CASS FREIGHT INDEX REPORT™

September 2018

Economic Outlook from Freight's Perspective

Correction or Change in Direction? Freight Market says Correction.

	September 2018	Year-over-year change	Month-to-month change
Shipments	1.241	8.2%	1.1%
Expenditures	2.990	19.3%	2.5%

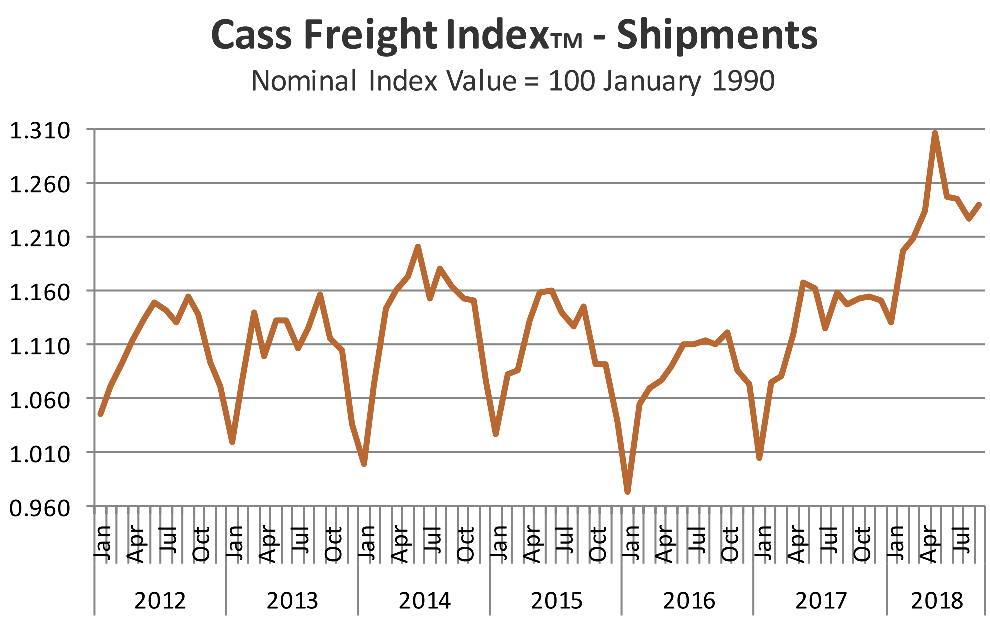
Last week was volatile for the financial markets. As the yield on the U.S. 10-year Treasury moved up sharply and the U.S. equity markets repriced, many began to ask the question, "Is this just a correction, or a change in direction?" After a long period of very low interest rates, extraordinarily strong economic growth, and strong equity market appreciation, both a correction and the need to ask, "If the economy and financial markets are so good, that it is difficult for them to get markedly better, when do they get worse?" are completely normal and warranted. We admit that we have two long held biases: (1) that the freight economy is the single best, data based, and dispassionate predictor of the economy; (2) that ongoing technological development (Moore's Law and all that it enables) is highly deflationary.

Although we subdivide the economy via multiple other data feeds that represent smaller segments of the freight flows, we continue to see the Cass Freight Shipments and Expenditures Indexes as strong proxies for what is happening in the U.S. freight markets.

Despite all the recent turmoil in the financial markets and the resulting concerns about the strength of the economy ("What is the financial market trying to tell us?"), the Cass Freight Shipments Index is clearly signaling that the U.S. economy, at least for now, continues to be extraordinarily strong. Simply stated, when shipment volume is up 8.2% it is the result of an expanding economy. We are hard pressed to imagine a scenario, barring a catastrophic geopolitical event, in which such a strong rate of freight flow expansion was possible or even a precursor to an economic contraction. Our confidence in this outlook is emboldened by the knowledge that, since the end of World War II (the period for which we have reliable data), there has never been an economic contraction without there first being a contraction in freight flows. Conversely, during the same period, there has never been an economic expansion without there first being an expansion in freight flows.

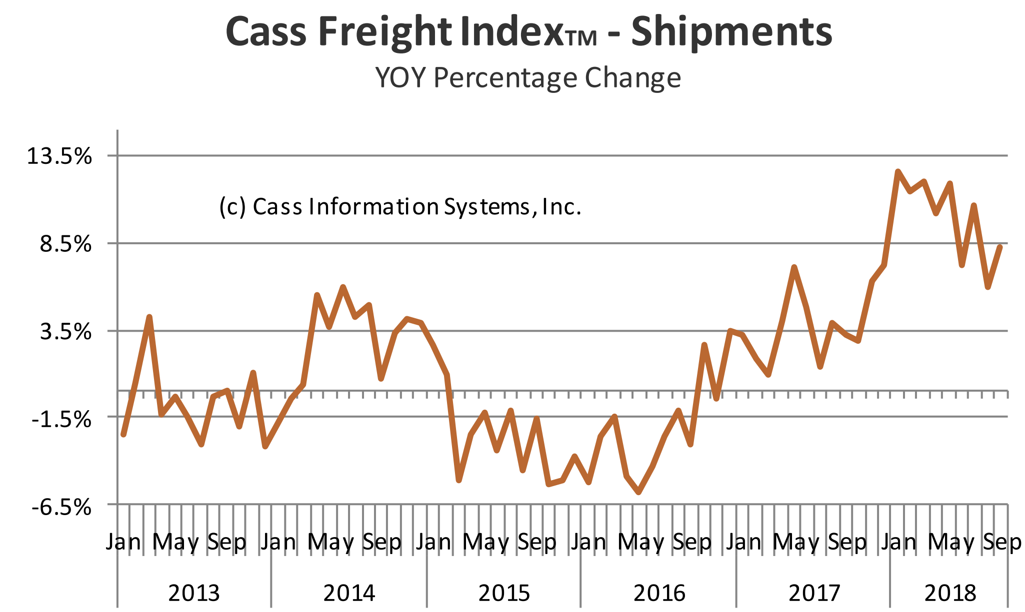
The Cass Expenditures Index is signaling continued strong pricing power for those in the marketplace who move freight. Demand is exceeding capacity in most modes of transportation by a significant margin. In turn, pricing power has erupted in those modes to levels that continue to spark overall inflationary concerns in the broader economy. With the Expenditures Index up 19.3%, we understand those concerns, but are comforted by two factors: the cost of fuel (and resulting fuel surcharge) is included in the Expenditures Index and the cost of diesel was up 17.3% in September; almost all modes of transportation are using the current environment of pricing power to create capacity. Especially to the extent that pricing is materially exceeding the marginal cost of creating that capacity, market participants are investing heavily in the exact activities which kill pricing power in commodity markets (i.e., expansion of capacity with the belief that current pricing power will endure for an extended period of time).

