Delivering Disruption: The Impact of Online Shopping in the U.S.

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April 10, 2018

Highlights

- The rise of online shopping continues to disrupt traditional retailing. Sales in this space now account for almost 10% of total retail sales.
- This growth has created strong demand for logistics space, and reduced demand for retail space and workers. Productivity in the U.S. retail sector has been boosted significantly above the economy as a whole, which in turn has helped to keep price pressure muted for consumers.
- In response to this disruption, the U.S. commercial real estate sector has managed to adjust supply quite well, and average vacancy rates remain low. Similarly, displaced retail workers are clearly finding work in other sectors as its unemployment rate remains low. A strong economy has no doubt supported this transition.
- There is likely further disruption ahead for the sector, as online shopping is forecast to reach 20% of all retail sales by 2025. With economic growth expected to be quite strong over the next two years, the broader economy is expected to continue to weather the disruption.

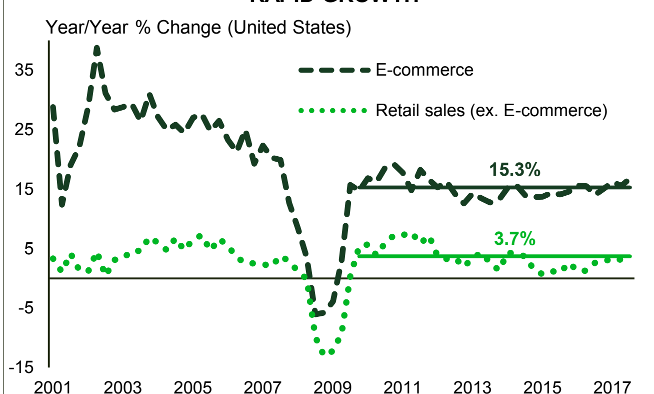
The rapidly-growing e-commerce segment continues to make headlines, whether through its role in the decline of traditional brick and mortar retail, its part in low inflationary pressures over the last few years, or perhaps through the new fortunes that the sector is helping create. The disruption is expected to continue as online retailing captures a greater share of overall retail sales in the years ahead. In this report, we provide answers to some of the most frequently asked questions around e-commerce trends, and examine what the future could look like for the retail sector.

Q: How fast is U.S. e-commerce growing and how widespread is it?

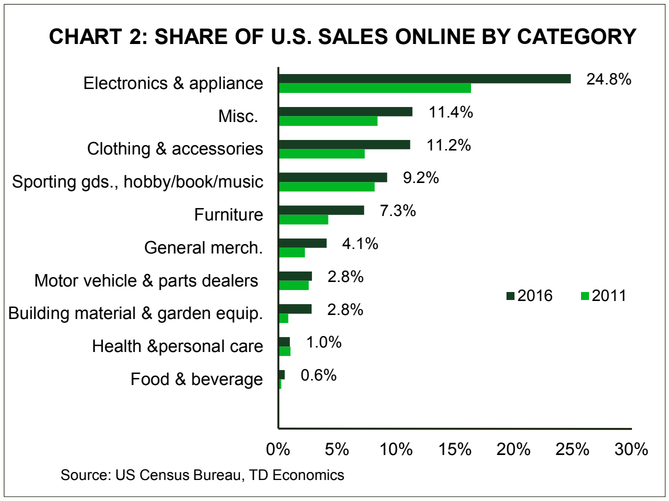
U.S. online retail sales have expanded rapidly over the last two decades. Since the recession, online sales have grown at a fairly steady 15% year/year pace. That is significantly faster than traditional store sales, which have advanced at about ¼ of this speed over the same period (Chart 1).

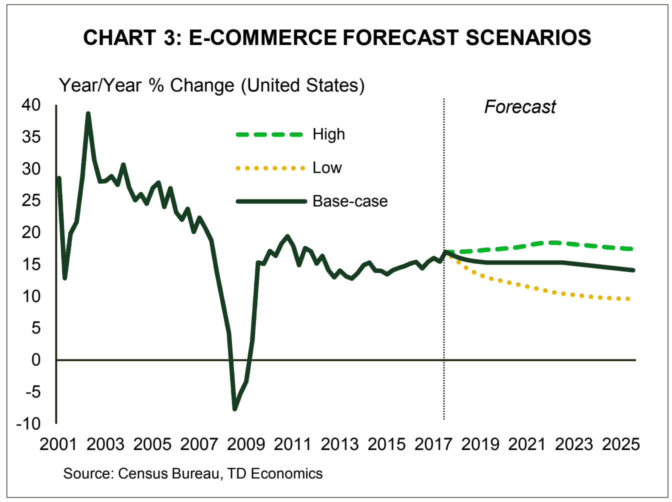
Retail e-commerce sales totaled $453B in 2017, and amounted to roughly 9% of total sales, up from 8% last year. This also marks a near tenfold increase in the share since the turn of the century when e-commerce sales made up around 0.9% of overall sales.

