The Industrial Pulse Of Freight Rates

If you ever lay awake at night wondering why we have a Dow Jones Transportation Average, originally a Railroad average, in addition to the Industrial Average, the answer is simple. Even though Charles Dow was familiar with the telegraph and the telephone, he did not consider himself to be part of an information-based economy. It was a tangible goods economy in the late 19th century, and Dow reasoned if you made it you had to move it.

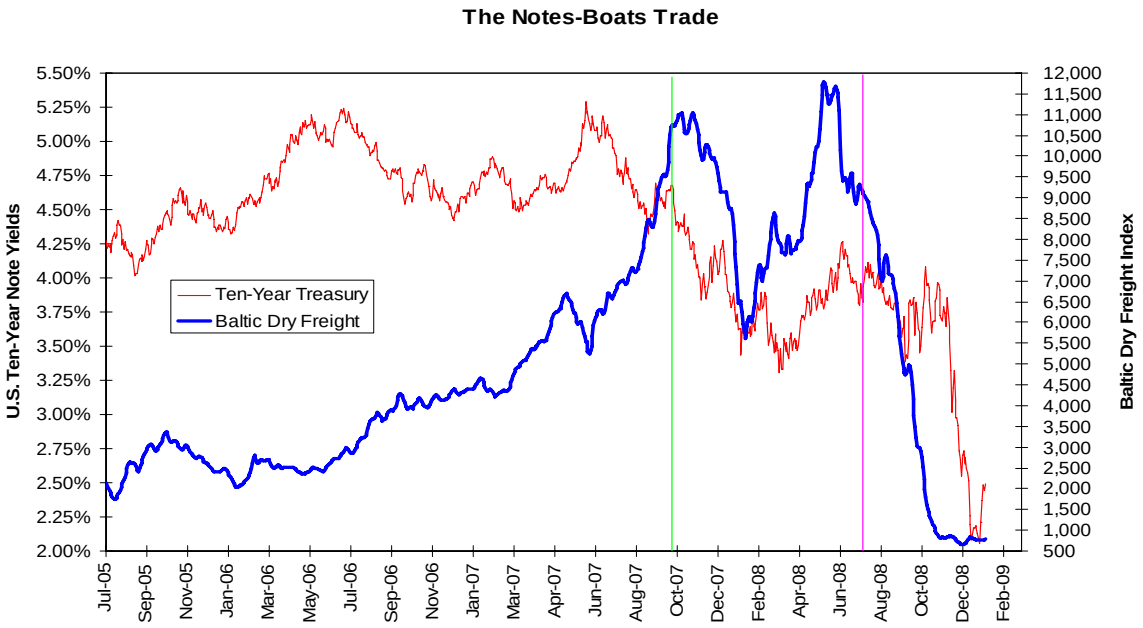
That insight applies still, and in a small digression it applies to information as well. Companies such as Cisco Systems, AT & T, Verizon, Comcast and others are involved in the transportation of data. But to return to the topic, as much of the industrial production of the U.S. has been outsourced to the other side of the Pacific Ocean, the Baltic Dry Freight index (BDI) of shipping rates is a good proxy for the health of both Chinese production and U.S. final demand. The index has been distorted at times by shipbuilding booms, but it remains a good barometer of Chinese demand for raw materials, often exported from Australia, and for shipping demand to the U.S.

The interplay between freight rates, the Chinese yuan-U.S. dollar exchange rate, commodity prices, interest rates and inflation creates numerous trading opportunities and provides insights into how markets operate.

Bond Linkages

A good principle of market analysis is relationships should not reverse over time unless there is an overwhelming and sound fundamental reason in support. Such is the case in the relationship between the BDI and U.S. ten-year note yields. When the Chinese allowed the yuan to start revaluing in July 2005, the world was in the midst of a full-throttle boom. This pulled the BDI higher. The Federal Reserve was in the midst of a rate-hike campaign at the time, too. Yet long-term interest rates in the U.S. remained in a trading range; Alan Greenspan referred to these low long-term rates in such an environment as a "conundrum." These same low long-term rates were contributing to the final surge in real estate prices that would bring the world much grief by 2007, but no one knew that for sure at the time.

Under pressure from U.S. protectionists, China acquiesced in an accelerated revaluation of the yuan in October 2007, marked with a green vertical line; this coincided with both the all-time high in U.S. equity prices and preceded the then-peak in the BDI by days. The relationship between the BDI and long-term rates changed, too: The two markets now rose and fell together through another all-time high in the BDI in May 2008. A third date, marked with the magenta vertical line, marks the U.S. government backstopping of Fannie Mae and Freddie Mac on July 15, 2008. This date also marks when the yuan stopped revaluing against the dollar.



