Cass Information Systems, Inc.

Cass Freight Index® Report

April 2019

Economic Outlook from Freight's Perspective

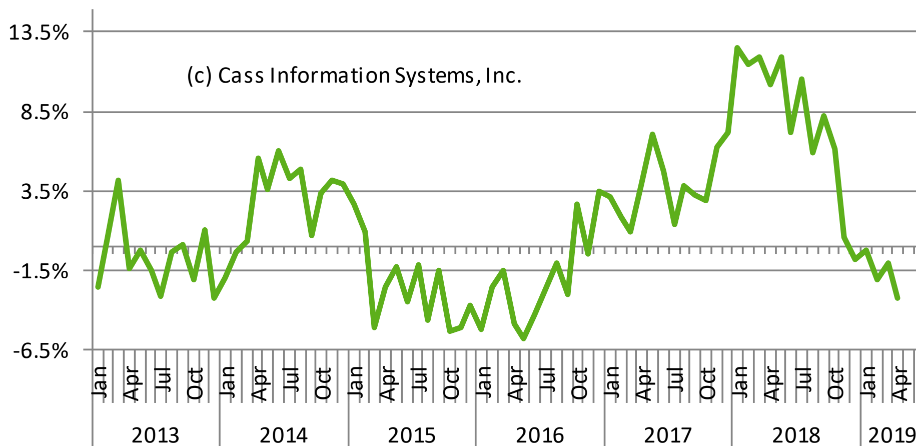
Negative Shipment Volume Hits Five Months in a Row

Economic Contraction or Only Retrenchment?

	April 2019	Year-over-year change	2 year stacked change	Month-to-month change
Shipments	1.194	-3.2%	6.6%	-0.3%
Expenditures	2.909	6.2%	19.8%	0.7%

Continued decline in the Cass Freight Shipments Index continues to concern us:

- When the December 2018 Cass Shipments Index was negative for the first time in 24 months, we dismissed the decline as reflective of a tough comparison. When January 2019 was also negative, we again made rationalizations. Then February was down -2.1% and we said, "While we are still not ready to turn completely negative in our outlook, we do think it is prudent to become more alert to each additional incoming data point on freight flow volume, and are more cautious today than we have been since we began predicting the recovery of the U.S. industrial economy and the rebirth of the U.S. consumer economy in the third quarter of 2016."
- When March was down -1.0%, we warned that we were preparing to 'change tack' in our economic outlook.
- With April down -3.2%, we see material and growing downside risk to the economic outlook. We acknowledge that: all of these still relatively small negative percentages are against extremely tough comparisons; the two-year stacked increase was 6.6% for April; and the Cass Shipments Index has gone negative before without being followed by a negative GDP. We also submit that at a minimum, business expansion plans should be moderated or have contingency plans for economic contraction included.
- The initial Q1 '19 GDP report of 3.2% suggests the economy is growing faster than is reflected in the Cass Shipments Index. Our devolvement of GDP explains why the apparent disconnect is not as significant as it first appears.
- The weakness in spot market pricing for many transportation services, especially trucking, is consistent with the negative Cass Shipments Index and, along with airfreight and railroad volume data, heightens our concerns about the economy and the risk of ongoing trade policy disputes.

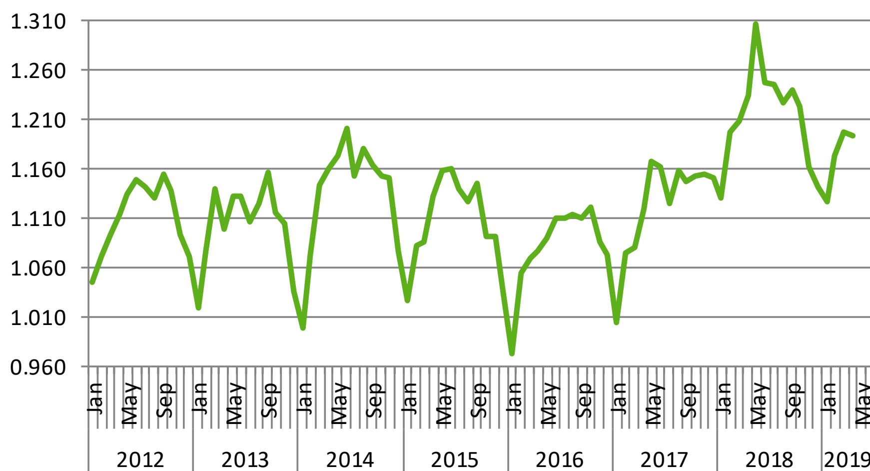


We should note that the Cass Freight Index was one of the first freight flow indicators to turn positive (in October 2016) **and confirm our prediction of a recovery in the U.S. economy.** As we try to navigate the ebb and flow of the economy, we don't pretend to have any 'secret sauce' or incredibly complex models that have exhaustively analyzed every data point available. Instead, we place our trust in the simple notion that the movement of tangible goods is the heartbeat of the economy, and that tracking the volume and velocity of those goods has proven to be one of the most reliable methods of predicting change because of the adequate amount of forewarning that exists. We will discuss all of this in greater detail later in this report.

Beyond our concern that the Cass Freight Shipments Index is negative on a YoY basis for the fifth month in a row,

- We are concerned about the severe declines in international airfreight volumes (especially in Asia) and the recent swoon in railroad volumes in auto and building materials;
- We see the weakness in spot market pricing for transportation services, especially in trucking, as consistent with and a confirmation of the negative trend in the Cass Shipments Index;
- As volumes of chemical shipments have lost momentum in recent weeks, despite the rally in the price of WTI crude, our concerns of the global slowdown spreading to the U.S., and the trade dispute reaching a 'point of no return' from an economic perspective, grow.

Bottom line, the data in coming weeks will indicate whether this is merely a pause in the rate of economic expansion, a retrenchment, or the beginning of an economic contraction. Evidence is accumulating that this is more than 'just a pause.' If a contraction occurs, then the Cass Shipments Index will have been one of the first early indicators once again.



April 2019 was a month of continued improvement throughout most of the U.S. financial markets and mixed signals in the global financial markets. After equity, bond, and commodity valuations fell in the fall of 2018 — especially in December of last year — by a magnitude considered to be "correction levels" by most, they staged recoveries that were equally impressive in January, February, March, and April:

- The Dow Jones fell from 25,826 on December 3, 2018 to as low as 21,792 on December 24th before rallying throughout the first four months of 2019, getting back above 26,000 (closing at 26,430 at the end of April);
- The 10-year Treasury yield, after peaking at 3.24% on November 8, 2018, has steadily fallen (2.47% at this writing). A more dovish Fed and lower economic growth are the headlines, but we maintain 'technology has killed inflation';
- WTI Crude Oil fell from >$75 a barrel on October 2, 2018 to as low as $42.53 on December 25th before rallying throughout the first four months of 2019 (>$61 now). WTI is at a price that proposes the world economy is stronger than

airfreight volumes suggest, and that should stimulate more U.S. fracking activity in the coming months.

What stayed the same? Large multi-national companies lowered guidance and blamed slowing rates of activity on Europe and Asia. Trade talks with China continued without resolution, as incrementally more negative indications that the Chinese economy is starting to suffer are coming out at an ever-increasing pace.

What changed? The consensus outlook by prognosticators went from "there is no way 2019 growth can surpass 2018" to "perhaps not at the scorching pace of 2018, but growth at an above-average pace is still attainable in 2019."