As we explained in previous months, we do not fear long-term inflationary pressure as technology provides multiple ways to ever-increase asset utilization and price discovery in all parts of the economy, especially in transportation. In fact, we are continuing to see more signs that ELDs (Electronic Logging Devices), which initially hurt the capacity / utilization of truckers (especially small truckers), are becoming an ever-smaller impediment to capacity utilization. Many of the truckers which were the most adversely effected are now getting most, if not all of, the original loss in utilization back. This is especially true in the Dry Van and Reefer (temperature control) marketplaces of trucking. Even the Flatbed segment of trucking, which initially faced the greatest challenges with productivity after the adoption of ELDs, has begun to adapt.

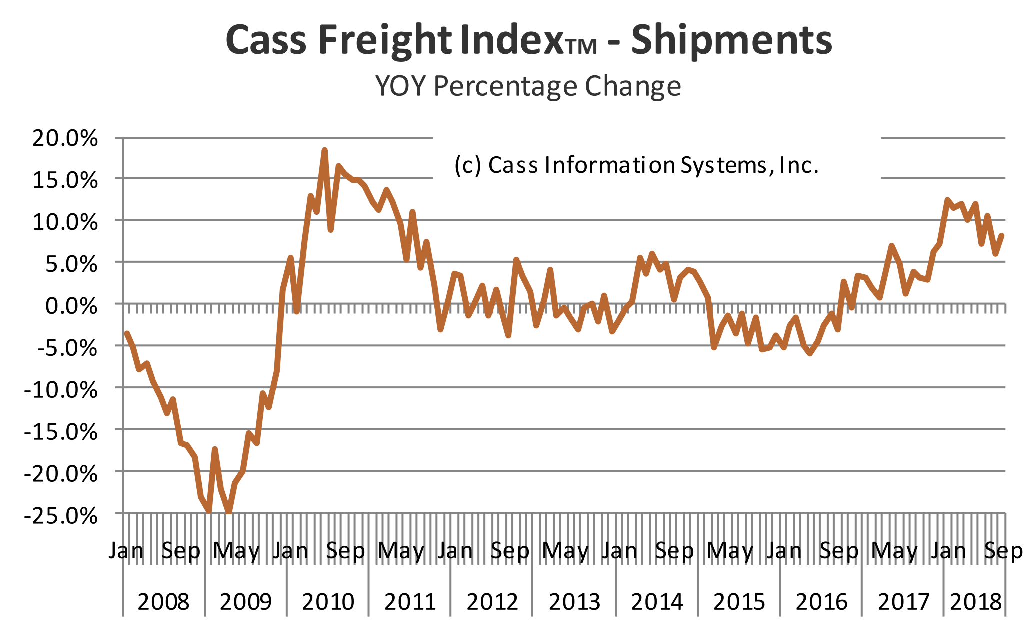


Transportation Continues to be a Leading Indicator

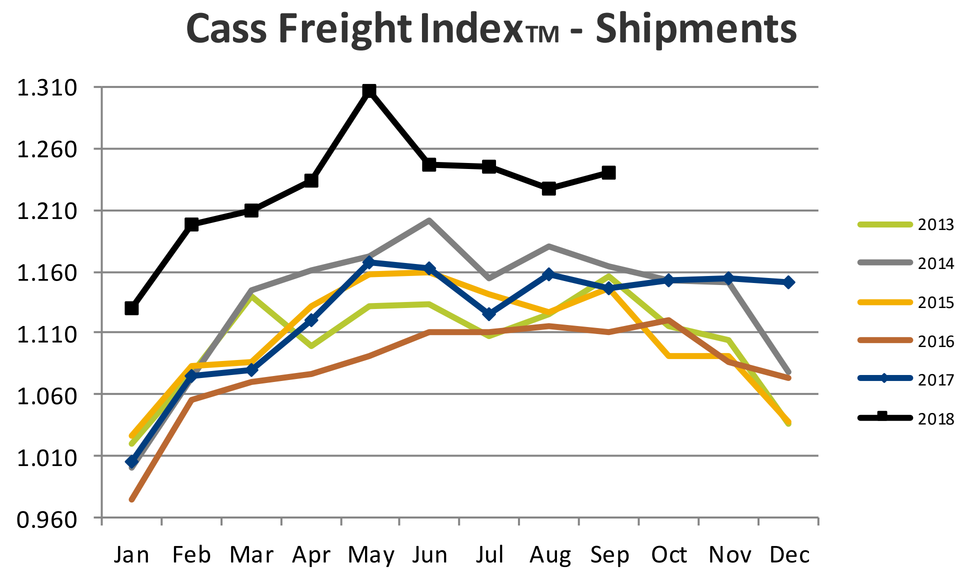
Shipments first turned positive 24 months ago, while expenditures turned positive 21 months ago. **The current level of volume and pricing growth is signaling that the U.S. economy is growing, but that level of growth may have reached its short-term expansion limit.** The 8.2% YoY increase in the September 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 continue to report limited amounts of capacity or even no capacity at any price shippers are willing to pay.**



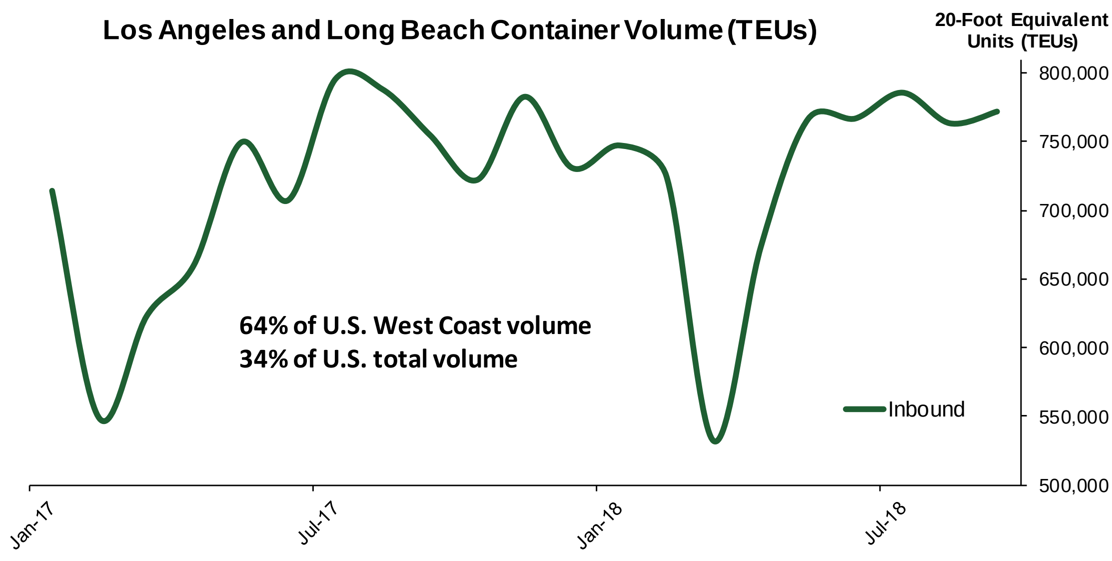
The YoY percentage change is notable because the freight recovery started in the second half of 2016 (i.e., tougher comparison) and because only when comparisons were weak (i.e., 2009-2010) were the percentage increases so high. Said another way, we normally only see such high percentage increases in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



