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Logistics News: Despite Dramatic Decline in Volumes, Railroads Saying Profitable, Investing in Service and Speed

New Understanding of the Benefits of Velocity; More Variable Cost Structures

SCDigest Editorial Staff

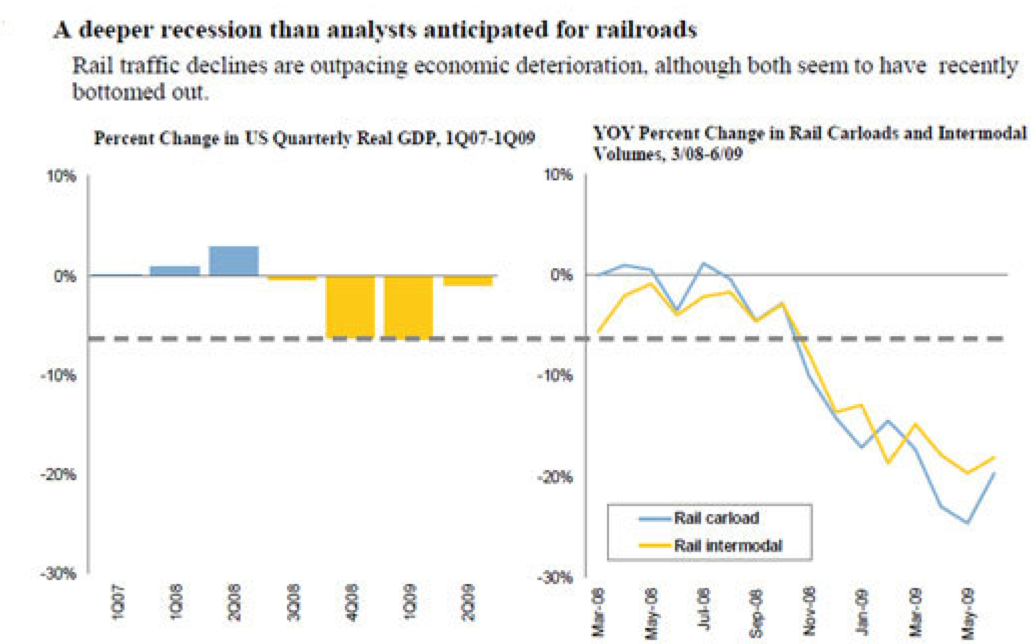
The US railroad industry, like most of the transport sector, has seen volumes plummet well beyond the overall decrease in the economy – the first time this has really happened.

Still, relative pricing power, cost savings, and a move to a more variable cost structure has enabled the rail carriers to remain profitable, even as most of the trucking industry has been bleeding red ink.

Meanwhile, railroad capital investment continues, in part due to anticipation of a move back to the positive trajectory the industry saw until the recession hit, and also due to a better understanding of the value of increasing the speed of rail cars on the network.

Union Pacific performed an analysis that showed that for every one mile per hour improvement in average train speed, a railroad can reduce its locomotives by 250, and its freight cars by 5,000.

Those are among the key observations from **Bill Rennicke** and **Jeffrey Elliott**, of consulting firm Oliver Wyman, in a conversation with John Larkin,



Source: Oliver Wyman, Stifel Nicolaus

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who follows the transport industry for investment firm **Stifel Nicolaus**.

The recession has in fact powerfully impacted rail volumes in the US. While GDP dropped by about 6% in the last quarter of 2008 and the first quarter of 2009, rail volumes in both rail cars and intermodal fell by much more, as much as 25% for rail cars and 19% for intermodal, as shown in the figure on page 1.

It's not hard to understand why. Key sectors such as autos, metals and forest products saw volumes drop by as 50%, and imports, which had fueled much of recent rail growth, also fell at much higher rates than did GDP.

