CASS FREIGHT INDEX REPORT™

August 2018

Economic Outlook from Freight's Perspective

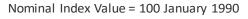
Volume Strong, Pricing Even Stronger, Continues Through Seasonally Slower Time

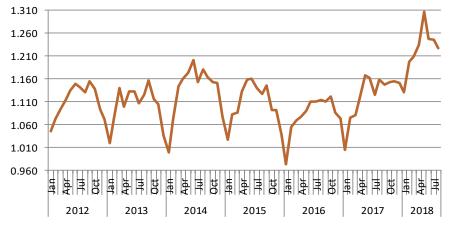
	August 2018	Year- over-year change	Month-to- month change
Shipments	1.227	6.0%	-1.4%
Expenditures	2.917	16.7%	0.6%

From both a volume and a pricing perspective, the U.S. freight economy continues to be extraordinarily strong. The Cass Freight Shipments and Expenditures Indexes are clearly signaling that the U.S. economy, at least for now, is ignoring all the angst coming out of Washington D.C. about the trade wars. Despite Wall Street's concerns about the increased threat of inflation or interest rates hikes, these indexes are displaying accelerating strength on top of increasingly difficult comparisons. Demand is exceeding capacity in most modes of transportation by a significant margin. In turn, pricing power has erupted in those modes to levels that continue to spark overall inflationary concerns in the broader economy.

As we explained in previous months, we do not fear long-term inflationary pressure as technology continues to provide multiple ways to increase asset utilization and price discovery in all parts of the economy, especially in transportation. In fact, we are seeing more signs that ELDs (Electronic Logging Devices) initially hurt the capacity/utilization of truckers (particularly small truckers), but many of the truckers most adversely affected are now beginning to get some of the loss in utilization back, especially in the dry van and reefer (temperature control) marketplaces. The flatbed segment of trucking, however, is continuing to struggle with productivity after the adoption of ELDs.

Cass Freight Index™ - Shipments



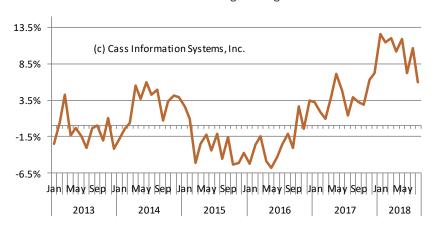


Transportation is a Leading Indicator

Shipments first turned positive 23 months ago, while expenditures turned positive twenty months ago. The current level of volume and pricing growth is signaling that the U.S. economy is growing, but that level of growth may have reached its near-term expansion limit. The 6.0% YoY increase in the August Cass Shipments Index is yet another data point confirming that the strength in the U.S. economy continues. We are confident that the increased spending on equipment, technology, and people will eventually result in increased capacity in most transportation modes. That said, many modes are reporting limited amounts of capacity or even no capacity at any price shippers are willing to pay.

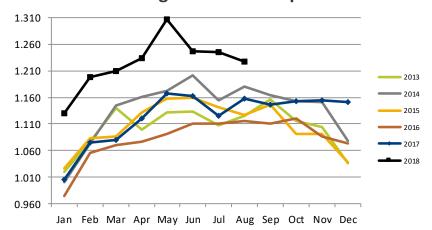
Cass Freight Index™ - Shipments

YOY Percentage Change

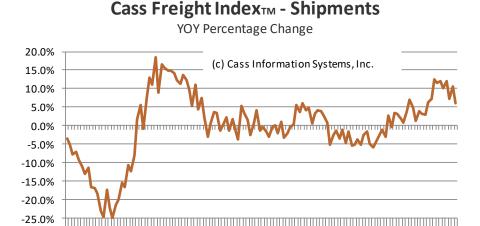


The first eight months of 2018 have clearly signaled that, barring a negative 'shock event', 2018 will be an extraordinarily strong year for transportation and the economy. March through August exceeded all levels attained in all months in 2014 (a very strong year), while February was roughly equal to the peak month in 2014 (June 2014 - 1.201 vs February 2018 - 1.198) which is extraordinary. A YoY stacked chart highlights that, similar to pattern which began in November and December 2017, the shipments index is still exceeding all previous respective months by a significant margin.