However, we would be negligent if we did not continue to acknowledge the storm clouds on the economic horizon (one of which has gotten worse, one which has gotten better, and one of which has appeared since our last report) and elaborate on our fourth "yes, but…" item:

1. **The tariffs — and threats of even higher tariffs — with China**, the world's second largest economy (even though the latest headlines and tweets keep suggesting there will be a resolution). Tariffs have throttled export volumes in some areas of the U.S. economy, most notably agriculture exports and other select raw materials. We maintain the view that there will be a resolution; that there will be a trade deal because both China and the U.S. have to reach one. But the recent Asian airfreight volumes suggest a growing risk that one or more of the Asian economies (China, South Korea, Singapore) is already sliding into recession. ***Risk has gotten worse.***

2. **The decline in WTI crude in December to as low as $42.50 a barrel**. This did not fall below the marginal cost of production for fracked crude in almost all areas of the U.S., but it made it less profitable and significantly lowered the incentive to drill ever more holes, effectively slowing the rate of growth in the industrial economy. Crude's ongoing rally (WTI above $61 as we write this) gives us reprieve. Continued strength in the price of crude makes us more confident in our positive outlook for the U.S. industrial economy and less worried about global demand. ***Risk has gotten so much better that it has arguably become a positive.***

3. **Consistent with disappointing housing starts** (down -10.6% in February and -13.0% in March) **and lackluster auto sales** (down -4.5% in April and -2.2% YTD), **spot pricing in transportation has declined dramatically.** Especially in trucking, spot pricing has reached levels below contract that will drive weakness in contract pricing and eliminate, or at least significantly reduce, all

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capital investment other than maintenance cap ex. ***This puts further downward pressure on growth in coming periods.***

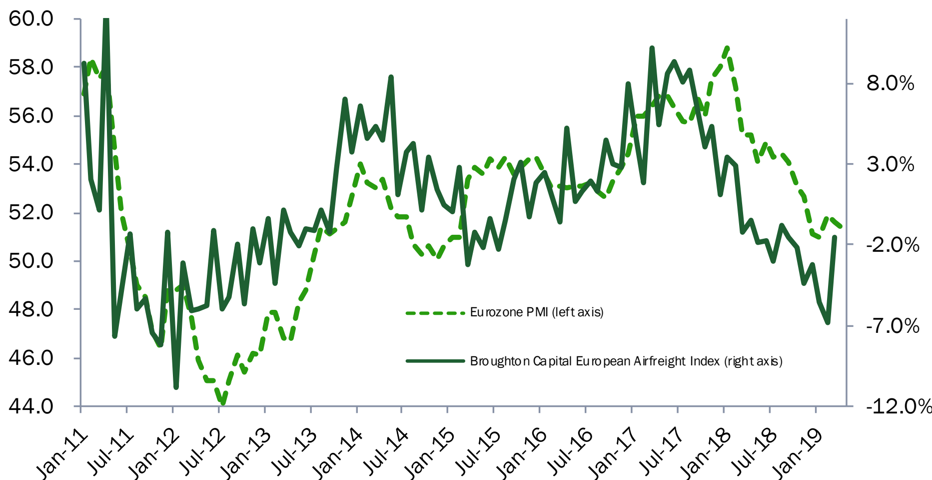
4. Yes, but…

   a. **The initial estimate from Bureau of Economic Analysis of the 1Q '19 U.S. GDP was an increase of 3.2%,** which seems much stronger than the Cass Shipments Index or underlying freight volumes and would suggest that our concerns about the economy might be too pessimistic.

   b. **"Too pessimistic" until we dissect what drove the 3.2%.** Increases in inventory contributed 0.65 percentage points, while more exports (0.45) and fewer imports (0.58) contributed 1.03 percentage points. ***Not including these adjustments*** (which we view as antiquated parts of the calculation that may have been appropriate 80 years ago when our method of calculating GDP was developed, but are no longer relevant in our modern economy), ***GDP increased by a mere 1.5%.***

Recent airfreight volumes in Europe suggest that the region's economy has cooled. Airfreight volumes in Asia suggest that the region is on the verge of, or is already entering, a recession. As we've highlighted before, <u>when trade tariffs slow the rate of growth for our global trading partners, it poses a real threat to the U.S. rate of economic growth.</u>

European Airfreight vs. EuroZone PMI



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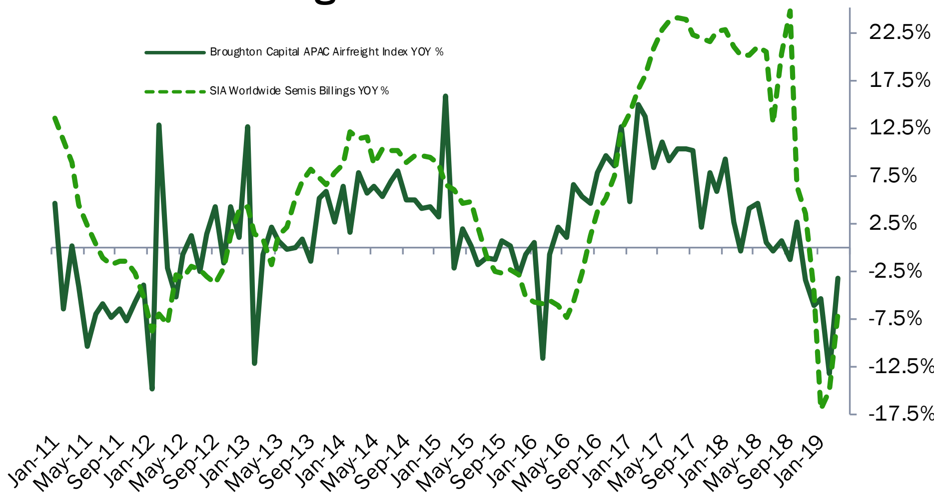
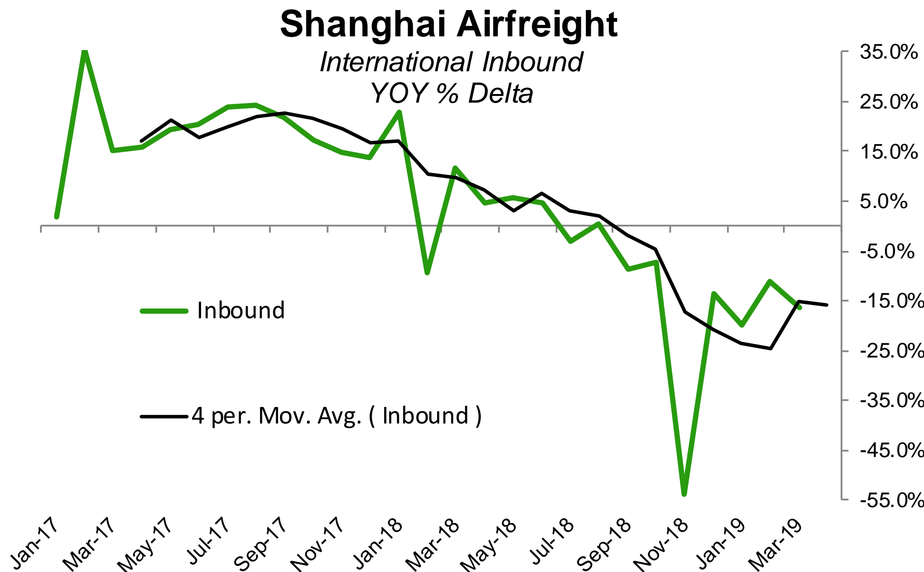
European airfreight volumes were negative since March 2018, but only by a small single-digit margins (-1% to -3%), until November 2018. Unfortunately, since then, volumes have started to further deteriorate. Our European Airfreight Index was down -6.8% in February and -1.5% in March. Although this is concerning, it's the Asian data that has become the most alarming.