With the first nine months of 2018 behind us, it is clear that 2018 will be an extraordinarily strong year for transportation and the economy. March through September exceeded all levels attained in all months in 2014 (a very strong year), while February was roughly equally to the peak month in 2014 (June 2014 – 1.201 vs February 2018 – 1.198) which is exceptional. A YoY stacked chart (see below) highlights that, similar to the pattern which began in November and December 2017, the shipments index is still exceeding all previous respective months by a significant margin.

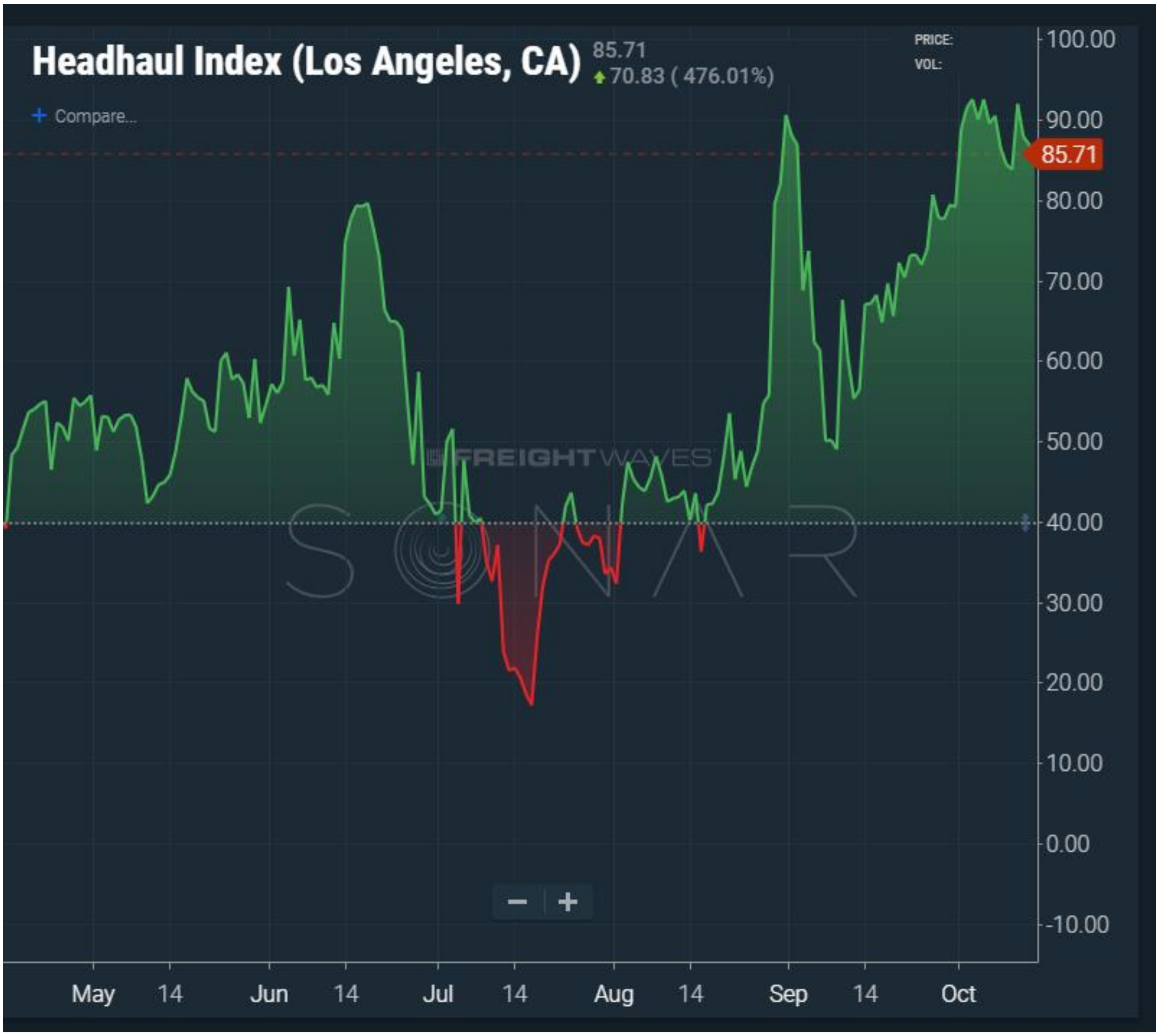


There has been some debate recently about whether the May and June period was inflated by shippers who pre-shipped in order to try and 'get ahead' of proposed tariffs. Did this happen and were July, August, and September slightly lower as volumes that were pre-shipped were worked through? Looking at the stacked YoY Shipments Index suggests that there might be some merit in the 'pre-shipment' assertion, as volumes exceeded previous years by a larger margin in the second quarter than they did in the third quarter.



Source: Ports of Los Angeles and Long Beach, and Broughton Capital

Looking at data generated by the Long Beach / LA port adds further credence to the 'pre-shipment' assertion. We'd remind readers that the Long Beach / LA port is the largest container port in North America, handling more than a third of the containers imported into the US (34% to be exact), and that February and March are typically slow months (depending on the timing of the Chinese New Year). Volumes in 2017 were exceptionally strong as the economy accelerated from both a consumer as well as an industrial perspective. After a relatively slow start, inbound container volumes were up 7.4% for the year in total and ran as high as 14.6% in July and 12.4% in September of 2017. Volumes in 2018 have been strong on top of tough comparisons throughout the year. It appears that there was some pull forward in May and June as some shippers attempted to beat the potential tariffs with June inbound volumes up 8.4%, while July and August volumes were slightly negative (down 1.3% and 3.1% respectively). Having now worked past that period, September inbound volumes were up 2.3% which is clear evidence that the retail economy is continuing to grow.