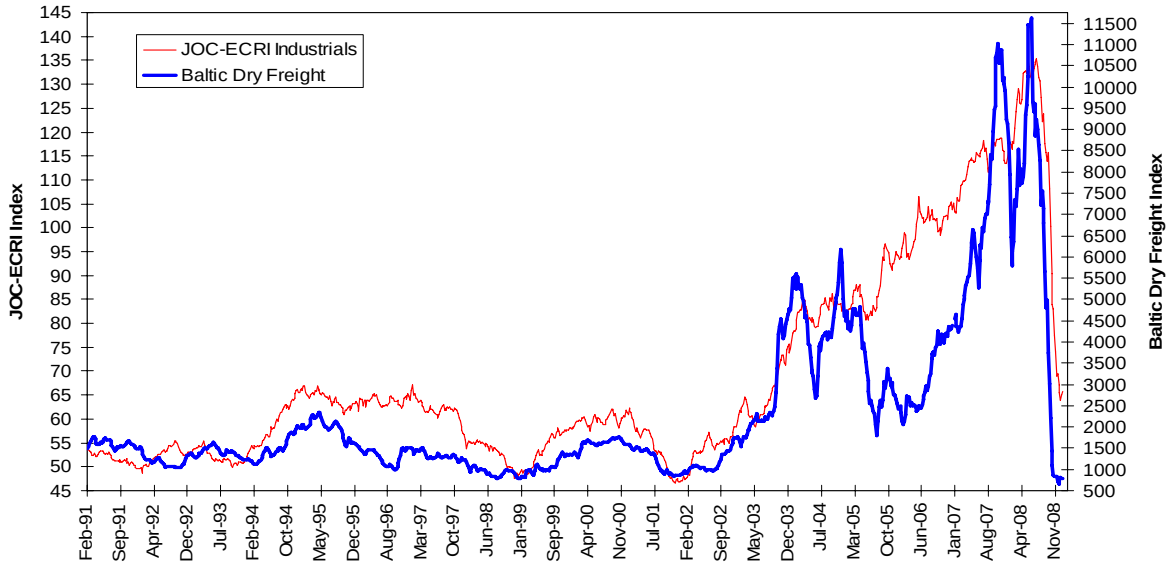
The relationship reversed briefly in October-November 2008 for a simple reason. As both U.S. Treasuries and Chinese industrial demand were responding to the same growth forces, credit demands rose and fell therewith. The more freely trade yuan was allowing for a more rapid transmission of cost signals back across the Pacific – the stronger yuan acted like a tax on the American consumer – and the capacity of China to reinvest its export earnings

into U.S. bonds rose and fell more quickly. By December 2008, both the BDI and U.S. Treasury yields collapsed as the global recession deepened.

Industrial Commodities

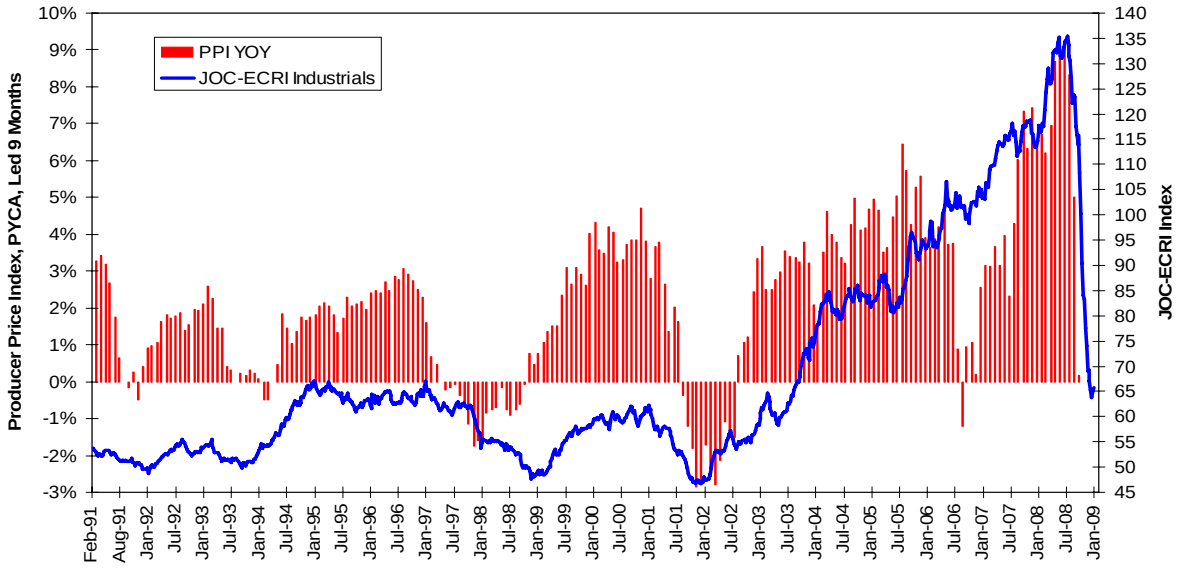
One relationship that never reversed was the one between the BDI and the Journal of Commerce-Economic Cycle Research Institute's industrial commodities index (JOC-ECRI). We should expect this relationship to be a simple and direct one, and mercifully it is. The JOC-ECRI contains a number of commodities such as burlap, hides, tallow, red oak and ethylene that do not underlie futures contracts and therefore are reasonably immune to speculative capital inflows. The index is designed to match the year-over-year changes in the producer price index; we shall see this comparison later.