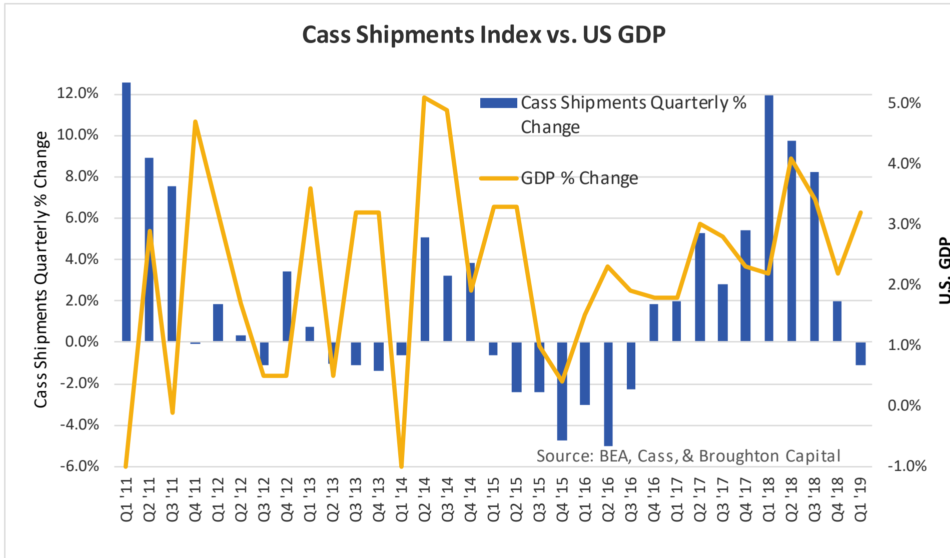


Asian airfreight volumes were essentially flat from June to October 2018, but have since deteriorated at an accelerating pace (November -3.5%, December -6.1%, January – 5.4%, February -13.3%, March -3.3%). If the overall volume wasn't distressing enough, the volumes of the three largest airports (Hong Kong, Shanghai, and Incheon) are experiencing the highest rates of contraction. Even more alarming, the inbound volumes for Shanghai have plummeted. This concerns us since it is the inbound shipment of high value/low density parts and pieces that are assembled into the high-value tech devices that are shipped to the rest of the world. Hence, in markets such as Shanghai, the inbound volumes predict the outbound volumes and the strength of the high-tech manufacturing economy.



While we acknowledge the need to review the terms of trade with our global partners on an ongoing basis, we also know our economic history. The data underlying economic history is clear: the more unrestricted and robust global trade is, the more prosperous the global population becomes. Open markets of free trade are the greatest method to efficiently allocate resources and ensure that the best quality goods made by the most efficient producers are available to everyone. Unrestricted global trade lifts hundreds of millions, even billions, of the world's population out of poverty. 'Protectionism,' like so many government regulations and programs, frequently produces results that are the exact opposite of the intended outcome.

Whether it is a result of contagion or trade disputes, there is growing evidence from freight flows that the economy is materially slowing. The freight markets, or more accurately goods flow, have a well-earned reputation for predictive value without the anchoring biases that are found in many models which attempt to predict the broader economy. As is our custom, we will look at the specific freight flows that are signaling continued growth in specific segments of the economy. Each of these data sets supports our assertion that the Cass Shipments Index is indicative of economic retrenchment bordering on 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. ***Bottom line: the volume of freight in multiple modes is materially slowing and suggests an increasingly bearish economic outlook for the U.S. domestic economy.***



At first glance the GDP for the 1st quarter seems very inconsistent with overall freight volumes. Using the Cass Shipments Index as a predictive proxy, we did not expect the BEA to report 3.2% as its initial estimate. As we have already explained, dissecting the estimate explains much of the disparity, but we won't be surprised if the second estimate and final report include downward revisions.

Although we also subdivide the economy via multiple other data feeds that represent smaller segments of freight flows, **the Cass Freight Shipments and Expenditures Indexes are two of the strongest proxies for what is happening in the overall U.S. freight markets, and as a result they are strong predictive indicators for the U.S. economy.** *We understand that there are other broad proxies for freight flows, but they are either less frequent (only once a quarter) or less timely (reported >4 weeks after the month ended).*

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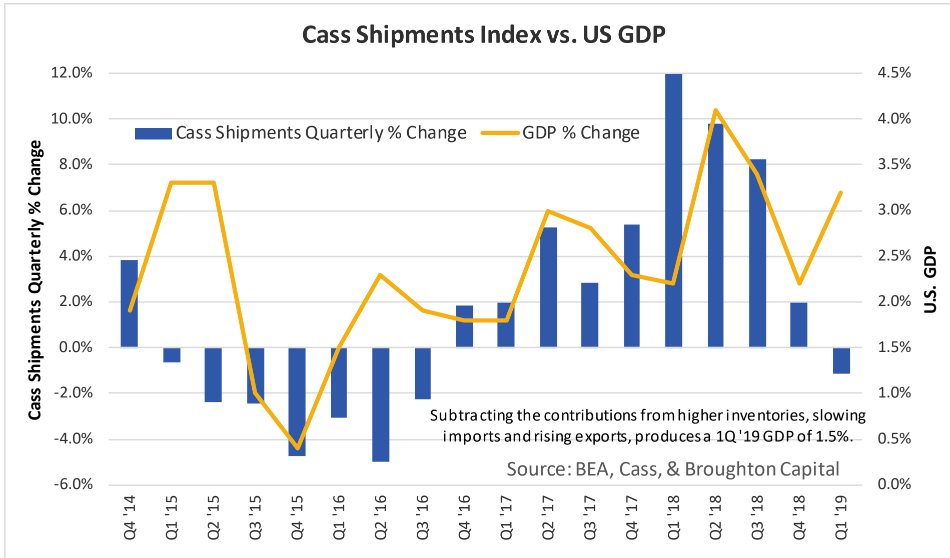

Other reasons the reported economic results in coming months are poised to be lower in 2019 (still expanding, but at a percentage rate less than in early 2018):

- lapping increasingly difficult comparisons;
- infrastructure in many industries showing signs of being at or near full capacity;
- infrastructure in most modes of transportation at or near full capacity;
- unemployment low enough to make growing the active workforce incredibly challenging.

Hence, further large percentage increases in the short term are increasingly difficult without significant investments in equipment and technology. Setting aside all the intricacies about the limitations on the rate of growth that's possible (on top of already strong growth), the Cass Shipments Index has turned negative and is now signaling economic stagnation with the potential for contraction.

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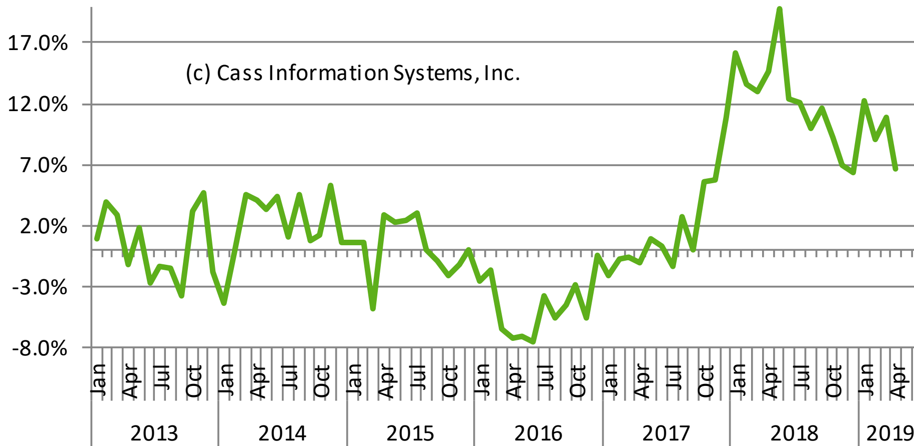
Transportation Continues to be a Leading Indicator

Shipments first turned positive 31 months ago (October 2016), while expenditures turned positive 28 months ago, both providing some of the first indications of the robust acceleration in the U.S. economy that was coming. Despite shipments contracting again this month for the fifth month in a row, the 2-year stacked rate of growth remains at a bullish 6.6%, albeit increasingly less bullish as the current year continues to be negative, but it is reflective of how much economic growth occurred in 2017 and 2018.



