## **Where's The Difference?**

## Freight Down, Purchases Up - An Opportunity Effect? By Petr Ledvina

On the macroeconomic side, there have been no significant developments since January that would affect the tie demand forecast.

Commodity prices, with the exception of oil, are at mid-term lows and stuck in a trading range. As discussed in the January/February 2016 issue of *Crossties* article titled, "Where Are We Headed Next?," low commodity prices are the result of lower world demand and a strengthening dollar. Over the months of March and April, the Trade Weighted Dollar Index lost ground, giving hope for commodity price recovery (Figure 1). However, in May, the index regained momentum after the last FOMC minutes were released. The market seems to be anticipating a rate hike in June or July.

At present, the microeconomic side of the tie market presents a conundrum for the Railway Tie Association's (RTA) tie demand econometric forecasting model. While total freight on Class 1 and Short line railroads has been in decline for some time, tie demand is bucking the trend. Tie purchases remain unexpectedly strong YTD. However, this may not last forever, and the tie demand could begin to soften by year-end.

In their 2015 annual reports, Class 1 railroads reported declining freight volumes. That trend continued into and through 2016 Q1. Revenue ton-miles of freight declined 15 percent year over year, and is down 11 percent from the fourth quarter of 2015. As presented on various conference calls, the main driver was a decline in coal shipments on the order of 30 percent or more. Also, other categories of freight, such as grain, declined measurably. On the positive side, there were some exceptions; auto and chemical shipments increased. This was also the case for some regional roads (see Genesee & Wyoming, Providence and Worcester lines, for example). Plus, some railroad companies reported improving efficiencies in operations.

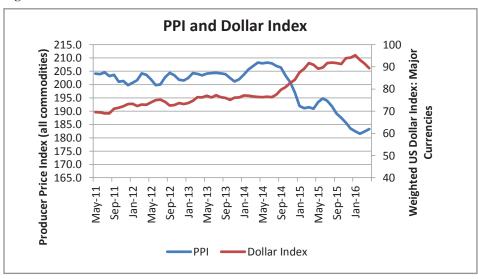
Railroads also stated that the strong dollar hampered exports and a warmer winter hurt shipments. Two Class I roads stated that coal inventories at power plants are significantly higher than average. CSX noted that the normal level of coal inventory at utilities is between 55 and 70 burndays. Currently, the inventories are about 120 burndays. UP reported similar burnday numbers. Furthermore, there are no expectations by most railroads for overall freight improvement in the first half of this year.

Tie demand remains surprisingly strong in the face of this data. Purchases for the first quarter are up 6.6 percent versus a year ago, and 15.7 percent compared to the fourth quarter of 2015. Tie production is also strong—up 16.4 percent from a

year ago, and only -1.6 percent from 2016 Q1. Is there a discrepancy between the forecast and reality? There are a few possible options to explore in the quest for an answer.

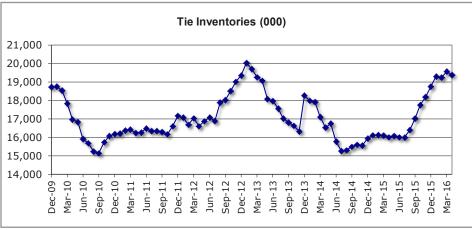
From mid-2013 through mid-2015, supply from sawmills did not meet the railroad demand for treated ties. Inadequate green tie supply, coupled with strong demand, reduced treated tie inventory to near-record lows (Figure 2). Since then, the situation has changed. Due to softer demand for other wood products, sawmills ramped up tie production. Yet, even with continued strong demand, tie inventory has continued to increase since mid-2015.

Figure 1



Source: Federal Reserve Bank of St. Louis

Figure 2



Source: RTA

The extension of Positive Train Control (PTC) implementation by the U.S. Congress may have offered the railroads some modest flexibility for CAPEX. That doesn't mean railroads aren't focused on the PTC mandate, it might just mean that they have more flexibility in optimizing CAPEX to achieve all goals on the horizon.

The early extension of the shortline tax credit in 2015 for the year 2016 may have also given shortlines confidence in their budgeting process. For example, one major regional road will have invested enough in infrastructure upgrades to receive a tax credit in 2016 of \$27 million. That represents more than 10 percent of the total CAPEX for that company. This example may suggest that the opportunity to get ahead of the maintenance curve is at hand for many similar roads, and the opportunity is being actualized with more tie purchases across the board for this market segment.

Finally, there is a buzz about increasing freight transportation of chemicals and liquefied propane gas (LPG), as expressed in multiple railroad conference calls and annual reports. That seems to be the case especially for the short lines, where some companies have received federal grants for track development, creating a strong demand for ties in the commercial markets.

Even though rail freight has declined since the last quarter of 2014, the above hypotheses may be having continued positive impact on tie demand. If so, it could explain why demand that is higher than what the forecast predicts is being reported. It should be noted, however, that if freight remains subpar, as many indicators suggest, tie demand could eventually reduce to a number closer to the model's expectations.

## **ABOUT THE AUTHOR:**

Petr Ledvina is a member of the RTA's economic forecast team. Born in Czechoslovakia, he has a background in electrical and civil engineering, and worked on railroad maintenance for two years. Following his wife from Birmingham, Ala., he moved to the United States, where he obtained a degree in economics from Birmingham-Southern College. As an analyst, Ledvina worked for two regional financial institutions, and joined RTA's economic forecast team a few years ago.

BASE CASE TIE DEMAND FORECAST									
New Wood Crossties (in thousands)									
Year	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct				
2012	2.2%	16,968	6,054	23,023	5.2%				
2013	1.5%	17,131	7,317	24,448	6.2%				
2014	2.4%	15,931	7,083	23,014	-5.9%				
2015	2.4%	16,566	7,417	23,983	4.2%				
2016	2.3%	16,577	6,449	23,026	-4.0%				
2017	2.5%	17,238	5,175	22,413	-2.7%				

UPSIDE SCENARIO									
New Wood Crossties (in thousands)									
Year	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct				
2012	2.2%	16,968	6,054	23,023	5.2%				
2013	1.5%	17,131	7,317	24,448	6.2%				
2014	2.4%	15,931	7,083	23,014	-5.9%				
2015	2.4%	16,566	7,417	23,983	4.2%				
2016	2.7%	16,612	6,426	23,038	-3.9%				
2017	2.8%	17,342	5,568	22,910	-0.6%				

DOWNSIDE SCENARIO									
New Wood Crossties (in thousands)									
Year	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct				
2012	2.2%	16,968	6,054	23,023	5.2%				
2013	1.5%	17,131	7,317	24,448	6.2%				
2014	2.4%	15,931	7,083	23,014	-5.9%				
2015	2.4%	16,566	7,417	23,983	4.2%				
2016	1.2%	16,480	6,386	22,866	-4.7%				
2017	2.3%	16,809	5,060	21,869	-4.4%				

Note: forecast is based on S&P's GDP, CPI, and oil price forecast, and on EIA oil and coal production forecast.

