Q4 retail spending and e-commerce trends

Overview

This year, e-commerce has continued taking share of overall holiday retail spending, growing more than three times faster than retail as a sector. Intensifying e-commerce activity has profound implications for retailers, of course: brick-and-mortar chains that cannot execute omnichannel strategies, including major department stores, are being left behind. This Cyber Monday, for instance, digital sales executed through smartphones grew 46% year-over-year, accounting for 33% of all Cyber Monday sales, and reached a new record of \$3 billion.

The transportation and logistics companies that position and replenish inventory and fulfill orders are also impacted by accelerating e-commerce sales. In this edition of Special Topics, we consider the effects of e-commerce on trucking volumes, capacity, average lengths of haul, warehouse employment and warehouse rents in major and fast-growing markets throughout the United States.

This year has seen a sea change in warehousing employment: plateauing growth, although the ultimate cause is not clear. We heard anecdotes from warehousing 3PLs at the recent Armstrong & Associates conference in Chicago suggesting that warehousing robotics have come down in cost, but even more importantly, financing options for the equipment have become more flexible. Now warehouse operators can lease robots for just a few months to provide flex labor as seasonality demands it, something that was not true just a few years ago.

Projected peak season package volumes (SJ Consulting) and year-over-year growth

Amazon	275M (+100%)
FedEx	510M (+3%)
UPS	840M (+5%)

Monthly sales for retail in \$M

Furniture	9,844 (.95%)
Food & Beverage Stores	65,582 (3.21%)
Electronics	7,621 (-3.35%)
Clothing Stores	21,113 (-2.66%)
Sporting Goods	5,918 (0.25%)

Warehouse rents in major markets / sq. ft.

Chicago	\$4.78
Los Angeles	\$7.46
Atlanta	\$3.82
Seattle	\$7.37
Miami	\$6.75
Philadelphia	\$4.60

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Holiday retail spending's impact on transportation



(Map: FreightWaves SONAR. Out-of-store sales / Department store sales)

Retail sales have been on a steady incline since the Great Recession. But over the past few months, retail sales have been flat across all sectors. Consumer spending continues to move away from department stores to more specialized stores. The chart above shows electronics and home-order spending growth has continued to accelerate, while department store spending has not only stopped growing but has actually started losing market share to other channels.

As the United States slipped into what may become an industrial recession, consumer-driven retail spending has propped up the goods economy, even allowing national contract truckload volumes to grow positively on a year-over-year basis (OTVIY.USA) from the end of July through mid-October.



(Chart: FreightWaves SONAR)

September was the first month that retail sales have gone negative since February and volumes have steadily declined since that time, despite a bump in spending in October. Still, severe winter weather and directionally constrained truck dispatching — getting drivers home for the holidays

— has removed capacity from trucking markets and pushed outbound tender rejection rates above 7% on Nov. 25 for the first time since the deteriorating freight market of early March 2019. While tender rejections have pulled back from their Thanksgiving peak, we anticipate another tightening before the Christmas holiday, especially if e-commerce sales continue to exceed expectations.

Retail vs. e-commerce dynamics



(Chart: FreightWaves SONAR)

With the rise in e-commerce there has also been an explosion in warehousing and storage jobs. Notably, growth in warehousing employment accelerated after 2011, despite the fact that warehousing is probably the most automated link in the supply chain.

Retailers need more warehouses because competition has forced them to constantly shorten transit times. After Amazon introduced free two-day shipping in 2005, more and more companies have adopted this framework. Amazon recently announced they were rolling out one-day shipping to more regions. It is fair to assume that this will put more pressure on retailers and force them to either rent more warehouses or manage their existing warehouses more efficiently.

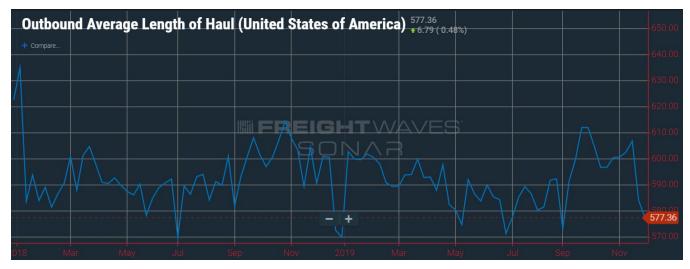
Slowing growth in warehousing employment in the back half of 2018 and 2019 should be understood in a multifactor context: slowing economic growth; more advanced and affordable automated solutions; and tight labor markets.

This year, both Black Friday and Cyber Monday set records in regard to digital sales. Black Friday digital sales totaled \$7.9 billion, while Cyber Monday sales totaled \$9.4 billion. Not only are these the largest amounts ever, they are still growing tremendously fast. Black Friday digital sales were up 14% Y/Y, while Cyber Monday sales were up almost 19% Y/Y.

¹ Klebnikov, Sergei "Cyber Monday 2019 By The Numbers: A Record \$9.4 Billion Haul." *Forbes.* 12/03/19. Koetsier, John "Record Black Friday Sales: 14% Growth To \$7.2B In Digital Revenue." *Forbes.* 11/30/19.

E-commerce implications for transportation

E-commerce's rapidly growing share of overall holiday retail spending has profound implications for transportation networks in the United States. After transcontinental long-haul moves have positioned inventory closer to population centers in the fall months, average length of haul begins dropping. A flurry of short-haul moves associated with distribution center and inventory replenishment pulls average lengths of haul down in October and November, and average length of haul bottoms in December.



(Chart: FreightWaves SONAR)

What fascinates us about charting average lengths of haul over time is that the shape of the curve heading into retail season has changed even in just the past two years. First, note the timing of the "double peak" going into retail season: in 2018, we saw peaks in late September and late October; in 2019 the peaks occurred in late September and mid-November. Second, consider the severity of the drop in average length of haul after the second peak in 2019 compared to the somewhat stable length of haul after the second peak in 2018.

As less-than-truckload and final-mile execution improves, the long-haul replenishment phase extends closer to the holiday (or, put another way, retail supply chains are becoming increasingly "just in time"). E-commerce's growing share of overall holiday retail spending is contributing to a steeper and deeper trough in average lengths of hau, too. In the next few years, we expect the shift from the long-haul replenishment phase to last-mile fulfillment to become starker and take on the characteristic of a modal rotation, especially as last-mile networks build out capacity in expedited vehicles and crowdsourced drivers.



(Map: FreightWaves SONAR)

Above are the five markets with the fastest growing warehouse rents in the United States. Hartford, Connecticut, had the largest quarter-on-quarter gain with a 30.8% change to the upside, followed by Los Angeles and Brooklyn, New York, at 8.6% and 8.4%, respectively. New York City rents (RENTE.JFK), predictably, are the highest. After the first three, Cincinnati and Indianapolis round out the top five, with 1.5% and 1.8% quarter-on-quarter increases in average warehouse rents, but many markets saw rents rise 1% or more from the second quarter to the third quarter.

Some large markets like Ontario, California, and Joliet, Illinois, may become saturated if the economy slows and absorption rates fall; those markets are large, liquid and mature. We expect warehousing to become further segmented, though, as developers and operators diversify their offerings into cold-chain, dedicated e-commerce and multistory facilities. We may see new industrial real estate market dynamics emerge that make average rents less illuminating as facility type, microlocation and robotic equipment become more important differentiators.