Viewing the percentage change on a two-year basis loses the predictive value of the index, but provides perspective on how strong the recent expansion has been. With this context, the small rate of the November 2018 YoY percentage increase and the rate of the recent (April, March, February, January 2019, December 2018) YoY percentage decreases seem less concerning. Alternatively, this highlights how severe the 2015-2016 industrial slowdown actually was.

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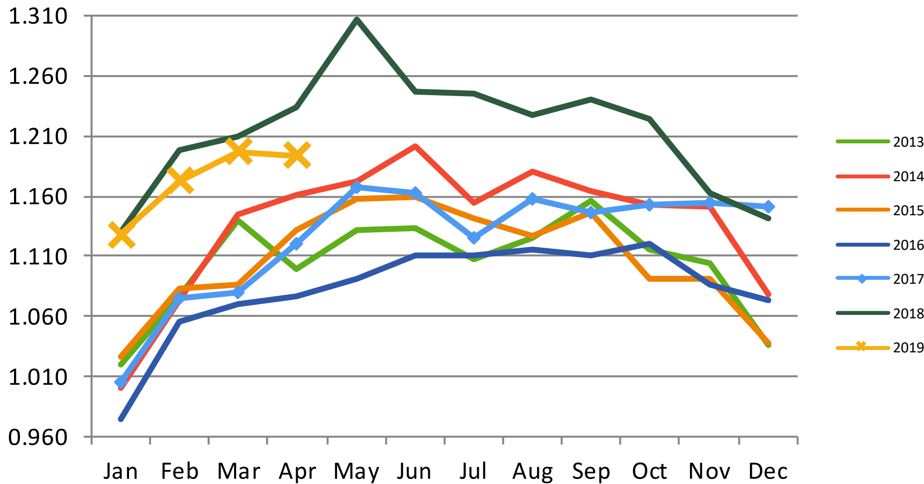

2018 was an extraordinarily strong year for transportation and the economy. Every month from March to October exceeded the highest point in 2014 (a very strong year), while February was roughly equal to the peak month in 2014 (June 2014 – 1.201 vs February 2018 – 1.198), which is astonishing given the typical seasonality of freight (February is usually the weakest month of the year and June is usually the strongest month of the year). Point being, 2014 was the strongest freight year until 2018, and in 2018 the weakest freight month was roughly equal to the peak month of the previous peak year.

Understanding the Drivers of Shipment Volume Demand

As we have regularly explained, overall freight volumes are one of the most reliable predictors of the overall economy, and the Cass Shipments Index is one of the most dependable measurements of overall freight volumes in the U.S. To better understand the segments from which this freight volume is derived, **we believe that there is value in separating the economy into three parts: industrial, consumer, and technology.**

We also see value in pointing out that there is a value to density spectrum of these goods. On one end, the Industrial goods flow has the most tonnage but the least value per ton (coal, grain, lumber, ore, steel); while on the other end, the technology goods flow has the least tonnage but the most value per ton (microprocessors, smartphones); with the consumer goods flow in the middle of this spectrum from both a tonnage and value per ton perspective.

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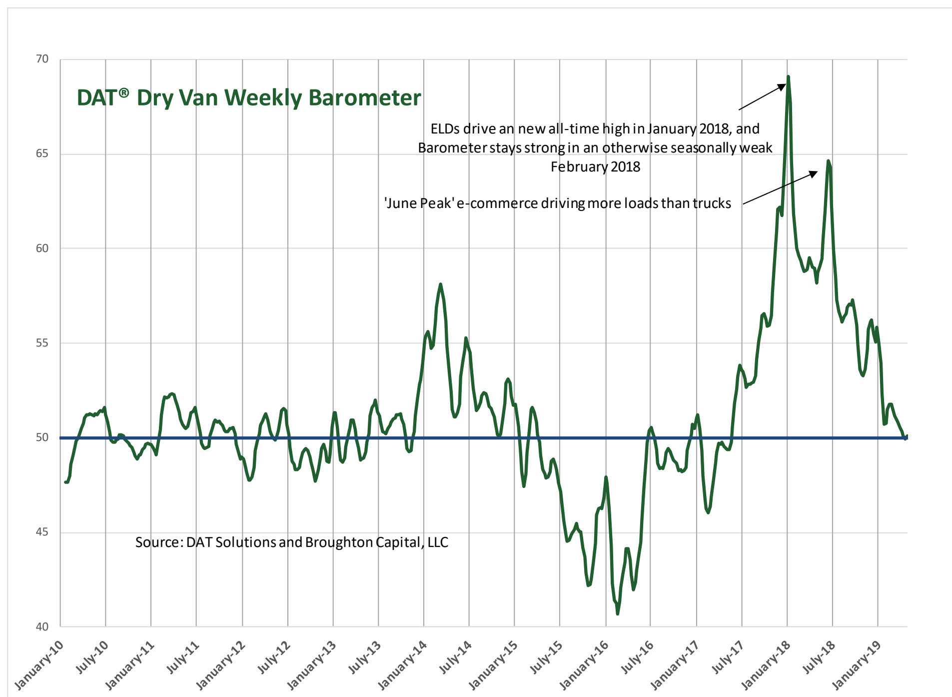
The Consumer Economy - We should note that dry van trucking volume has historically been a fairly reliable predictor of retail sales (container volume serves a similar role). When studied using the DAT Dry Van Barometer, current demand is at levels in line with capacity, which suggests that the consumer economy is still healthy and that retail sales are continuing to grow, just not at a rate exceeding the rate at which capacity has expanded.



***Key Takeaway** - the DAT Dry Van Barometer is a real-time indication of demand and capacity. We see the current level as an indication that the consumer economy is growing, just not a rate exceeding the growth in capacity.*

The Industrial Economy - With the surge in the price of WTI crude back above $45 a barrel in October of 2016, the industrial economy's rate of deceleration first eased and then began a steady improvement led by the fracking of DUCs (drilled uncompleted wells), first in the fields with a lower marginal production cost (i.e., Permian and Eagle Ford) and now with oil back above $50 a barrel (WTI is above $64 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**