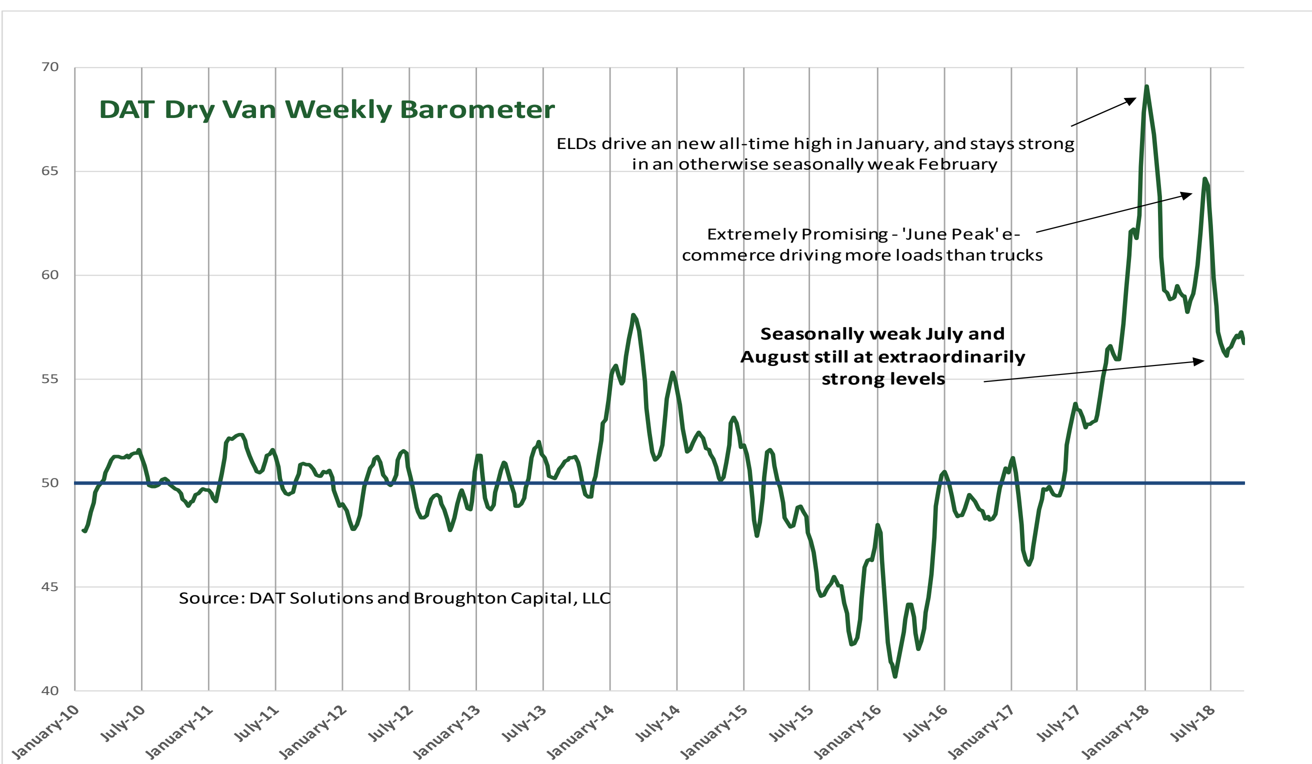
Further real time evidence of continued growth in this marketplace can be found through the FreightWaves SONAR transportation data platform. The chart above is the SONAR Headhaul Index out of the greater Los Angeles, CA area. Essentially it measures the amount by which loads coming out of the area are exceeding trucks going into the area. With the level of pre-shipped containers that landed within the May and June timeframe, this index surged as high as 67.77 before settling back down throughout July and August. September and October volumes have taken the headhaul index back to record high levels above 80.

The Consumer Economy

All of this data is signaling that this holiday shopping season will be very strong. We are often asked, "Why is the container volume so predictive of retail sales? Is it as simple as retailers must have the product on the shelves (or in the warehouse if they are an e-tailer) in order to generate the sale?" It's hard to refute the simplicity of this logic, but we believe it's a bit more sophisticated. Call it the "Wisdom of Crowds" (i.e., the more people betting, and the more money being bet, the more predictive a market becomes). Retailers of all sizes have professional buyers who have extensive experience gauging both the strength of demand from their customers and what specifically those customers are going to want. Those professional buyers individually are capable of making mistakes about volume (they order too little or too much) and product selection (grey pull-over sweaters instead of blue cardigans), but collectively their sense regarding consumer demand and choice are highly predictive of what will actually happen in the coming months. In part, this marketplace works because of the number of people involved and the money deployed, and in part, because the buyers who regularly prove their ability to correctly predict volume and selection gain ever larger budgets and influence over time. Those that don't find other careers to pursue. ***Bottom line, the professional retail buyers (large and small) and the container volume that results from their buying decisions are predicting a strong holiday shopping season.***

