09                              | 10.18  | 9.11   | 8.58  | 8.42   | 35.31 - 15.17              | 16.23 - 8.47   | 12.24 - 6.18  | 11.83 - 7.50  | 13.33 - 5.29  |
| WERN                                | † WERNER ENTERPRISES INC       | DEC     | 1.19                    | 1.41   | 1.41 | 1.11   | 0.79   | 10.62                              | 9.76   | 9.95   | 9.21  | 9.80   | 25.44 - 21.80              | 26.67 - 20.63  | 27.17 - 19.78 | 24.58 - 19.11 | 21.40 - 12.59 |
| <b>OTHER RAILROAD COMPANIES</b>     |                                |         |                         |        |      |        |        |                                    |        |        |       |        |                            |                |               |               |               |
| CNI                                 | CANADIAN NATIONAL RAILWAY CO   | DEC     | 2.91                    | 3.09   | 2.68 | 2.26   | 1.89   | 14.59                              | 12.85  | 11.82  | 12.21 | 11.34  | 58.40 - 45.67              | 47.42 - 37.25  | 40.63 - 30.91 | 33.99 - 24.58 | 28.09 - 14.69 |
| CP                                  | CANADIAN PACIFIC RAILWAY LTD   | DEC     | 4.70                    | 2.83   | 3.31 | 3.86   | 3.52   | 37.17                              | 28.50  | 25.78  | 27.37 | 36.90  | 156.96 - 103.82            | 102.80 - 66.23 | 69.92 - 44.74 | 67.03 - 46.13 | 55.43 - 25.11 |

Note: Data as originally reported. ‡S&P 1500 index group. []Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year. J-This amount includes intangibles that cannot be identified.

The analysis and opinion set forth in this publication are provided by S&P Capital IQ Equity Research and are prepared separately from any other analytic activity of Standard & Poor's. In this regard, S&P Capital IQ Equity Research has no access to nonpublic information received by other units of Standard & Poor's. The accuracy and completeness of information obtained from third-party sources, and the opinions based on such information, are not guaranteed.

## General Disclaimers

S&P Capital IQ's Industry Surveys Reports (the "Industry Surveys") have been prepared and issued by S&P Capital IQ and/or one of its affiliates. In the United States and United Kingdom, the Industry Surveys are prepared and issued by Standard & Poor's Financial Services LLC; in Hong Kong, by Standard & Poor's Investment Advisory Services (HK) Limited, which is regulated by the Hong Kong Securities Futures Commission; in Singapore, by McGraw Hill Financial Singapore Pte. Limited, which is regulated by the Monetary Authority of Singapore; in Malaysia, by Standard & Poor's Malaysia Sdn Bhd, which is regulated by the Securities Commission of Malaysia; in Australia, by Standard & Poor's Information Services (Australia) Pty Ltd, which is regulated by the Australian Securities & Investments Commission; and in Japan, by McGraw Hill Financial Japan KK, which is registered by Kanto Financial Bureau.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisers and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment adviser except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P provides a wide range of services to, or relating to, many organizations, including issuers or underwriters of securities or obligors, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries. As a result, S&P may receive fees or other economic benefits from organizations whose securities or services it may recommend, analyze, rate, include in model portfolios, evaluate, price or otherwise address.

The Industry Surveys are not intended to be investment advice and do not constitute any form of invitation or inducement by S&P Capital IQ to engage in investment activity. This material is not intended as an offer or solicitation for the purchase or sale of any security or other financial instrument. Any opinions expressed herein are given in good faith, are subject to change without notice, and are only current as of the stated date of their issue. Past performance is not necessarily indicative of future results.