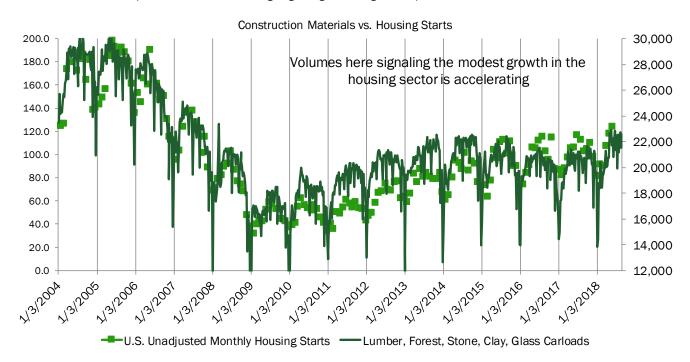


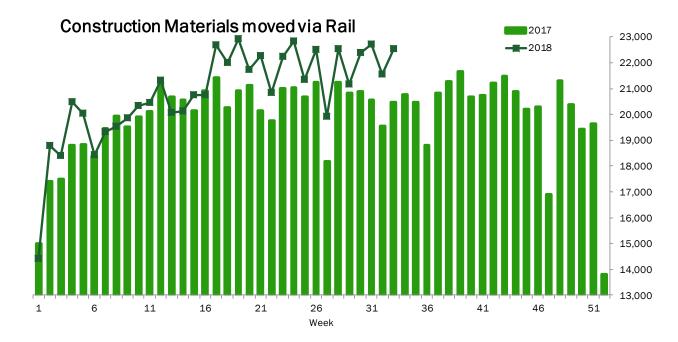
The YoY percentage change is notable because the freight recovery started in the second half of 2016 (i.e. tougher comparison) and because only when comparisons were weak (i.e. 2009-2010) were the percentage increases so high. Said another way, we normally only see such high percentage increases in volume when related to easy comparisons. That these percentage increases are so strong and strong against tough comparisons explains why our outlook is so bullish, why capacity is so constrained, and why realized pricing is so strong.



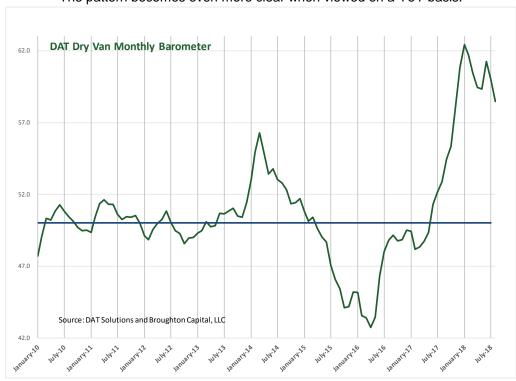
The Consumer Economy - The consumer is starting to spend, albeit not as much with brick and mortar retailers. Millennials are starting to form households in earnest and household formation is an extremely strong driver of consumer spending. It's also important to note that there are more millennials than baby boomers in the U.S. (see chart on below highlighting Housing Starts).