Industrial Commodities And Freight Rates



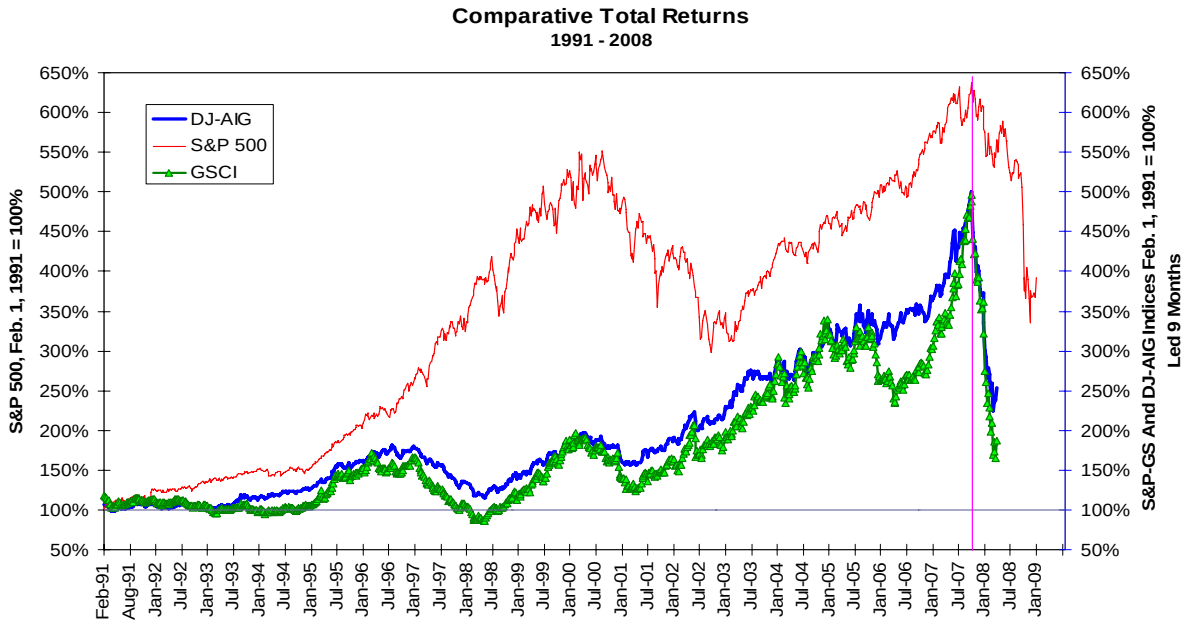
In some respects, the JOC-ECRI is a less volatile measure of inflation at the producer level than is the PPI. The JOC-ECRI marched higher between February 2002 and July 2008; the PPI failed to match its rate of increase in late 2006 and early 2007. Anyone who looked at the PPI as an autoregressive process, one where the trend is the most important determinant of the next data point, would have thought inflation was under control at this point. Anyone who followed the JOC-ECRI would have thought differently and would have been correct in the bargain.

Higher Raw Material Prices And The PPI



Between Commodities And Equities

Now let's add the last linkage, that between equity prices and commodity prices. If we mark the October 2007 high in U.S. stock prices, which also marks the point where the yuan started to revalue more rapidly and the BDI peaked, we find it leads the eventual peak in commodity indices' total return, whether we use the S&P-Goldman Sachs or the Dow Jones-AIG indices.



As freight rates came down, so did physical commodity demands, earnings, bond yields and the dollar's exchange value against the yuan. That is pretty good work for a single measure, the demand for ocean freight. We may live in an information age, but Charles Dow's insight that if you make it you have to move it hold true still. And best of all, you could explain it to anyone from anywhere in the world at any time in human history. Can your technical indicators do that?