CHART 1: E-COMMERCE HAS SEEN CONSISTENT RAPID GROWTH



Source: Census Bureau, TD Economics





Q: How do online sales differ across retail sectors?

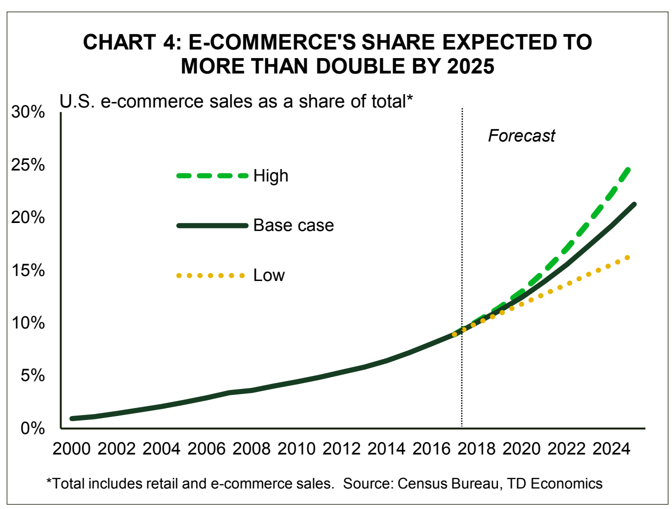
Chart 2 ranks each category of retailing by the share of sales that occurred online in 2016 (the latest year of detailed sector data) versus 2011. Not surprisingly, electronics leads the way, followed by miscellaneous (which includes office supplies, gifts, novelty and souvenirs) and clothing. Meanwhile, food and beverages have a very low share of online sales. Although that is clearly set to change, as the share of online sales nearly doubled in 2016 alone.

Q: What is the outlook for e-commerce sales over the next decade?

U.S. online sales are expected to continue growing at a rapid pace and absorb additional market share. The fact that the growth rate in e-commerce sales over 2010-17 has remained relatively steady despite varying levels of consumer confidence, economic growth and increased smartphone adoption, underscores the dominance of structural over cyclical trends in online spending.

We present three different scenarios for growth in online shopping: high, medium and low. Our base-case scenario (medium) carries forward the current trend, while allowing for a slight deceleration to reflect a gradually maturing industry (Chart 3). Coupled with our projections for overall consumer spending and retail sales for the decade ahead, our base-case scenario suggests that online shopping will account for just over 1/5th of overall sales by 2025 – more than double its current share (Chart 4).

It is also plausible that consistent with the past twenty years, growth in online retailing could slow. Several elements would provide support to such a scenario. For one, looking at the available data in blocks of five years and omitting the distortions that occurred during the recession, we can see that the growth rate slowed considerably, from 27% in the early 2000s, to around 15% over the past five years. This trend may point to a slowdown in the growth of online shopping relative to our base-case. Another factor is stricter enforcement of tax collection on online purchases. Online retailers in the U.S. were typically required to collect taxes only for sales occurring in jurisdictions in which they had a physical presence.[1] Traditional retailers have pointed out/complained that this may have given online retailers an advantage and contributed to their rapid growth. However, states are now pushing for stricter tax collection from online retailers, which would reduce the attractiveness of online shopping at the margin.[2]



Last but not least, since 2000, e-commerce sales have received a significant boost from the increased adoption of the internet, which rose from 52% of total population in 2000 to 89%[3] in 2018, and more recently smartphones, which have grown from 2% of mobile market to over 80%[4] currently. With less upside on smartphone adoption, online sales growth will benefit less from this factor as time goes on. All factors considered, under this lower-growth scenario, online sales grow to 17% of retail sales by 2025.

Conversely, several factors could lead to a temporary re-acceleration in online shopping growth over the next few years. In order to keep up with competition from online retailers, traditional retailers have invested in their e-commerce platforms. As it becomes more seamless for consumers to make purchases from all their favorite stores online, online shopping activity could accelerate. This could be supported by improved economies of scale, greater supply chain efficiencies and potentially lower delivery costs, giving online shopping an even greater edge. At the same time, while smartphone adoption may have limited growth ahead, shopping through mobile devices is likely to intensify further, which could help absorb additional market share from traditional retail. Statistics suggest that mobile commerce sales (m-commerce) in the U.S. have risen much more rapidly than overall online sales, making up over a third of e-commerce sales in 2017 from 16% five years ago.[5] That still leaves plenty of room for growth.