2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018

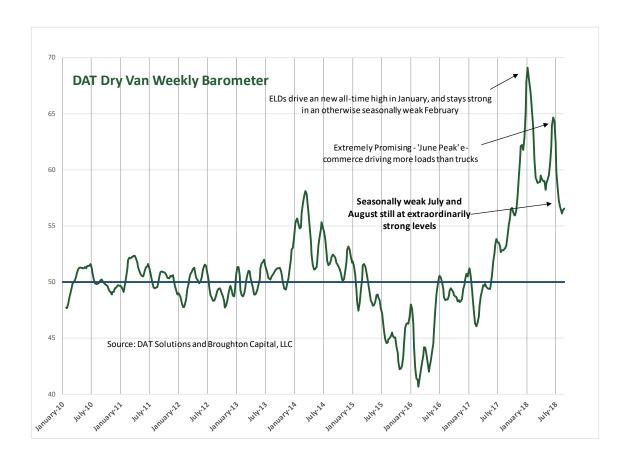




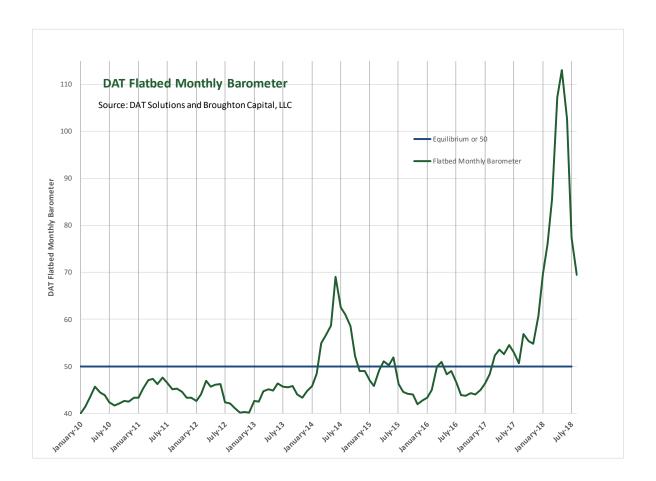
The pattern becomes even more clear when viewed on a YoY basis.



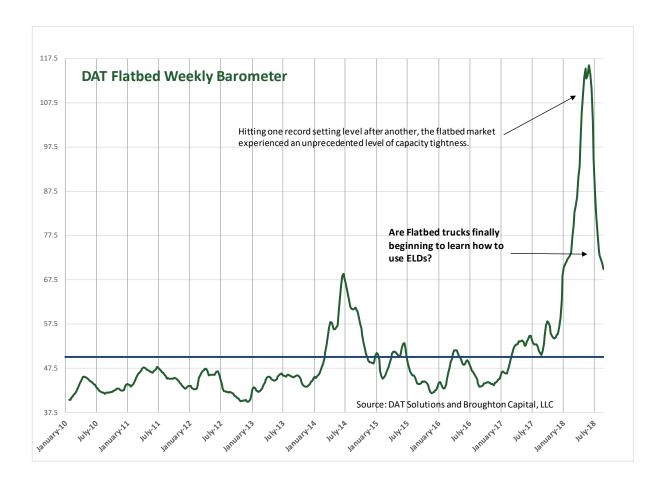
The DAT Dry Van Barometer is giving us real-time indications of stronger demand and tighter capacity in this key freight group. So, the consumer economy is not only alive and well, but growing robustly.



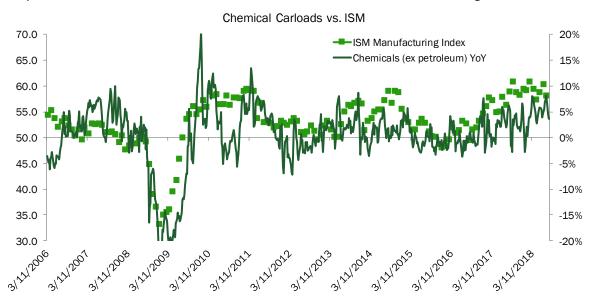
The Industrial Economy - With the surge in the price of WTI crude back above \$45 a barrel in April 2016, the industrial economy's rate of deceleration first eased and then began a steady improvement. Now with oil at around \$70 a barrel (WTI is above \$69 a barrel as we write this), the U.S. oil industry is now fracking new wells in all the major shale fields. We would note that indications of accelerating strength have been coming from several modes of transportation, but none more visibly than in flatbed trucking which we view as a key heavy industrial indicator. As long as WTI crude oil stays above the marginal cost of production (\$55 a barrel) in the major U.S. fracking fields, we expect to see continued strong industrial economic growth.



