Market Outlook Is Sobering

2009 begins, economists are struggling to size up the current recession in terms of depth and duration. RTA's forecast models are driven by economic projections and thus face the same issues. The crystal ball is particularly clouded by the fact that if an economic downturn is caused or exacerbated by a financial panic it is usually deeper and longer than other types of recessions. Another obscuring factor is that such panic-induced recessions also vary considerably from one to the next. To deal with the differences between possible futures, this article presents two crosstie forecasts: The first represents a recession of one year, the second of two years. But first, some history and explanations.

Global Financial Trouble

An early sign of trouble was the wellknown bursting of the housing bubble, which exposed risky mortgage loans. Fear of default quickly spread to other debt securities, and with the fall in their value so went the assets of banks. Within days no one wanted to lend and credit markets froze. Corporate cash began to dry up and continues to be in short supply. Corporate bond offerings that have traditionally been an additional source of financing now reflect extra risk and bear much higher yields. Without inexpensive sources of adequate cash, not only are most business expansions on the back burner, but also, in some instances, payrolls are threatened. Going forward, business failures are thus likely to increase. This will further damage creditors, some of whom are the same regional and local banks already in trouble. International trade has also been affected; exporters are finding letters of credit difficult to obtain, so this channel of commerce also faces deep uncertainty.

A milestone event was the Sept. 15, 2008, default of Lehman Brothers, which

ignited fear. This helped bring about congressional passage of the United States Troubled Assets Relief Program (TARP) on Oct. 3, yet fear increased for about a week. Then an early sign of improvement appeared on Oct. 27, when U.S. commercial paper issuance expanded by about tenfold. One additional positive sign occurred in the first week of January, when sales of corporate debt surged. Furthermore, TARP activity is now clearly in the pipeline and U.S. management of the crisis is beginning to show some progress.

However, some economists are concerned that the European Union is behind in their efforts to stimulate economic activity. New overnight bank loans from the EuroBank (the U.S. equivalent of the Federal Reserve), for example, are financed at 3 percent rather than the near zero percent interest rates coming from the Federal Reserve for U.S. banks. In addition, some developing nations lack the financial reserves to provide the economic stimulus to free up their financial markets. While the World Bank may provide some relief to developing countries through expanded loan programs, there is no guarantee as to what level of stimulus this will have.

Global Economic Trouble

Restricted credit has made it difficult for firms, consumers and local governments to spend at normal rates. On top of that, U.S. consumer confidence took a huge wallop in October. According to the Conference Board, it plunged from 61.4 percent in September to 38 percent. It recovered to 44.9 in November but still remains well below "healthy" levels. After a tax-rebate-induced surge in spending in the second quarter, real consumer spending dropped to a 3.8 percent annual rate dragging down third quarter real gross domestic product (GDP) to a 0.5 percent pace. Furthermore, the Federal Reserve's index of industrial production

By Fred Norrell and Jim Gauntt

tanked in four of the past six months. Employment has fallen by about 1.9 percent from its December 2007 peak, and the unemployment rate has climbed from a 2007 average of 4.6 percent to 7.2 percent as of December 2008. Real disposable personal income has declined in three of the past six quarters, which bodes ill for future spending. A possible positive for the market is that expected heavy spending by the federal government may offset private reductions and stave off a deep recession.

Alan Greenspan recently suggested a formula for what it will take to turn things around. He stated that global equity prices will need to at least partially recover, and housing prices will have to stabilize before financial institutions' assets find firm footing. From the take some economists have on the situation, this would seem to be a minimum and mandatory prerequisite to the resumption of credit flow.

However, once this does occur it does not imply the end to recession, because other economic problems exist. Examples of these include nonresidential fixed investment, which declined in the third quarter, a significant change from non-residential investment experienced in 2007.

Also, the strengthening dollar works against U.S. exporters. Thus, job losses are spreading across many industry groups, and conditions seem to be deteriorating with increasing speed.

Furthermore, consider the housing market: November's supply of unsold houses is sufficient for 11.5 months of purchases, compared to 4.5 months during the 2004-2005 period when new home sales peaked.

It would be difficult to imagine housing prices stabilizing until significant excess inventory no longer exists. And, that will take time. No matter how long clearing this excess inventory takes, in the meantime, builders and developers are either defaulting on or spending scarce cash resources on construction loans. Remember that these are the same loans that are often tied to properties whose values have plummeted. The risk appears to be compounding.

Additionally, U.S. woes have been felt overseas by many countries. For example, the European Commission recently revised its real GDP forecast for European Union countries from 1.5 percent to 0.1 percent for 2009. And, the Organisation for Economic Co-operation and Development (OECD) predicts the economic growth of its member countries (as a whole) will actually contract to -0.4 percent in 2009. OECD is a group of 30 countries representing other highly developed or fast-developing countries in Europe, Scandinavia, the Pacific, Asia and North America.

Economic Forecast for the U.S.

This torrent of bad news has led to downward revisions in almost all economic forecasts. The Federal Reserve's latest October forecast, which predicts a shallow recession and quick recovery, already looks obsolete; the OECD published a forecast in November that shows a more realistic timeline for events. That forecast for economic activity (GDP) sees a recession in full force throughout 2009 and

provides the basis for the one-year recession crosstie demand scenario.