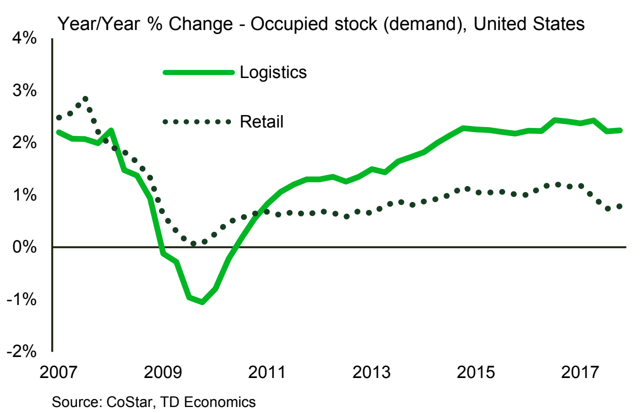
But perhaps the biggest potential for a boost to growth in online shopping would be expansion into categories where online sales penetration remains low – most notably, in food retailing. Food sales at grocery stores (excluding liquor stores), along with sales at health and personal care stores, make up 1/5th of overall retail sales. These two categories have very low rates of online shopping. Increased availability of food shopping online at a competitive price could provide a significant boost over the medium term to the growth of online shopping overall. There is some indication that this trend is already taking off. Walmart and many other large-scale retailers offer online grocery shopping. Online sales at food and beverage retailers grew by 77% in 2016 alone. These factors could together propel the share of online to total retail sales to above a quarter over the next eight years.

Q: Who are some of the winners from the shift to retail e-commerce?

Consumers certainly benefit in various ways from online retailing. For starters there is the time-saving convenience of online shopping. These benefits are difficult to quantify, but the growth in sales indicates consumers are voting their satisfaction with their wallets. The ability to easily compare prices online also heightens competitive pressure on retailers. Consumers benefit by paying more competitive prices than in the past.

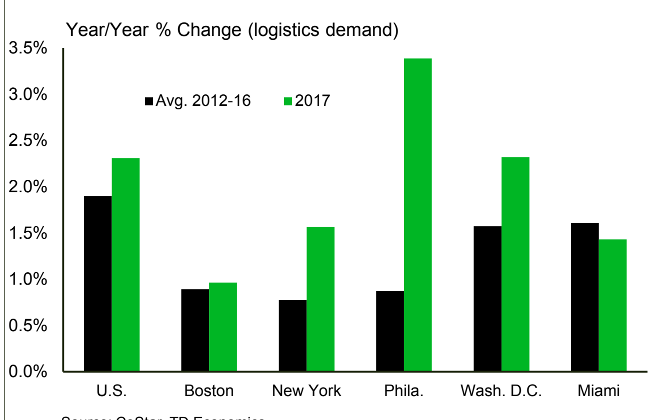
Online retailers and companies involved in the shipping and logistics supply chain have also benefited, with growth in demand for logistics space quite strong in recent years, along with employment (Chart 5). In line with the national trend, demand for logistics space has

CHART 5: U.S. LOGISTICS DEMAND STRONGER THAN RETAIL



Source: CoStar, TD Economics

CHART 6: GROWTH IN LOGISTICS DEMAND



Source: CoStar, TD Economics

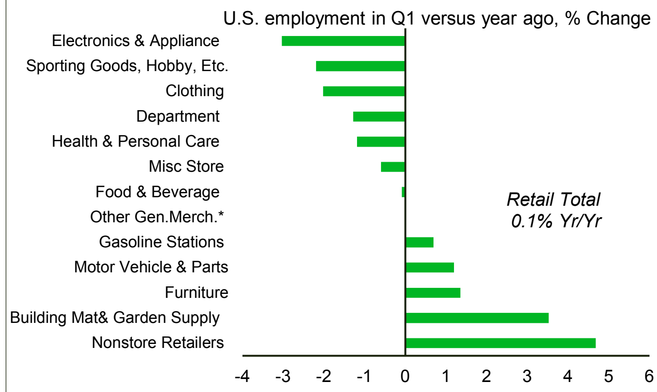
continued to grow in the TD footprint, with the Philadelphia metro exhibiting particular strength last year (Chart 6).