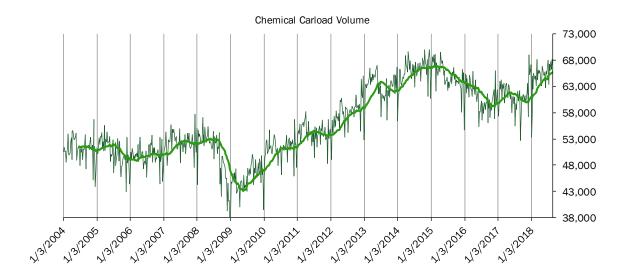
In a similar fashion to the DAT Dry-Van Barometer, the DAT Flatbed Barometer is indicating that **the U.S. industrial economy is alive and well and accelerating**. Hence, it shouldn't come as a big surprise that spot rates in the flatbed segment in August were up 17.2% on a spot basis and up 15.5% on a contract basis (not including the fuel surcharge).



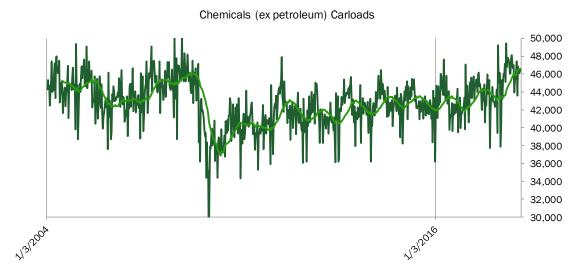
Data from the rail industry mirrors the data coming out of the flatbed segment of trucking. We have asserted for years that one of the best predictive indicators of U.S. domestic industrial activity is the chemical carload volume moved via railroad. Our assertion is simple: it is almost impossible to manufacture, or even assemble, anything in mass quantity without consuming chemicals. As a result, there has been, historically, a very tight relationship between the railroad chemical carload volume and the ISM Manufacturing Index.



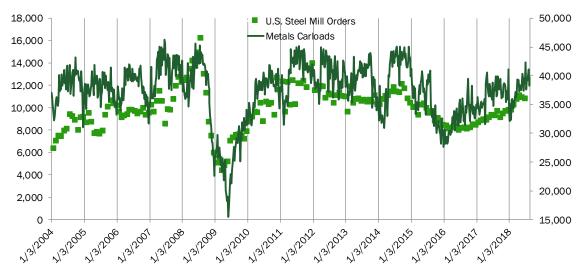
When viewed on a nominal basis, the chemical carload volume looks equally bullish for U.S. Industrial Production.



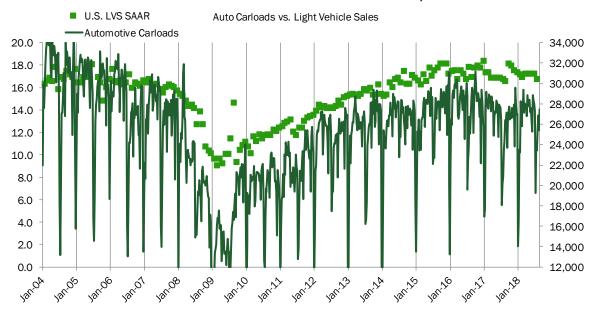
And, for those who might point to the strength provided via the growth in crude by rail, we have stripped out the petroleum carloads from the chemical carload volume. This suggests an equally bullish outlook for the U.S. Industrial Production, at least for the short to intermediate term.



Metals Carloads vs. US Steel Mill Orders



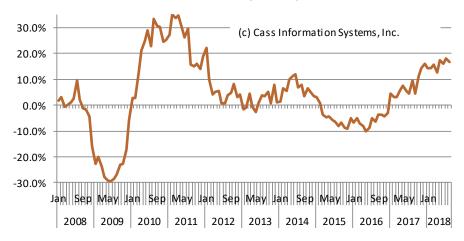
It is too early to definitively tell, but it appears that the steel industry is accelerating in the U.S. in the wake of the tariffs which adds to our bullish outlook for the industrial economy in the U.S.