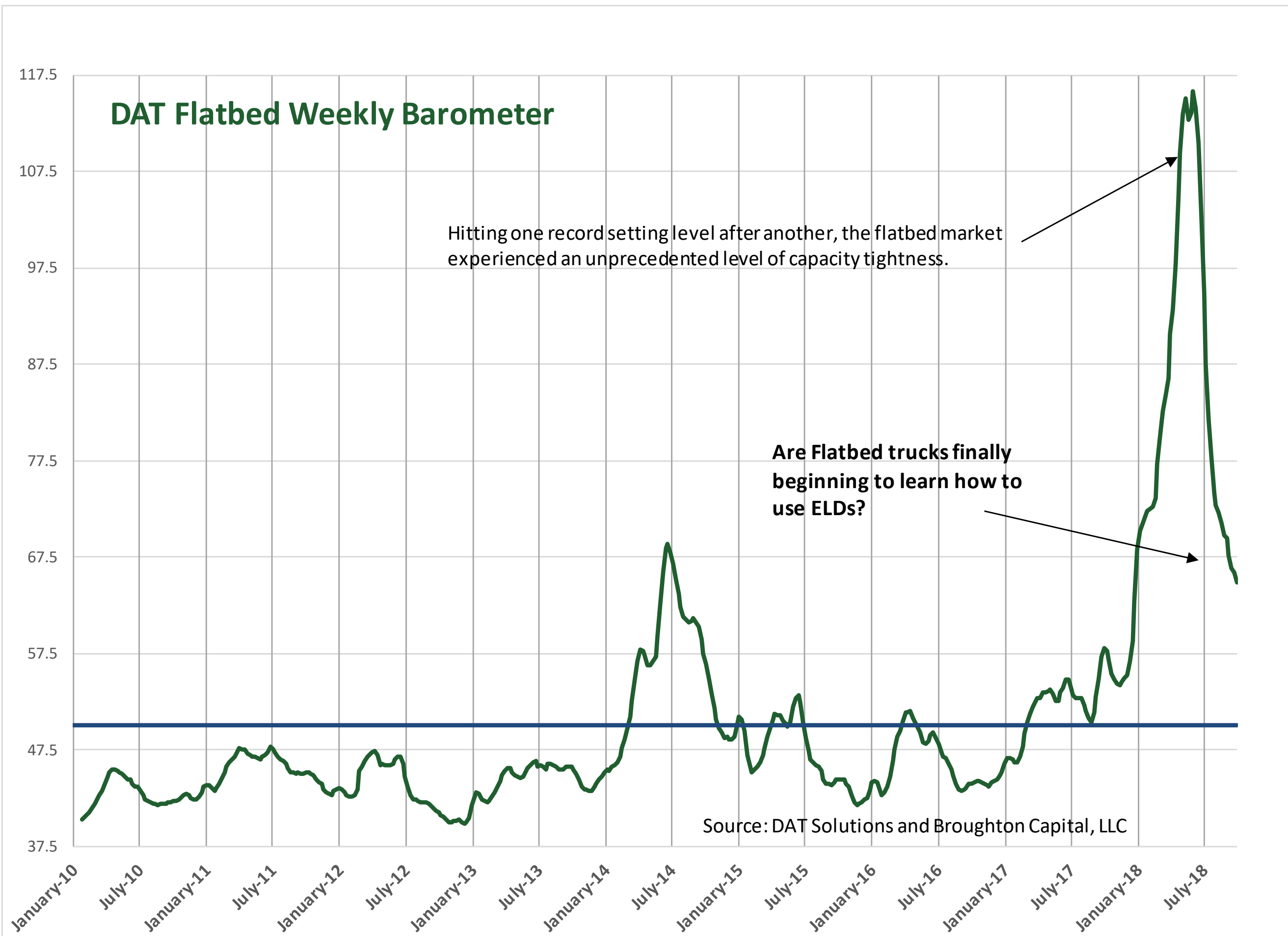
Side note - despite the strong pre-ship in May and June, inventories across the US economy fell in the second quarter and were a one-percentage point headwind to GDP (the reduction of inventory is a negative to the calculation of GDP, while the increase in inventory is a positive to the calculation of GDP). Without the drop in inventories that occurred, GDP would have come in at 5.1% in 2Q!

We should also note that Dry Van trucking volume serves a similar role as container volume in predicting retail sales. When studied using the DAT Dry Van Barometer, a clear pattern of strong volume growth that exceeds capacity growth, which is driving pricing power, remains.



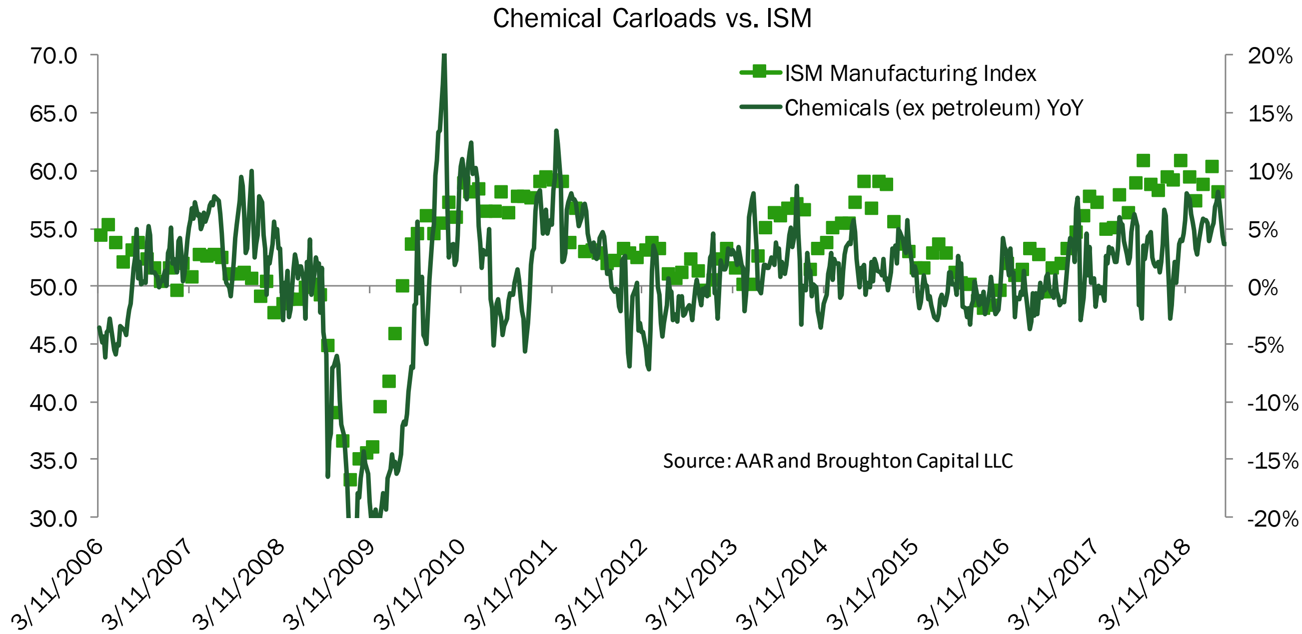
The DAT Dry Van Barometer is giving us real-time indications of stronger demand and tighter capacity in this key freight group which indicates that the consumer economy is not only alive and well, but growing robustly.