Gains in online retailing have also accompanied significant productivity growth in the sector. Online retailing is not the whole story when it comes to this trend, but it has no doubt been a factor. Labor productivity growth in the U.S. retail sector has dramatically outpaced the broader economy. In retailing it has averaged 3.4% over the past 5 years, in contrast to 0.7% for the nonfarm business sector as a whole. Strong productivity gains help keep price pressures for consumers lower than they would have been otherwise, chalking up another benefit for consumers in the form of increased purchasing power.

Q: What are some of the dislocations that are occurring as a result of shift?

Traditional bricks and mortar retail jobs have experienced their largest job losses outside of a recession recently (Chart 7). You can't disentangle how much of the loss in retail jobs is the direct result of online shopping, or due to increased adoption of labor saving technologies like automated check outs, and the failure of major retail chains to keep pace with competition from big box stores. But, it appears to be part of the story. Looking at which retail sectors have lost jobs recently (Chart 8), it lines up well with the sectors with the greatest degree of online penetration; primarily sectors like electronics and appliances, clothing and miscellaneous. Department stores are likely a special case, as they have been losing out to big box retailers (which are accounted for in "other general merchandise") over the longer-term, but more recently

CHART 8: EMPLOYMENT SHIFTS ACROSS SECTORS



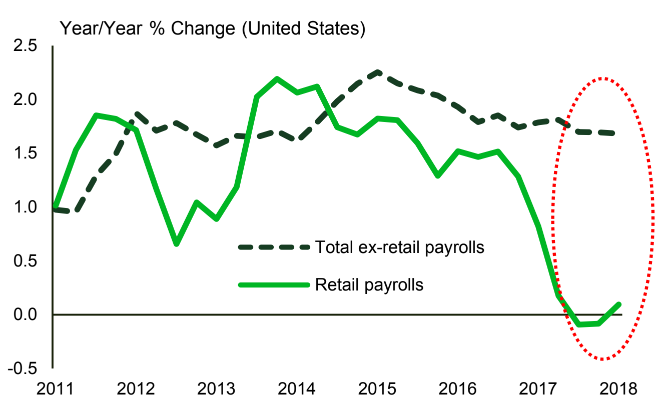
Source: BLS, TD Economics. * Other General Merch includes warehouse clubs and supercenters

even these warehouse clubs and supercenters have been losing steam in terms of hiring.

Despite the notable jobs losses in the sector, retail unemployment is close to a cyclical low. That means that unemployed workers are either quickly finding jobs in other sectors, or job losses may be concentrated among older workers who opt to retire. This is not surprising given the hot labor market. Backing up an overall healthy job market for retail workers, job openings in the retail sector have never been higher. This seems to paint a more optimistic picture of job prospects in the sector, despite the significant shifts going on beneath the surface.

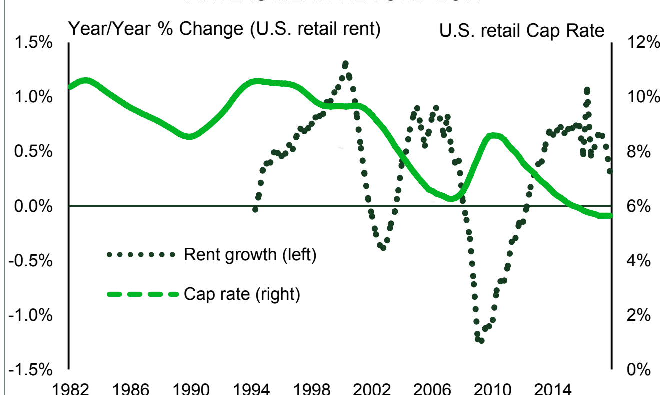
Not surprisingly, alongside demand for workers, demand for retail space has cooled. Growth in rents has slowed to a crawl (Chart 9). Meanwhile, the cap rate, a measure of return on commercial real estate assets, is near a record low. Still the industry had clearly adjusted