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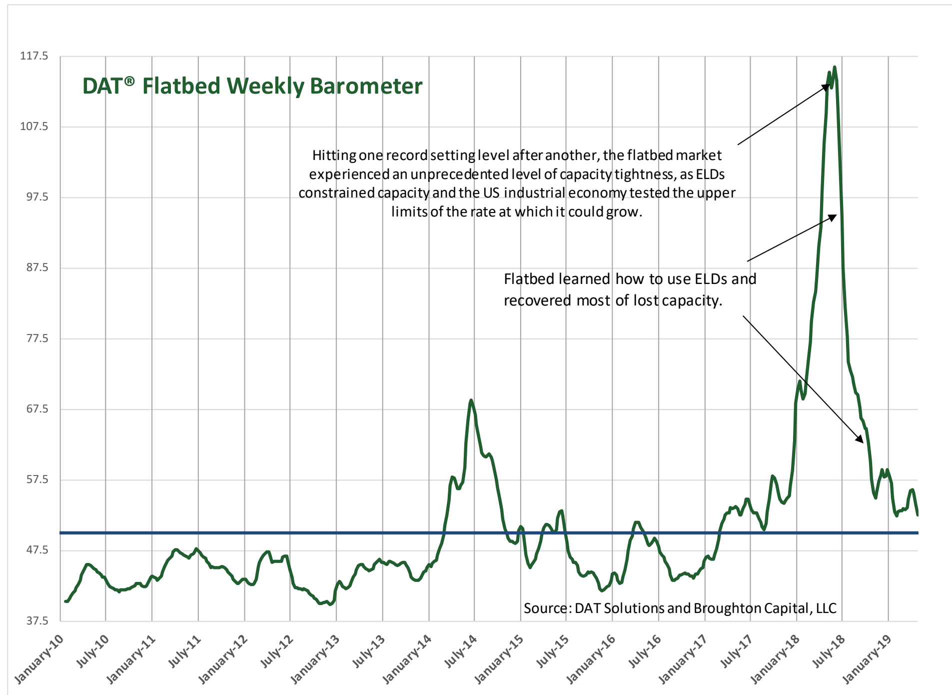
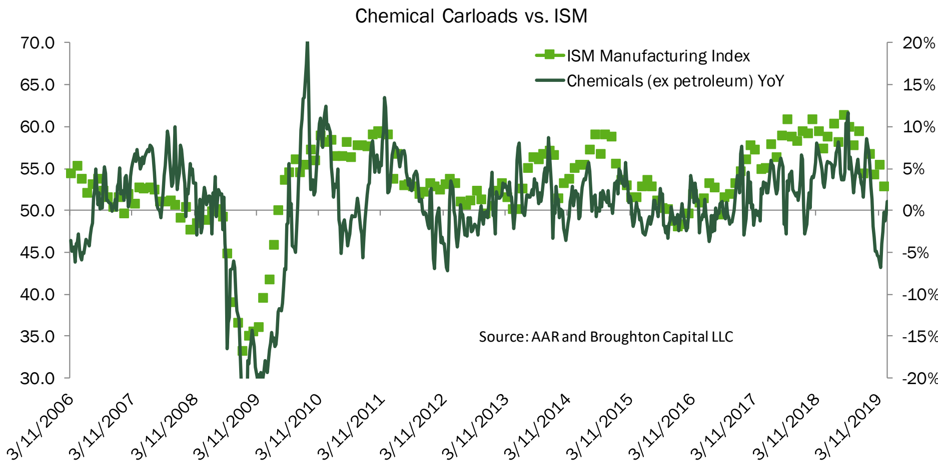
cost of production in the major U.S. fracking fields, we expect to see continued industrial economic growth.

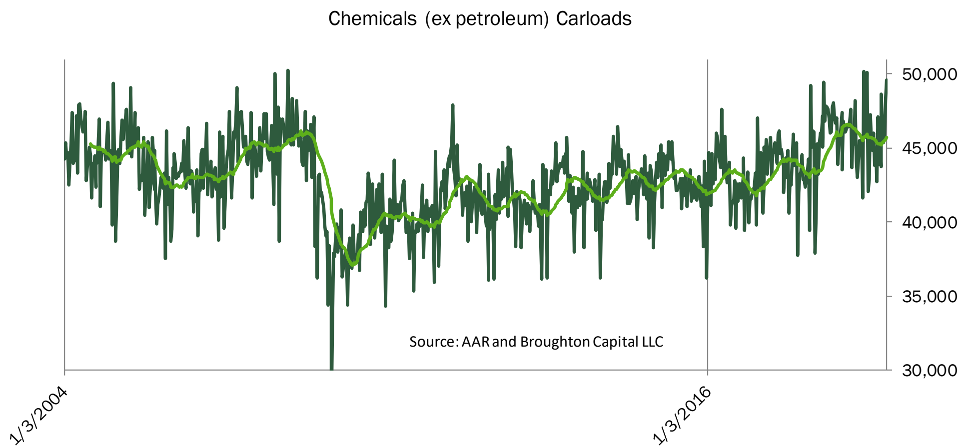


The DAT Flatbed Barometer indicating that demand exceeds capacity is a positive sign that the U.S. industrial economy is still healthy and growing, albeit at a much more modest pace than in 2018. However, recent rail volumes suggest a more bearish outlook.

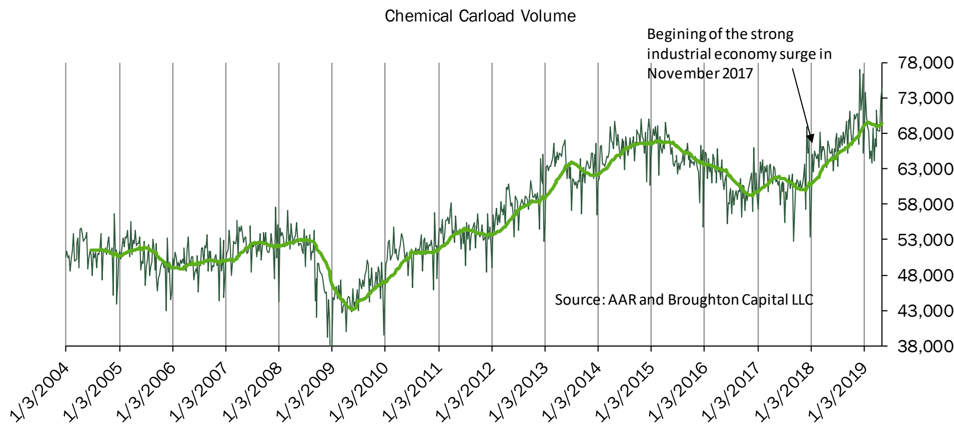
Recent data from the rail industry raised concern about the Industrial economy. We have asserted for years that one of the best predictive indicators of U.S. domestic industrial activity is the chemical carload volume moved via railroad. Our assertion is simple: it is almost impossible to manufacture,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



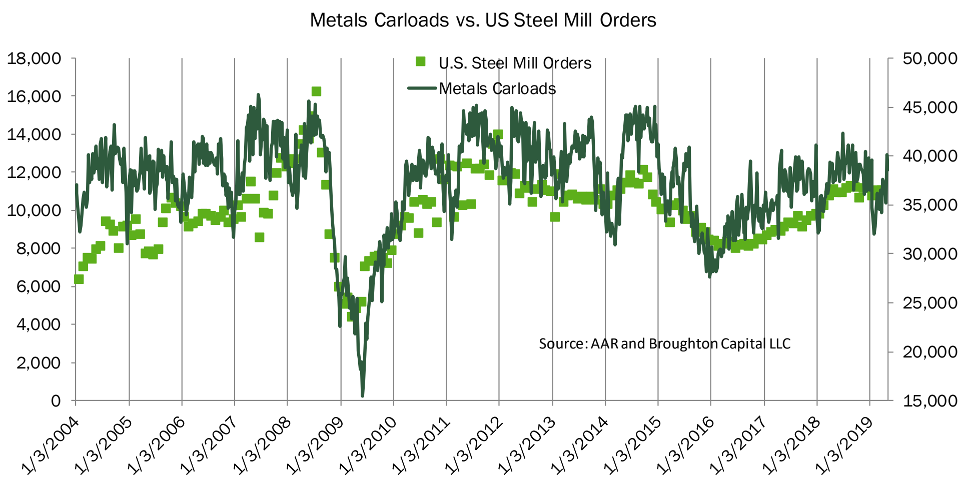
We should note that, after reaching strong volume increases (up 5.0% to 8.5% YoY in January and early February), the last half of February through early April dropped to levels >5.0% below on a YoY basis, severe enough and for a long-enough period of time to add merit to a more bearish forecast. Whether it was as a result of, or the consequences of, the absence of trade agreements and ongoing trade talks (which we assert are the primary cause for the slowdowns in international airfreight), it suggests that the global slowdown is spreading to the U.S. industrial economy. We do know that chemical volume shipped by railroads has historically been one of the earliest and most reliable indicators on this matter.