For details on the S&P Capital IQ conflict-of-interest policies, please visit: [www.spcapitaliq.com/Policies](http://www.spcapitaliq.com/Policies)

### Notice to all Non US Residents:

S&P Capital IQ's Industry Surveys may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors (the "Intermediaries" or "Distributors"). Intermediaries are not acting as agents or representatives of S&P Capital IQ. In Territories where an Intermediary distributes S&P Capital IQ's Industry Surveys, the Intermediary, and not S&P Capital IQ, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory authorities, including laws in connection with the distribution of third-party investment research, licensing requirements, supervisory and record keeping obligations that the Intermediary may have under the applicable laws and regulations of the territories where it distributes the Industry Surveys.

Industry Surveys are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject S&P Capital IQ or its affiliates to any registration or licensing requirements in such jurisdiction.

Industry Surveys are not directed to, or intended for distribution to or use by, any person or entity who is not in a class qualified to receive Industry Surveys (e.g., a qualified person and/or investor), as defined by the local laws or regulations in the country or jurisdiction where the person is domiciled, a citizen or resident of, or the entity is legally registered or domiciled.

**S&P Capital IQ's Industry Surveys are not intended for distribution in or directed to entities, residents or investors in:** Albania, Belarus, Bosnia, Burma, Cote d'Ivoire, Croatia, Cuba, Democratic Republic of the Congo, Former Yugoslav Republic of Macedonia, Herzegovina, Iran, Iraq, Kosovo, Lebanon, Libya, Montenegro and Serbia, North Korea, Somali, Sudan, Syria, Taiwan, Yemen and Zimbabwe.

**For residents of Australia:** Industry Surveys are issued and/or distributed in Australia by SPIS. Any express or implied opinion contained in an Industry Survey is limited to "General Advice" and based solely on consideration of the investment merits of the financial product(s) alone. The information in an Industry Survey has not been prepared for use by retail investors and has been prepared without taking account of any particular investor's financial or investment objectives, financial situation or needs. Before acting on any advice, any investor using the advice should consider its appropriateness having regard to their own or their clients' objectives, financial situation and needs. Investors should obtain a Product Disclosure Statement relating to the product and consider the statement before making any decision or recommendation about whether to acquire the product. Each opinion must be weighed solely as one factor in any investment decision made by or on behalf of any adviser and any such adviser must accordingly make their own assessment taking into account an individual's particular circumstances.

SPIS holds an Australian Financial Services License Number 258896. Please refer to the SPIS Financial Services Guide for more information at: [www.spcapitaliq.com/FinancialServicesGuide](http://www.spcapitaliq.com/FinancialServicesGuide)

**For residents of China:** Industry Surveys are not distributed in or directed to residents in The People's Republic of China. Neither S&P Capital IQ nor its affiliates target investors in China.

**For residents of Kuwait:** The Distributor, and not S&P Capital IQ, is responsible for complying with all relevant licensing requirements as set forth by the Kuwait Capital Markets Law ("CML") and Kuwait Capital Markets Authority ("CMA") and with all relevant rules and regulations set out in the CML and CMA rule books.

**For residents of Malaysia:** All queries in relation to Industry Surveys should be referred to Ahmad Halim at [ahmad.halim@spcapitaliq.com](mailto:ahmad.halim@spcapitaliq.com).

**For residents of Mexico:** S&P Capital IQ is not regulated or supervised by the Mexican National Banking and Securities Commission ("CNBV"). S&P Capital IQ has a licensed rating agency affiliate in Mexico (Standard & Poor's, S.A. De C.V.), of which S&P maintains firewalls and seeks to avoid conflicts of interest, pursuant to approved policies.

**For residents of Qatar:** The Distributor, and not S&P Capital IQ, is responsible for complying with all relevant licensing requirements as set forth by the Qatar Financial Markets Authority or the Qatar Central Bank, and with all relevant rules and regulations set out in the Qatar Financial Markets Authority's rule book, including third party branded investment research distribution of securities that are admitted for trading on a Qatari securities exchange (Admitted Securities).

Copyright © 2014 Standard & Poor's Financial Services LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P EUROPE 350 and STARS are registered trademarks of Standard & Poor's Financial Services LLC. S&P CAPITAL IQ is a trademark of Standard & Poor's Financial Services LLC.