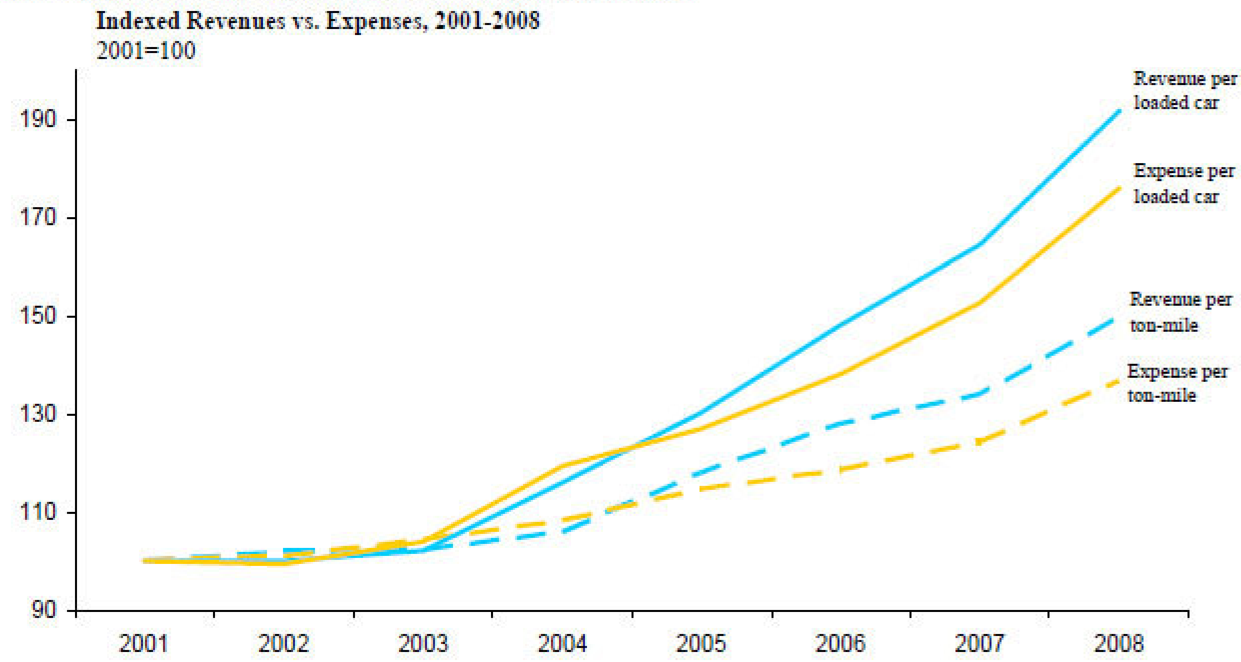
Yet, despite these headwinds, all of the carriers other than Norkfolk Southern, which had special circumstances, saw their operating ratios (basically a measure of costs per dollar of revenue) ***improve*** in the second quarter, in the case of Burlington Northern by as much as 4%. That improvement is one that goes directly to the bottom line.

That improvement in operating ratios, in turn, is due to several factors: the relative ability of the rail carriers to hold prices (versus say the truckload carrier industry), more variable cost structures, and the rail carriers' strong focus on productivity gains over the last 4-5 years, as shown in the figure below. As can be seen, starting in 2004, the growth in revenue per "ton-mile" has sharply outpaced the growth in costs per ton mile – and that spells profit.

"The rails have made very, very substantial productiv-

Railroad revenues outpacing expenses

Revenue increases required to fund the new capex levels have been achieved by raising base revenues, legacy contract conversions, and expansion of fuel surcharges. Expenses have been driven by fuel costs and investment in infrastructure.



Source: AAR Analysis of Class I Railroads, R-1s, Oliver Wyman analysis.

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ity changes," Rennicke said. "While the cost per unit, based on inflation, has gone up considerably, the number of units of input the rails required to produce the transportation services and products that they offer has fallen substantially."

Part of this story is the fact that slowly, the railroads have been outsourcing a growing variety of tasks, from engine maintenance to "weed and bush control." The result is total cost structures that are now much more variable than they were 10 years ago, mitigating in part the impact of the lower freight volumes.

Rennicke says that improved car routing and scheduling is also an important part of the mix, as over the past decade all the major US railroads have implemented optimization software to produce those schedules. Prior to that, most of the scheduling was manually done.

At the same time, the rail carriers are continuing to invest in rail infrastructure – and in many cases also tapping into public money to add capacity. Total infrastructure spending by the railroads has really not dropped, according to Rennicke, even as the recession goes on. Why? While partially with an eye to the future and a return to growing volumes, the rails are also realizing the benefits of faster speeds.

Rennicke noted that several years ago, Union Pacific performed an analysis that showed that for every one mile per hour improvement in average train speed, a railroad can reduce its locomotives by 250, its freight cars by 5,000, and its train and engine employees by 150.

In addition, "Every one hour improvement in car terminal dwell is worth 2,500 freight cars, every day you can take out of your car cycle is worth 25,000 freight cars, and every one hour improvement in locomotive terminal dwell is worth 125 locomotives," Rennicke said.

"For every 1% or 2% increase in overall average train speed you're able to take thousands of rail cars out of the system and also reduce the various expenses that are associated with those leases," he added.

No matter how you look at it, there the carriers have clearly seen there is a "better way to run a railroad" – which ultimately will benefit both shippers and investors.