However, a significant shortcoming of most economic forecasting models is the poor ability to introduce the effects of a financial panic. In January, a paper was presented at the American Economic Association conference by Carmen Reinhart (University of Maryland) and Kenneth Rogoff (Harvard University) that summarizes the economic after-effects of a large number of financial panics that have occurred in various countries including the United States, and RTA has taken a stab at quantifying conditions consistent with these results. In this "constructed" scenario,

real GDP is seen falling by almost 4 percent in 2009 and again in 2010, before recovery begins in 2011[∗]. This provides ▶

Table 1:Economic ProjectionsGrowth Rates of Real GDP

Year approx.	OECD based One-year Recession	R&R AEA paper based on Financial Panic Two-Year Recession
2005	3.1%	3.1%
2006	2.9%	2.9%
2007	2.2%	2.2%
2008	1.1%	1.1%
2009	-0.9%	-3.9%
2010	1.6%	-3.9%
2011	2.8%	2.5%



the basis for the "Deep Recession" forecast. Table 1 compares the two different projections for growth rates of U.S. real GDP.

The Crosstie Market

On a 12-month-ended basis, tie purchases hit a 22 million peak in February 2007. Over the next four months, they dropped to about 19.9 million. Even though by June 2008 purchases had recovered to 21.6 million, since then purchases have slowed to 20.9 million in December about 3 percent above year-ago levels. The market is beginning to show signs of deceleration as would be expected in a slowing economy. Another piece of information that suggests slowing market activity is that Class 1 and shortline railroads both report carloads of freight down by about 3 percent at the end of 2008.

Table 2 presents the recessionary economic projection from OECD and the tie purchases consistent with that scenario. Note that although GDP declines only one year, purchases decline for two. This is due to a time lag discovered in the historical data and, thus, is present in RTA's model. It is known that movement of freight wears on all roadway components. Yet "current" freight movement does not predict "current" purchases as well as the predictor that is created when current data is combined with the previous year's freight movement. Thus, in order to best predict "current" purchases for ties it is necessary to combine past freight movement with current freight movement. Understanding this helps to

Table 2: Recession in 2009 New Wood Crossties (in thousands)								
Year approx.	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct			
2005	3.1%	15,029	3,786	18,815	4.5%			
2006	2.9%	15,937	4,719	20,656	9.8%			
2007	2.2%	15,285	5,115	20,400	-1.2%			
2008	1.1%	16,197	4,543	20,740	1.7%			
2009	-0.9%	15,693	4,265	19,958	-3.8%			
2010	1.6%	15,122	4,109	19,231	-3.6%			
2011	2.8%	15,552	4,603	20,155	4.8%			

explain the time lag effect that occurs when trying to forecast future tie purchases. In this instance, GDP falls in 2009. This results in lower freight in 2009 (measured in ton-miles) and reduces the demand/need for tie installations in both 2009 and 2010.

Table 3 presents an economic projection based in part on the Reinhart and Rogoff study presented at AEA. It shows the outcome of a deep two-year recession based on those assumptions. This scenario was crafted to approximate the results of the paper as presented at AEA and mentioned above. That study does not address strength of recovery, however, so for this scenario RTA "assumes" a modest 2.5 percent GDP growth for the projected year of recovery in 2011. Tie purchases experience three years of decline in this scenario.

In an earlier article in the Sept./Oct.

New Wood Crossties (in thousands)							
Year approx.	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Pct		
2005	3.1%	15,029	3,786	18,815	4.5%		
2006	2.9%	15,937	4,719	20,656	9.8%		
2007	2.2%	15,285	5,115	20,400	-1.2%		
2008	1.1%	16,197	4,542	20,739	1.7%		
2009	-3.9%	15,159	3,807	18,965	-8.6%		
2010	-3.9%	13,244	2,953	16,197	-14.6%		
2011	2.5%	13,034	3,745	16,779	3.6%		

Table 3: Deep Recession Scenario

2008 issue of *Crossties* magazine, an even more negative scenario was presented. This scenario looked at what would happen if the industry experienced a severe three-year recession similar to what happened at the end of World War II. That scenario has not been included here because it was a result of a different set of causes, mainly massive manpower and other resource adjustments, not financial panic.

Hopefully, both of these forecasts are more pessimistic than what the industry will ultimately face. In the first forecast one can more easily envision how the railroad industry could pull back demand to just below 20 million ties over the next two years. At the very least it follows similar cyclical pull-backs in demand that tie producers have weathered in the past. The second forecast is more difficult to imagine, yet the history of financial panics suggests they spawn such nasty recessions. RTA members should realize that such an event could occur if the current financial turmoil degenerates into a full-blown panic. Members should note while the Federal Government and Congress are striving to avert such a panic, this scenario serves to illustrate the depth of impact such a deep recession could foster if such panic created conditions were to arise. §

*Reinhart and Rogoff calculated an average decline of 9.3 percent in real GDP per capita over a period of 1.9 years. RTA assumed equal relative declines in 2009 and 2010, projected U.S. population, and calculated real GDP for these two years.

CROSSTIES • JANUARY/FEBRUARY 2009