Similar to our point about steel, the auto industry is also (so far) immune to the tariffs and add to our bullish outlook for the industrial economy in the U.S. (at least for the short-term). The 12-week moving average is a solid 6.5% ahead of last year's pace, with the shorter moving averages such as the 6-week boasting an even higher 10.3%.

Cass Freight Index™ - Expenditures

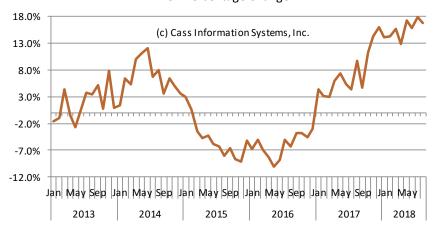
YOY Percentage Change



With the strength in demand, it follows that the Cass Freight Expenditures Index posted strong percentage increases throughout 2017, and that has continued so far in 2018. As we commented on the Shipments Index, we have to go back to the easy comparisons of 2009-2010 to find such large percentage increases and the current comparison is anything but easy. We have commented repeatedly that this was indictive of an economy that is continuing to expand. August's 16.7% increase clearly signals that capacity is tight, demand is strong, and shippers are willing to pay up for services to get goods picked up and delivered in modes throughout the transportation industry.

Cass Freight Index™ - Expenditures

YOY Percentage Change



On a nominal basis, the index exceeded the all-time high established back in June 2014 and appears poised to stay at record levels with ease in the coming months. Stay tuned...

Putting it all in Perspective

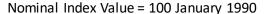
Expenditures (or the total amount spent on freight) turned positive for the first time in 22 months in January 2017, albeit against an easy comparison. Not since 2011—when the economy was still climbing out of the recession—had this index been so low. Our Expenditures Index in January 2016 was the worst in five years, as demand had weakened and crude oil had fallen below \$30 a barrel. Although February and March of 2016 were also weak, they were not nearly as weak as January 2016 and, hence, a slightly tougher comparison.

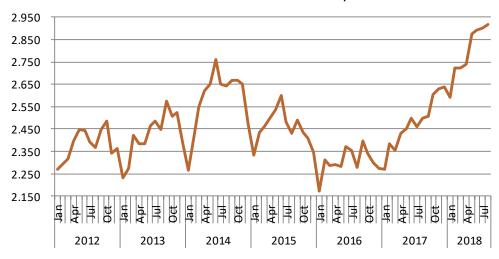
Since fuel surcharges are included in the Expenditures Index, fuel was a positive bias in 2017 and continues to be in the current data.

Throughout much of 2017, fuel was up as much as 30% on a YoY basis (diesel is at \$3.25 a gallon on a national average basis as we write this), and we have pointed out that part of the Expenditures increase was a result of the relatively steady increase in the price of fuel and the related fuel surcharges. The YoY increase attributable to fuel is now diminishing (up an average of 24% on a YoY basis in August), but still significant. We also continue to see strengthening in the pricing power of truckers and intermodal carriers. As an example, the proprietary Cass Truckload Linehaul Index (which measures linehaul rates and does not include fuel) rose 11.1% on a YoY basis in the month of August, which is the strongest percentage increase in the history of this index (since 2005) and an all-time high on a nominal basis. The proprietary Cass Intermodal Price Index (which does include fuel), increased 11.4% in August (see those reports here for more details on the data and the underlying trends).

We should also remind readers of a fundamental rule of marketplaces: volume leads pricing. Repeatedly we have watched in a host of different markets that volume goes up before pricing starts to increase and volume goes down before pricing starts to decline.

Cass Freight Index™ - Expenditures

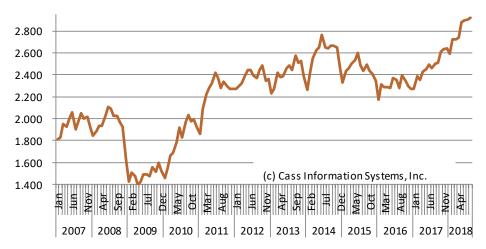




Viewing the Cass Freight Expenditures Index on nominal basis shows how positive the trajectory has been in the last year. It is now above the levels achieved in the 2014 period. To put how strong the underlying pricing is in perspective, we should remind readers that the price of oil was at or around \$100 a barrel throughout most of 2014 versus the current price of \$69 a barrel.