CHART 7: RETAIL PAYROLLS HAVE LAGGED



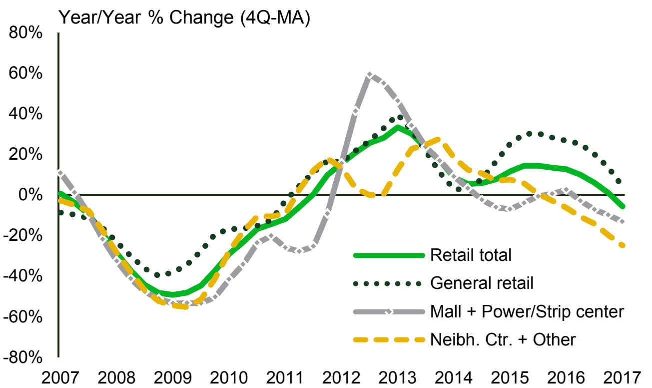
Source: BLS, TD Economics

CHART 9: U.S. RENT GROWTH HAS SLOWED, CAP RATE IS NEAR RECORD LOW



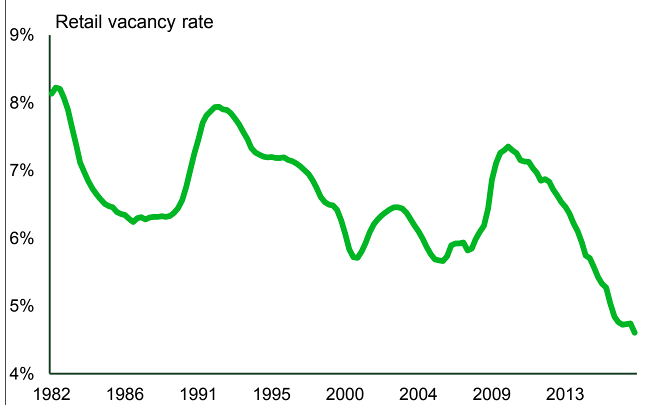
Source: CoStar, TD Economics

CHART 10: GROWTH IN RETAIL STOCK UNDER CONSTRUCTION HAS SLOWED TO A HALT



Source: CoStar, TD Economics

CHART 12: U.S. RETAIL VACANCY RATE LOWEST LEVEL ON RECORD

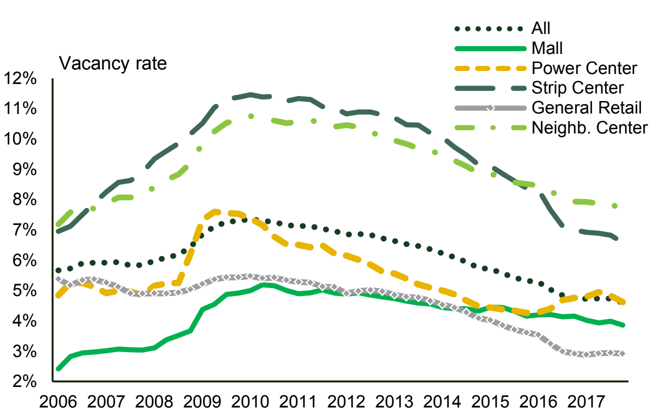


Source: CoStar, TD Economics

for this as vacancy rates remain low. The commercial real estate sector has added retail space at a much slower pace than in the past (Chart 10). With the stock of retail space available growing at a very modest pace, retail vacancy rates have stayed low despite reduced demand. Vacancy rates do vary across sub-industries, with neighborhood and strip centers seeing higher vacancies, while malls and general retail are at the other end of the spectrum (Chart 11). In the middle are power centers, with sectoral vacancy moving largely in line with overall retail after having picked up through 2017 due to a slump in demand. All told, while there is likely to be further adjustment in the sector, the vacancy rate is starting from close to the lowest level on record (Chart 12).

Q: What can traditional retailers and shopping center landlords do to mitigate some of the risks?

CHART 11: U.S. RETAIL VACANCY RATES



Source: CoStar, TD Economics

Selling primarily offline may still make sense (for now) for a few niche retailers that retain an edge by placing significant emphasis on the exclusivity of products, the shopping experience and/or the necessity of clients 'try before they buy'. These may include retailers that sell wedding cakes, bespoke suits, sports cars, ultra-luxurious watches and other handcrafted masterpieces. But this is a small and quickly declining minority; and the trends showing the rapid growth in online shopping have been rather clear. So the clever strategy for the vast majority of traditional retailers has long been to embrace the wave, and invest in a competitive online presence to broaden the income stream, while leveraging existing strengths. The latter typically include an established customer base which can be retained when its preferences increasingly shift online, along with the ability to use physical locations to enhance the omni-channel shopping experience (i.e. provide direct customer service on site; allow pick-up or return of online orders at physical retail locations for a seamless, more convenient experience). Establishing a strong online presence certainly comes with additional costs, such as competitive advertising, shipping etc., which may not be viable for some players. At the same time, it provides other advantages, such as the ability to cast a wider net and reach more clients. An added beauty of going online is the ability to gather additional data/insight on clients, which can help tailor products and bring them to market with more precision.

