INTERESTING TIMES

Tie Market Outlook for 2014 & Beyond

Tie Purchases Healthy…How Will Supply Respond?

BY FRED NORRELL

An ancient Chinese curse is to wish for someone to live in interesting times. Although crosstie purchases are healthy, supply issues are not as good. And, as for figuring out how to predict the market's activity, we are currently cursed.

Multiple changes in market dynamics have stimulated the search for new ideas as to what forces are driving crosstie demand, and where information on those forces can be found. New track is being constructed to serve gas and oil well development. Growing volumes of sand, pipe and chemicals are being shipped to drilling rigs. Crude oil and petroleum shipments are expanding rapidly. Intermodal continues to grow. Coal has taken a dive.

Crosstie purchases reflect these and other changes to the positive. Recent reports to RTA include notably higher tie purchases, up 5.5 percent annually as of November.

At present, there are some questions developing regarding the purchases data. Since "small market" purchases are estimated by subtracting North American Class 1 installs (with a timing shift) from total purchases from RTA members, potential irregularities would end up in small market purchases data.

By past measures, small market purchases constituted 26 percent of the market in one year but only 16 percent a few years after.

To deal with unruly small market data, a method termed "exponential smoothing" has been employed in the forecast process. As implied, the small market purchases data are smoothed.

Next, they go into the econometric model, where economic variables are used to "explain" the behavior of crosstie purchasing activity. Currently, those variables are active U.S. drilling rigs, change in coal shipments, change in real oil price, and short line tax incentives.

Short line and regional freight data are not available for a sufficiently long time period to be included in the econometric model. Yet, the General Electric Company data show this freight to be up by 5.4 percent as of week 51 of 2013.

New Wood Crossties (in thousands)

Year approx.	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Percentage
2009	-2.8%	16,216	3,432	19,648	-4.9%
2010	2.5%	16,379	3,200	19,579	-0.4%
2011	1.8%	16,525	5,363	21,888	11.8%
2012	2.8%	16,968	6,054	23,023	5.2%
2013	1.9%	17,457	6,738	24,195	5.1%
2014	2.8%	17,834	7,019	24,852	2.7%
2015	3.3%	18,228	7,116	25,344	2.0%

Class 1 crosstie purchases data (U.S. and Canadian) are more reliable, since these crosstie installations are required to be reported each year. Moreover, additional information is available on Class 1 operations; the variables that "explain" their purchases are miles of track owned and freight moved on those tracks. North American freight has increased by 2 percent as of week 51; U.S. freight is up 1.6 percent.

However, freight dynamics are changing: U.S. coal shipments are down 4.8 percent during this period, and petroleum shipments are up by 31 percent. Crude oil shipments are not identified separately in published reports, but are being pursued for future use in the forecasting process.

The result of these dynamics and of incomplete data is increased difficulty in forecasting freight by rail. Add to this the problem of forecasting miles of track; track mile data has been stable for several years but may expand to reach new oil and gas rigs. Again, interesting times.

RTA forecasters are up to their arms in uncertainty. Be that as it may, the table above is humbly offered as a guide to what may unfold in the years to come. Most economic forecast data has been supplied by Standard & Poor's; some data is from the U.S. Department of Energy. ■