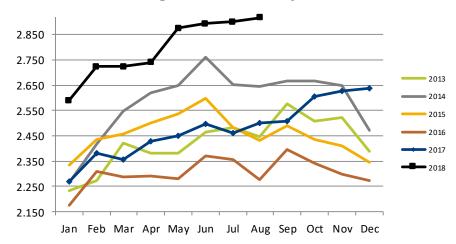
Cass Freight Index™ - Expenditures

Nominal Index Value = 100 January 1990



Similar to the Cass Freight Shipments Index, the Cass Freight Expenditures Index—when viewed on a nominal YoY stacked basis—highlights that the February Expenditures Index has exceeded all previous levels for January since the recovery from the 2008 – 2009 recession.

Cass Freight Index™ - Expenditures



About The Cass Freight Index

The Cass Freight Index represents monthly levels of shipment activity, in terms of volume of shipments and expenditures for freight shipments. Cass Information Systems processes more than \$25 billion in annual freight payables on behalf of its clients. The Cass Freight Index is based upon the domestic freight shipments of hundreds of Cass clients representing a broad spectrum of industries. The index uses January 1990 as its base month. Visit http://www.cassinfo.com/frtindex.html or call 314-506-5500 to get detailed information about the Cass Freight Index, including historical data.

About the Author: Donald Broughton

Founder and Managing Partner of Broughton Capital, a deep data driven quantimental economic and equity research firm.

Prior to starting Broughton Capital, Mr. Broughton spent nine years as the Chief Market Strategist and Senior Transportation Analyst for Avondale Partners. Before that, Mr. Broughton spent over twelve years at A.G. Edwards. At A.G. Edwards, in addition to being the Senior Transportation Analyst, he was the Group Leader of the Industrial Analysts and served on the firm's Investment Strategy Committee. Prior to going to Wall Street, Mr. Broughton spent eight years in various distribution and operations management roles in the beverage industry, including serving as the Corporate Manager of Distribution for Dr. Pepper/Seven-Up companies and Chief Operating Officer for Bevmark Concepts.

Many in the transportation industry know him for his quarterly tracking of trucking bankruptcies. He is also known for his development of a 'Value to Density Spectrum' study of the tangible goods flow and its economic ramifications.

Broughton's equity research has earned acclaim and is regularly quoted by The Wall Street Journal, Bloomberg, Fortune, Forbes, and numerous other national media outlets. He is a frequent guest on CNBC, Nightly Business Report, CNN, Fox, NPR and other broadcast media.

His stock-picking performance has been repeatedly recognized by The Wall Street Journal, which has ranked him in its "Best on the Street" survey for his picks in both the cargo and railroad industry groups. Forbes has highlighted his performance in its "When Picky Analysts Pick" series. He has been ranked by Zacks Investment Research and Starmine as a 5-Star Analyst (their highest ranking) based on the historical performance of his recommendations.

Beginning in mid-2006, Broughton published reports warning of an impending economic slowdown and by early 2007 published reports explaining why a recession was coming. In early 2009, as the world became convinced that the 'sky was falling' he upgraded large cap industrials and names such as FedEx and Union Pacific. More recently, in July of 2010 and again in September 2011 his "Blue Car Report" explained why fears of a double dip were severely overblown and outlined why the market would have significant rallies by the end of those years. He believes that the current market is struggling to digest the end of the industrial-led recovery and the beginning of the consumer-led recovery in this cycle. But fear not, the consumer both in the U.S. and globally is about to be better than expected.

Other indexes published by Cass and Donald Broughton:

Cass Truckload Linehaul Index – measures fluctuations in U.S. truckload linehaul rates **Cass Intermodal Price Index** – measures fluctuations in U.S. domestic intermodal costs Visit http://bit.ly/s9inig to view or subscribe.



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