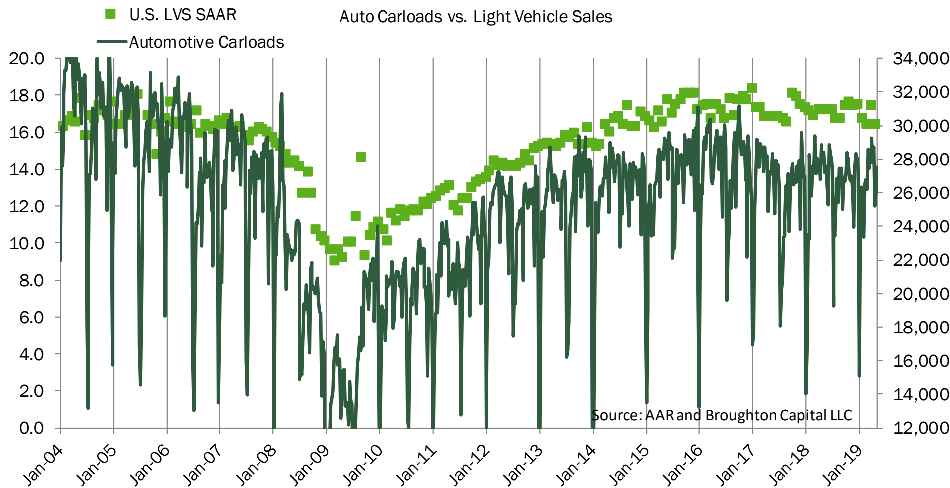
For those who might argue that the strength in chemicals is only a by-product of the growth in crude by rail, we have stripped out the petroleum carloads from the chemical carload volume.



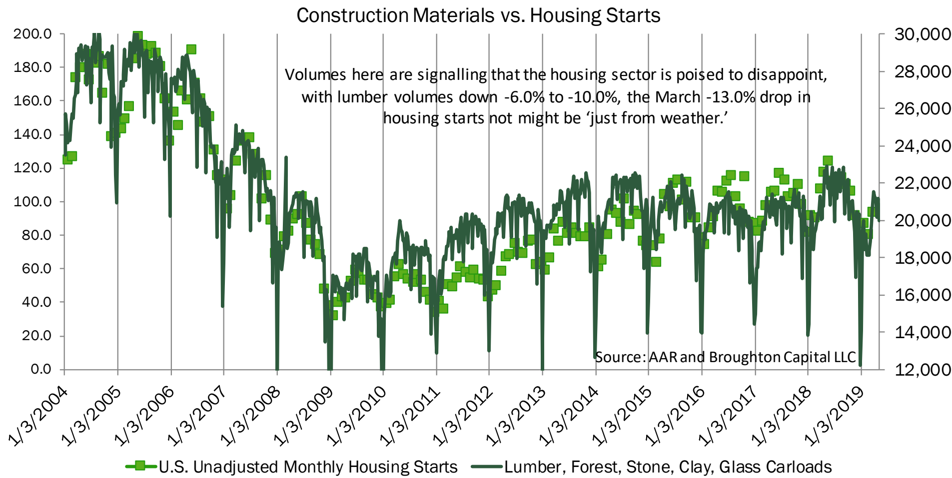
When viewed on a nominal basis, the chemical carload volume looked bearish for U.S. industrial production in late February through early April, but has begun to recover in recent weeks. The 3-week moving average YoY % change of chemical shipments, including petroleum, hitting 9.7% last week, suggests that that Industrial economy might be recovering from the recent 'soft patch.'



Again, although it's too early to definitively tell, it appears that until recently, the steel industry was accelerating in the U.S. in the wake of the trade talks.



Dissimilar to steel, the auto industry is not immune to the trade talks and is adding merit to taking a more bearish outlook for both the industrial economy and consumer in the U.S., at least for the short-term. Without material increases in volume in coming weeks, the auto industry appears to be a headwind to growth in 2019. No surprise after looking at the chart above, Auto sales were down -4.5% in April and are down -2.2% through the first four months of the year.



Similar to auto sales, housing starts drive activity in both the industrial and consumer economies. Unlike the recent surge in chemical shipments, the volume of materials to build houses moved via rail suggest that a more bearish outlook for both the industrial and consumer economies is warranted.

Enough About Volume and Demand, What About Pricing?

The Cass Freight Expenditures Index is signalling continued, overall pricing power for those in the marketplace who move freight. Although demand is no longer exceeding capacity in most modes of transportation, realized pricing power is still being reported at the contract level in some modes. Unfortunately, weakness in spot market pricing, especially in trucking, suggests that contract pricing is under increasing amounts of pressure and is at risk of going negative by the end of the year.

With the Cass Freight Expenditures Index up 6.2% in April, and the two-year stacked increase at 19.8%, we understand why there are those who are still concerned about inflation. We continue to point out four factors:

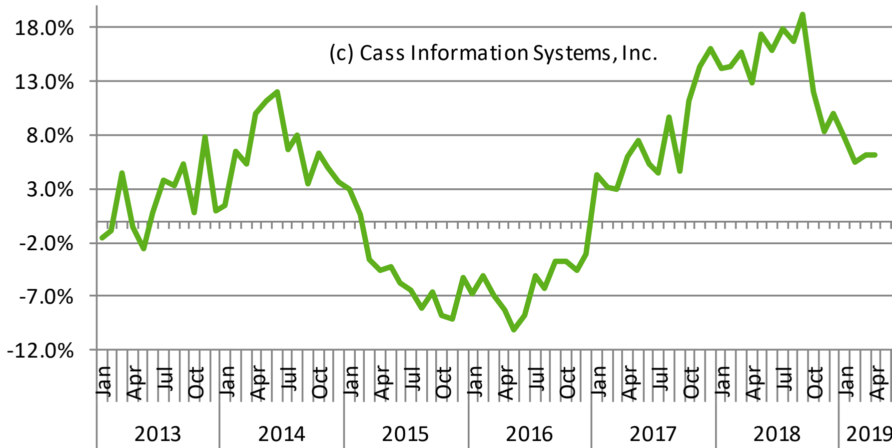
1. Almost all modes of transportation have used their pricing power to create capacity, which will first dampen and eventually kill pricing power;

2. Spot pricing (not including fuel surcharge) in all three modes of truckload freight (dry van, reefer, and flatbed) has already been falling for ten months. Spot pricing, using dry van as a proxy, has fallen 24.7% from its peak in June 2018 and is now 30.9% below contract pricing (which we see as unsustainable);

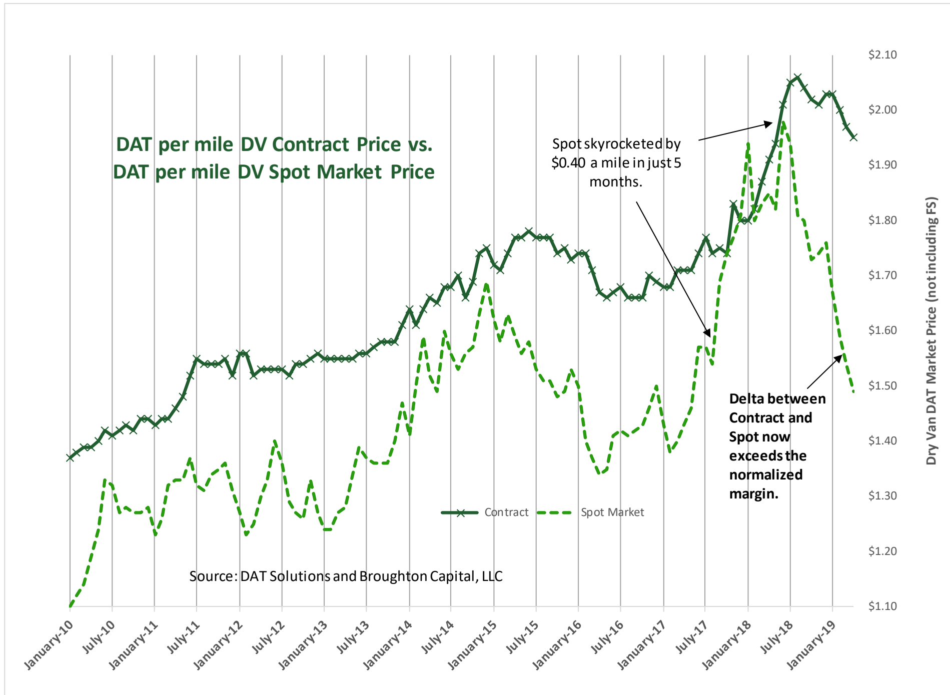
3. The cost of fuel (and resulting fuel surcharge) is included in the Cass Expenditures Index, and since the cost of diesel was roughly flat (only up 0.9%) in April, we don't see it currently as the driving factor;