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 back above $70 a barrel (WTI is above $71 a barrel as we write this) the U.S. oil industry is now fracking new wells in all major shale oil 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.**

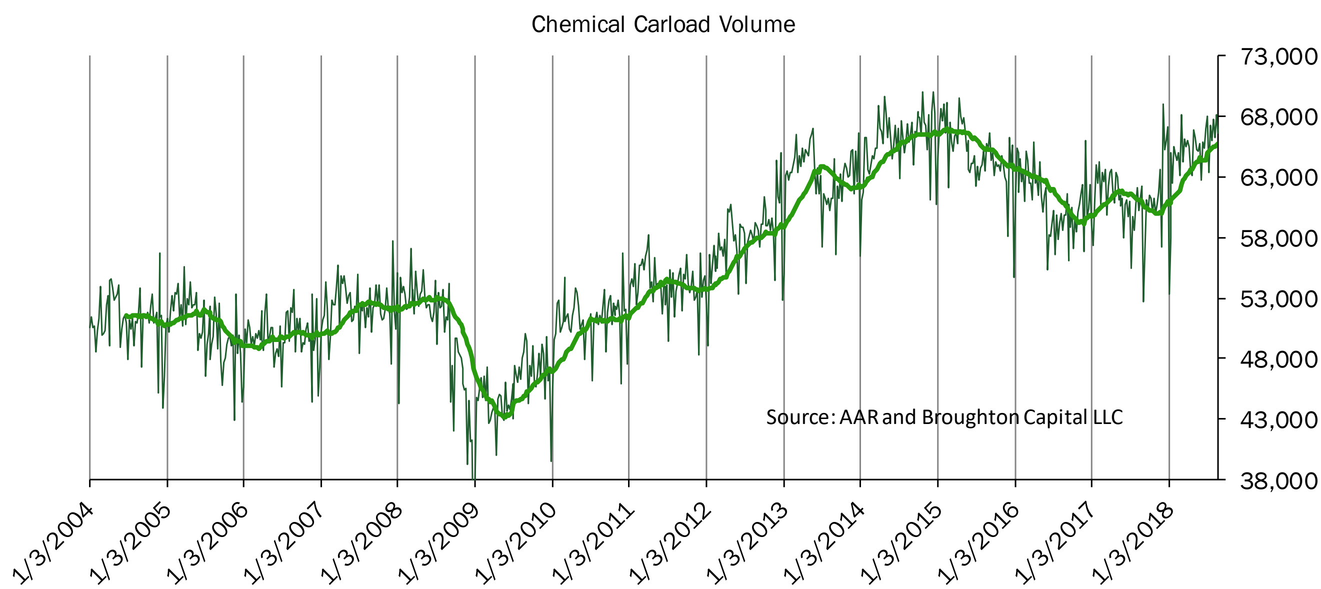


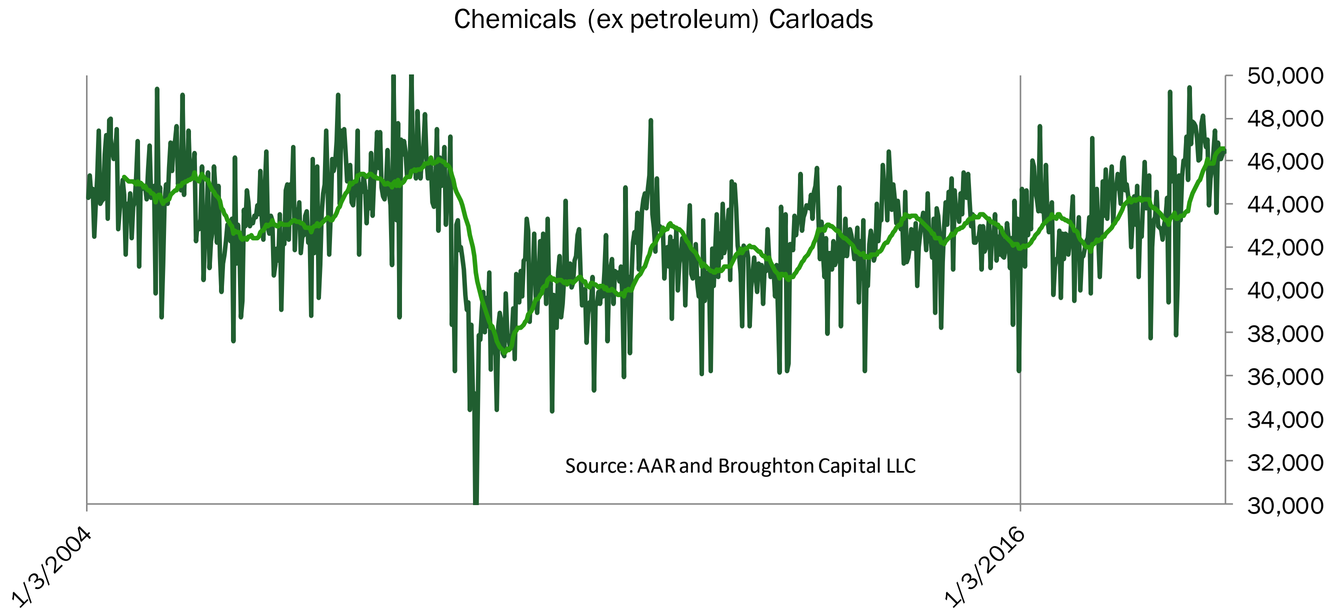
Similar to the DAT Dry-Van Barometer, the DAT Flatbed Barometer is indicating that the U.S. Industrial economy is alive and well and accelerating. Hence, it shouldn't come as a big surprise that spot rates in the flatbed segment in September were up 10.2% on a spot basis and up 15.3 on a contract basis (not including the fuel surcharge, which was up 33.3%).

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 rail. 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 historically been a very tight relationship between the railroad chemical carload volume and the ISM Manufacturing Index.