On the other hand, with respect to mall and shopping center landlords, as online shopping gains additional ground, the risk is that fewer retail square feet will be required to service traditional purchasers. An increased number of store closures last year, including ones at JC Penney, Macy's, Payless Shoesource, with more announced of late (i.e. K-mart, Sears, Bon-Ton, Toys-R-US) underscore this narrative. Landlords have recognized this and are working towards diversifying tenant mix. The main goal would be to encourage and facilitate a shift toward an enhanced mall 'experience', given that ultimately fewer 'products' will be sold under the same roof. Options that will retain and perhaps grow foot traffic include gyms, bars/restaurants, movie theatres, spas, sports (mini-golf, rock-climbing) and other entertainment facilities. But upgrading the look and feel, and the retrofitting process will require time and capital, which may put considerable pressure on operators, particularly those that will require massive diversification.

Q: What could the long-term look like?

The lines between traditional retailers and e-commerce operators are likely to be increasingly blurred. The battle between bricks and mortar retail and online sales will likely revolve around their respective advantages – physical presence and virtual convenience. Traditional retailers are likely to continue to expand e-commerce operations, while e-commerce retailers could invest in more physical locations. For example, Amazon, traditionally an online retailer, has recently opened up a number of physical bookstores in prime locations and bought Whole Foods – a supermarket chain that specializes in food products. Amazon is also experimenting with innovation in the physical shopping experience with Amazon GO – a retail store where the consumer can simply grab the needed items and walk out without the need to check out at the cashier. Other advances such as drone delivery and virtual reality (VR)/augmented reality (AR) shopping are newer innovations, which are likely to shape the retail landscape in the coming years. Such technology would offer a superior shopping experience relative to simply online shopping once perfected, while retaining the convenience of home delivery. A number of retail giants, such as Alibaba, Walmart, Swarovski and IKEA, are already experimenting with and perfecting VR shopping.

Overall, e-commerce and its derivatives (m-commerce, VR shopping) will continued to gain additional ground. But, some shopping is likely to always remain in store given impulse purchasing and the need to satisfy immediate necessities. Where the equilibrium level will fall depends on the evolution of consumer preferences, shipping costs and regulatory constraints. Growth in online penetration will naturally slow over time as it reaches a saturation point, and likely moves more in line with consumer spending. It is difficult to say when we will get there, but it is clear that we are only part way through a significant transformation in retailing, and that there will be further disruption along the way.

Q: What is the bottom line?

Online retailing is expanding rapidly, causing significant disruption in the sector. Against a backdrop of healthy economic growth, this disruption has largely been taken in stride. Job growth in retailing has slowed notably, but the sector's unemployment rate has remained low. Similarly, overall vacancy rates for retail commercial real estate are relatively low as well, as the sector has adjusted to reduced demand for retail space by adding fewer square feet in recent years.

The transition to a greater share of purchases being made online likely has a fair bit farther to run. At a minimum, there is room for rates of online shopping in the U.S. to catch up to many countries in Asia, Europe and the UK where online shopping is more widespread. This process will be helped by increased online sales in categories with low penetrations thus far, like grocery shopping. Online shopping could reach 20% of all retail sales by 2025, so there is further disruption ahead for the sector. Fortunately, a relatively healthy economic outlook over the next couple of years should help ease the transition.

Endnote

1. The basis for this has been a 1992 Supreme Court ruling which stipulated that remote retailers cannot be required to collect taxes if they do not have a "physical presence" in the state.
2. As of April 2017, Amazon began collecting sales taxes for all states that levy such a tax – including the ones in which it does not have a physical presence. Additionally, Colorado's 2010 law that required online retailers to collect sales tax was finally allowed to go into effect last year, while Pennsylvania has a new law which requires remote retailers to either remit a sales tax at the point of sale or send tax notices to clients and the government. At the same time, South Dakota is seeking to overturn the 1992 Supreme Court ruling – a move also supported by the U.S. administration.
3. PEW Research Center, (2018). See: http://www.pewinternet.org/fact-sheet/internet-broadband/
4. ComScore, (2017). See: https://www.comscore.com/Insights/Blog/US-Smartphone-Penetration-Surpassed-80-Percent-in-2016
5. Statista, (2017). See: https://www.statista.com/statistics/249855/mobile-retail-commerce-revenue-in-the-united-states/