4. Whether driven by capacity addition/creation or lower fuel surcharges (or a combination of both, which is our best guess) the Expenditures Index has sequentially declined: the April 2019 Index is down 2.7% from its peak in September 2018.

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, but especially in transportation. In fact, we are continuing to see more evidence 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 and in some cases actually improving utilization to levels above those achieved before ELD adoption. Many of the truckers who were the most adversely affected 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, is learning to adapt.



With all the strength in demand, it follows that the Cass Freight Expenditures Index also posted strong percentage increases throughout 2017 that continued throughout 2018 and into 2019. 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. The current comparison is anything but easy. We have commented repeatedly that this was indicative of an economy that is continuing to expand. The April 6.2% increase signals that pricing is still be realized, demand is stable, and shippers are willing to pay up for services to get goods picked up and delivered in modes throughout the transportation industry.



After making several references to the weakness in spot pricing for trucking, we should probably show our readers some of the data and provide some explanation. The current discount of spot to contract pricing, in all modes of truckload (dry van is illustrated above), is large enough for shippers to increase the number of loads that they 'put out into the spot market.' This decreases demand in the contract market and increases demand in the spot market. We expect this marketplace behavior to continue until the spot market price firms up and begins to increase, or the contract price falls enough to materially narrow the gap, probably a degree of both. All of the Cass pricing indexes (Expenditures, Truckload Linehaul, and Intermodal) represent a mixture of both spot and contract pricing, as they are based on freight bills paid. Shippers flex the amount that they use the spot market. Understandably, data suggests that they are currently increasing the amount that they use the spot market.

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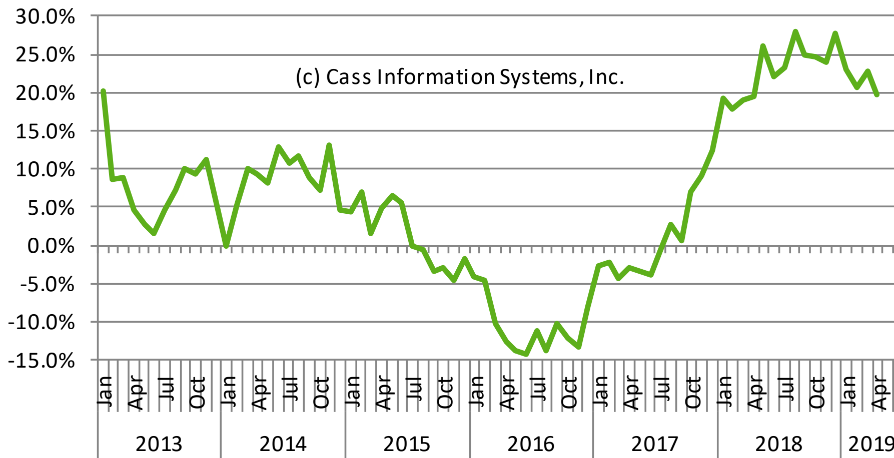
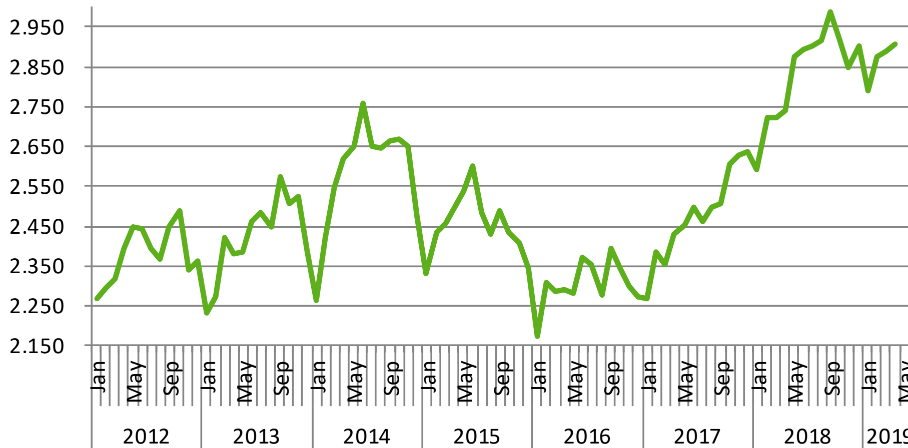


While the rate of the Cass Freight Expenditures Index percentage increase has been declining in recent months, this is in part because the current and recent monthly increases are on top of strong double-digit increases from October 2017 through October 2018. Viewed another way that provides more perspective, the two-year stacked increase (2018 vs. 2016) in expenditures was 24.8% in September, 24.6% in October, 23.9% in November, 27.7% in December, 23.1% in January, 20.6% in February, 22.7% in March, and 19.8% in April.



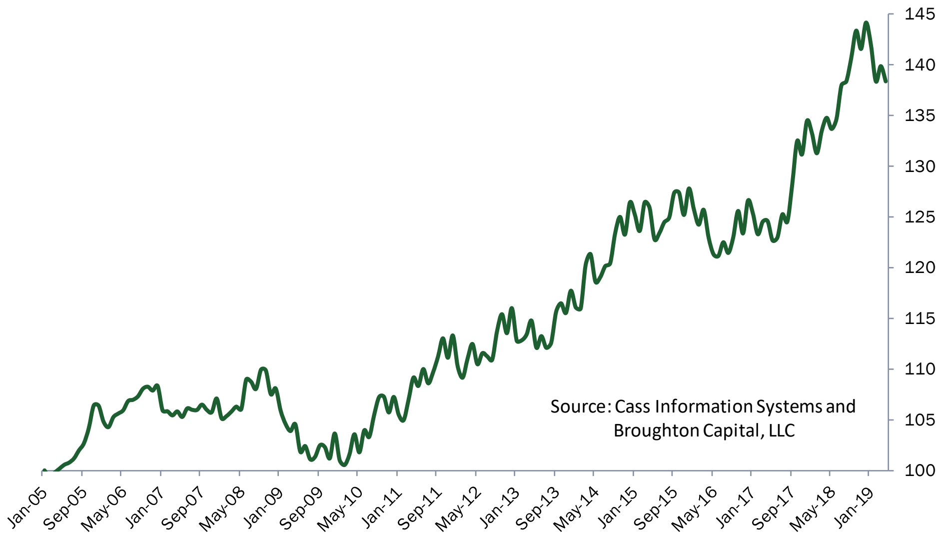
Viewing the Cass Freight Expenditures Index on nominal basis shows how positive the trajectory has been over the last two years. It also illustrates that despite the sequential decline from last year's peak and the current weakness in spot pricing, overall realized pricing continues to be at robust levels. On a nominal basis, the Index first exceeded the all-time high established back in June 2014 and has then stayed near record levels. To put the strength of the underlying pricing in perspective, we should remind readers that the price of oil was at or above $100 a barrel throughout most of 2014, vs. the price today of >$61 a barrel.