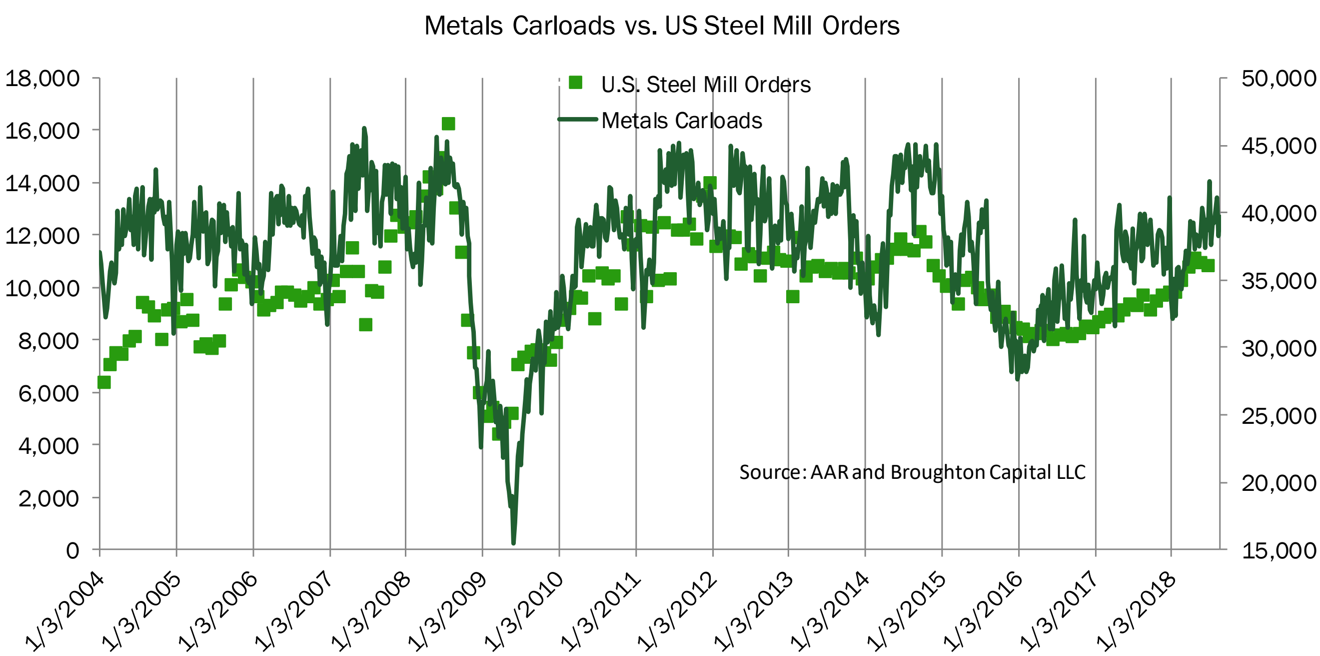


When viewed on a nominal basis the chemical carload volume looks equally bullish for U.S. Industrial Production.

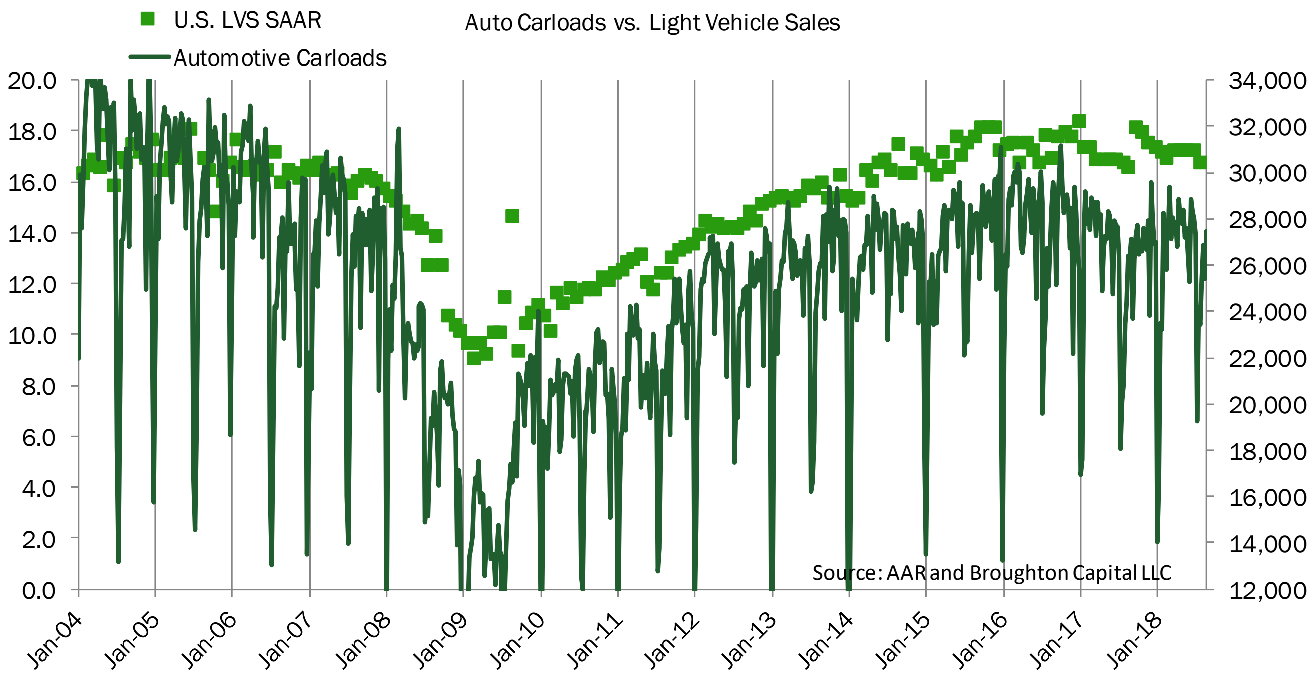




And, for those who might point to the strength provided via the growth in crude by rail, we have stripped out the petroleum carloads from the chemical carload volume. This suggests an equally bullish outlook for the U.S. Industrial Production, at least for the short to intermediate term.

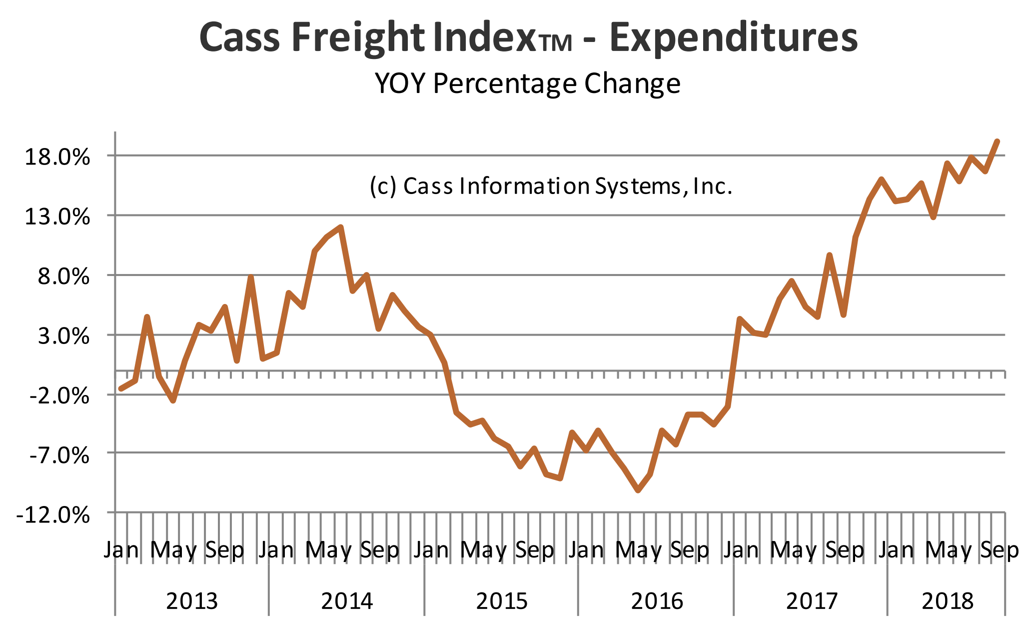


It is too early to definitively tell, but it appears that the steel industry is accelerating in the U.S. in the wake of the Trump tariffs. This adds to our bullish outlook for the industrial economy in the U.S.

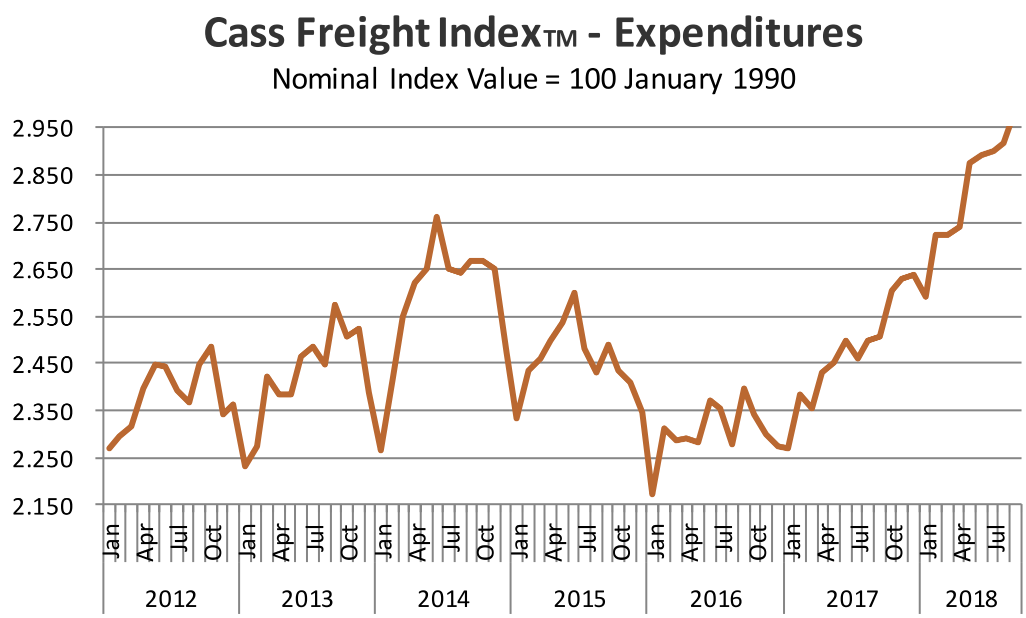


Similar to our point about steel, the auto industry is also (so far) immune to the Trump tariffs and add to our bullish outlook for the industrial economy in the U.S., at least for the short-term. The 12-week moving average is a solid 6.3% ahead of last year's pace, with the shorter moving averages, such as the 6-week, boasting an even higher 10.0%.

Given the higher price of oil (resulting in higher fuel surcharges) and the strength in rates being experienced in sectors such as flatbed and chemical railroading, it should come as no surprise that the Cass Freight Expenditures Index is reporting such overall strength in transportation spending.



With all of the recent strength in demand, it follows that the Cass Freight Expenditures Index also posted strong percentage increases throughout 2017, and that has continued so far throughout 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 is indicative of an economy that is continuing to expand. **September's 19.3% 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 all modes throughout the transportation industry**.



Viewing the Cass Freight Expenditures Index on nominal basis shows how positive the trajectory has been in the last year. 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. We should remind readers that the price of oil was at or above $80 a barrel throughout most of 2014 versus the current price of $70 a barrel.

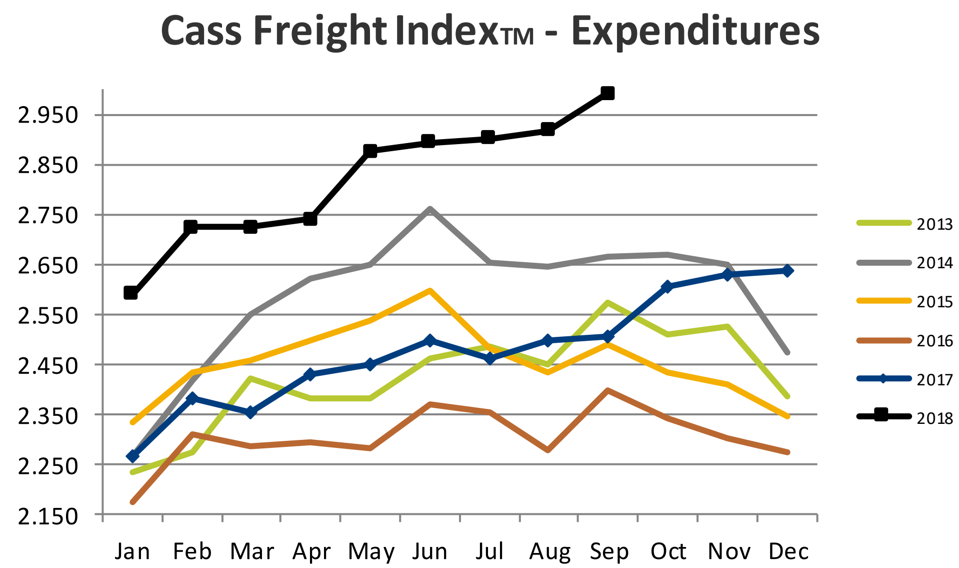
Putting it all in Perspective

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 comp. 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 $3.394 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 less than it was in 2017 (up an average of 17.2% on a YoY basis in September), but still significant. We also see continued strength in 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 9.8% on a YoY basis in the month of September to 140.7, an all-time high on a nominal basis. The proprietary Cass Intermodal Price Index (which does include fuel), increased 10.1% in September to 142.1 (*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 improve and volume goes down before pricing starts to weaken.

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.



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/s9iniq to view or subscribe.

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