Putting it all in Perspective – the Background Story

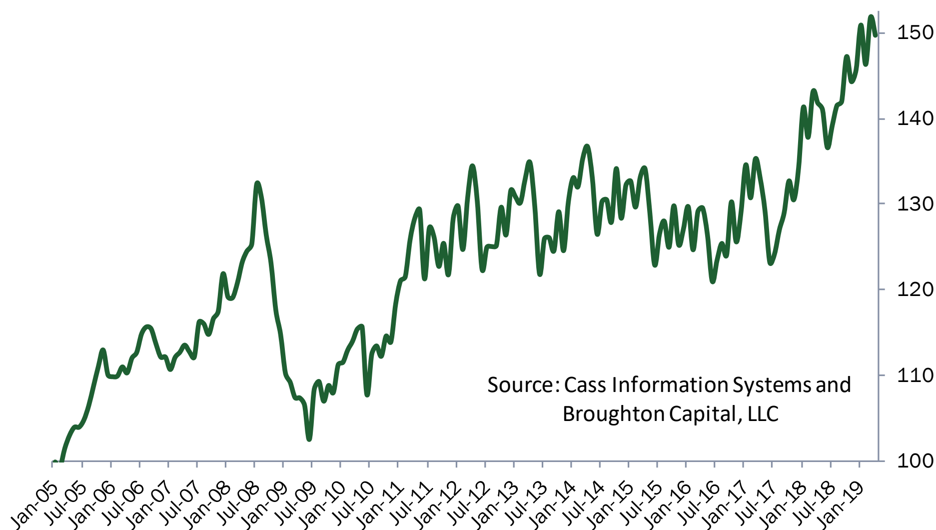
Expenditures (or the total amount spent on freight) turned positive for the first time in 23 months in January 2017, albeit against an easy comparison. Not since 2011—when the economy was still climbing out of the recession—had this index been so low. Our Expenditures Index in January 2016 was the worst in five years, as demand had weakened and crude oil had fallen below $30 a barrel. Since fuel surcharges are included in the Expenditures Index, the price of diesel fuel was a positive bias in 2017 (fuel was up as much as 75% on a YoY basis, on average up 15.0%) and continued to be in the 2018 data (on average up 19.9%), albeit to an ever-lesser degree by the end of the year.

After being a positive bias throughout 2017 and 2018, diesel (at $3.171 a gallon on a national average basis, up a mere 0.4% YoY as we write this) is not yet poised to be

much of a bias (positive or negative) in coming months of 2019. Despite this, we are seeing continued realized pricing power for truckers and intermodal shippers.



As an example, the proprietary Cass Truckload Linehaul Index (which measures linehaul rates and does not include fuel) rose 2.7% on a YoY basis in the month of April to 138.4 (just shy of the all-time record high, set in December 2018 at 144.2) and is now 10.9% higher than it was two years ago.



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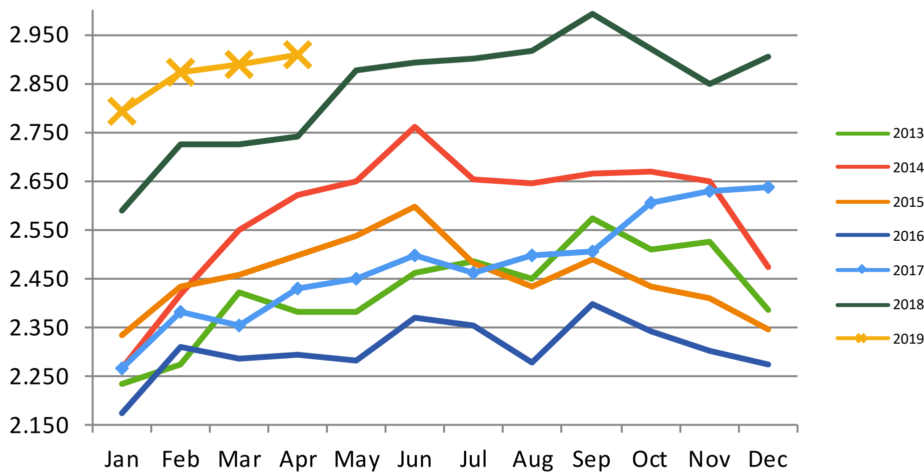
The proprietary Cass Intermodal Price Index (which does include fuel), increased 5.6% in April to 149.8, after establishing a new all-time record high of 151.9 on a nominal basis in March, and is now 12.2% higher than it was two years ago.

(See those reports here for more details on the data and the underlying trends.)

Like the Cass Freight Shipments Index, the Cass Freight Expenditures Index, when viewed on a nominal YoY stacked basis, highlights that:

- the monthly Expenditures Index exceeded all previous levels for each month respectively throughout 2018;
- since May 2018, it has even exceeded all previous levels in any month of any year;
- January, February and March of 2019 are not only well above January, February and March of 2018, but are above the peak of 2014. **Since oil was markedly higher in 2013 and 2014 (and hence included a much larger fuel surcharge), this data is reflective of stronger core pricing**.



We'd remind readers of two fundamental rules for marketplaces: volume leads pricing, and the long-term value of a commodity is the marginal cost of producing it.

- 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. Even in markets as basic as the weather, the number of hours of

sunshine (sunrise to sunset) starts to decline long before the temperature starts to fall. Volume leads pricing.

- Especially to the extent that pricing materially exceeds the marginal cost of creating capacity, market participants will invest heavily in the exact activities which kill pricing power in commodity markets (i.e. expansion of capacity with the belief that the current pricing power will endure for an extended period of time). Transportation may not be a pure commodity marketplace, and we appreciate that there are segments where customers are more motivated by the speed and reliability of the service than the price, but overall, transportation is a commodity-like industry. Significant increases in price are used to attract new workers (drivers, pilots, etc.), buy newer, more efficient equipment (with larger capacity when available), and purchase ever more sophisticated technology to increase asset utilization. Pricing power will continue until capacity is expanded enough to meet demand. As capacity eventually grows faster than demand, because participants in commodity markets (especially if the participants are highly fragmented) always overshoot, pricing will fall. Pricing continues to fall until it is below the cost of adding incremental capacity, at which point the incentive to add any incremental capacity is gone, and pricing stabilizes as long as demand holds steady. If pricing continues to fall dramatically - because too much capacity was created or because demand has contracted - capacity will be destroyed or at least idled until pricing stabilizes. This process may create significant oscillations in pricing above and below the marginal cost of creating capacity in the short term, but those increases and decreases in pricing will be around the marginal cost of production.

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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.

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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. In the fall of 2015, he began predicting that the decline in the price of oil would lead to a contraction in the U.S. industrial economy, and in the third quarter of 2016 predicted that the U.S. industrial and consumer economy were about to be dramatically better.

He is currently expressing growing concern about the deceleration in the European and Asian freight flows, and sees a growing risk of recession in many of the European and Asian countries. He believes the U.S. economy remains in a growth mode, but is carefully watching for signs of contagion from the global slowdown, and believes that it is imperative that agreements are reached with our major trading partners as quickly as is prudently possible.

But fear not, he believes that the potential for growth in the U.S. economy in coming years, especially the industrial economy and the tech economy, is dramatically underestimated. He predicts the U.S. tech economy will continue to expand and dominate the global tech economy; and the U.S. tech economy is already beginning to drive a renaissance of productivity and precision in the U.S. industrial economy that will ultimately restore it to global dominance.

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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