Deutsche Asset
& Wealth Management

Research Report

Digital Displacement:

How e-Commerce and e-Products are Transforming the Retail Landscape

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Passion to Perform

For Institutional Investors Only

Prepared By:

Andrew J. Nelson
Retail & Sustainability Specialist
andrewj.nelson@db.com

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The digital challenge to bricks and mortar stores goes well beyond just sales migration to online retailers of goods formerly sold in stores. The added and growing threat is the replacement of physical products with virtual goods and services—many provided free to end consumers. Even with economic recovery, our nation will need less retail space, and the mix of tenants will swing more toward services over goods. Investors should be especially selective in buying and holding retail property to avoid commodity space most vulnerable to e-commerce competition.

Key Findings

- E-commerce still accounts for less than 5% of retail sales nationally. But excluding auto-related purchases drives the online share to 6.5%. But even this figure is distorted by the inclusion of groceries and other items that are rarely purchased online. Excluding these items, the online penetration rate in "core" e-commerce categories soars to over 15%.
- The online share of retail sales has been growing at an increasing rate, even as the base gets larger. The sales flight is even greater in the main e-commerce categories, adding more than 120 bps of market share annually since 2007.
- Online sales are growing via not only ever-greater shares of the traditional e-commerce categories, but also by capturing more retail segments previously considered safe from the online threat. Key growth factors include growing shopper comfort with online shopping; improving e-commerce technology; retailers' omni-channel strategies pushing more sales online; and greater consumer access to mobile shopping devices.
- At current growth rates, the online share will rise to at least 15% by the end of the decade. But there are at least three reasons to expect the online shift to accelerate even faster: expansion of e-commerce to other retail segments; improvement in the home delivery infrastructure; and continued expansion in mobile shopping by more consumers.
- The looming prospect of greater online grocery shopping would be especially harmful to the nation's retail property sector, given the dominance of grocery-anchored community centers in the America retail landscape. Any significant decline in shoppers at these magnet stores would likewise reduce customer traffic to the smaller in-line shops selling specialty goods and services – a double whammy for the retail centers.
- Physical retailers and shopping centers are being challenged not only by the migration of sales online but from the increasing replacement of retail goods by virtual goods and services, many of them free to consumers.
- Despite popular perceptions to the contrary, mail order sales are actually still increasing in dollar terms. The overall share of goods sold outside of stores (including both online and mail order sales) has more than doubled since 1999 to over 10%, meaning that e-commerce has grown *in addition to* – not at the expense of – mail order sales.
- Universal online sales tax collection would do little to stem e-commerce, even if it levels the playing field for bricks and mortar stores and recaptures sales tax revenues for state and local governments.
- Though masked by lingering impacts from the recession, e-commerce now accounts for at least a third of the vacant space in American shopping centers. The expected growth in online shopping and e-products will further mute the retail property sector recovery.

Introduction

At long last the U.S. retail property sector seems to be turning a corner toward sustained recovery, with rents finally starting to rise on the strength of several consecutive quarters of positive leasing. Consumers are more confident and spending again, while retailers are financially stronger and opening more stores. Meanwhile, shopping center construction remains restrained portending further improvement in market fundamentals, as new leasing translates directly into higher occupancy. But the enduring and more meaningful trend to emerge in recent years is the growing size and scope of e-commerce and its disruptive impacts on the retail sector, particularly the bricks-and-mortar world of shopping centers.

The nation was starting to suffer from an oversupply of shopping centers even before the recession, as retail space had been expanding far in excess of population growth.[*] Recent economic and retail trends have only magnified this disconnect, as a variety of factors are reducing retail spending and retailer demand in our nation's shopping centers well below their former trajectories, notwithstanding the modest recovery from the cyclical downturn. In a previous paper, Deutsche Asset & Wealth Management explored some key demographic, economic, and other structural changes in the retail landscape that are confronting shopping centers, and those trends continue apace.[1]

But it is e-commerce that provides the more immediate and significant challenge to retail property: diverting retail sales from stores; altering the retailing strategies of leading chains to focus more on online over physical retailing; threatening the survival of the “mom & pop” stores that have been the mainstay of neighborhood centers; and ultimately upending longstanding dynamics of the retail sector. Shopping centers thus will see much reduced retail space demand from traditional retailers of physical goods. Some of this space will be occupied by service providers, particularly entertainment and restaurants. But the net effect will be negative, with even greater retailer preference on the top centers and best locations, to the detriment of inferior centers and markets.

In this paper we update and expand upon our findings from our 2012 analysis of e-commerce.[2] As then, our focus remains on how digital commerce is reshaping the retail shopping center industry, with implications for those who own, manage, or build retail space. We document the rapid migration of sales from physical to online retailers, particularly for key discretionary items essential to the vitality of malls and power centers. Retail chains continue to lose ground to internet-only retailers, despite substantial capital investments to expand and improve their e-commerce infrastructure. Smaller chains and independent stores, with less capacity to capture online sales, face even greater threats. Meanwhile, physical retailing faces another, related challenge as retail goods are replaced by virtual goods and services, many of them free to consumers. Thus, bricks and mortar retailers face sales erosion not only through declining market share, but also because fewer physical goods are being sold at all. Industry and individual efforts to counter these trends appear unlikely to alter their course appreciably.

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[*] For example, the number of shopping centers in the country jumped more than 23% between 1995 and 2008, and the total leasable area almost 30%, while the population grew less than 14%. Thus, shopping center space grew at more than twice the rate of population growth for more than a decade. See Nelson and Symes, 2008.

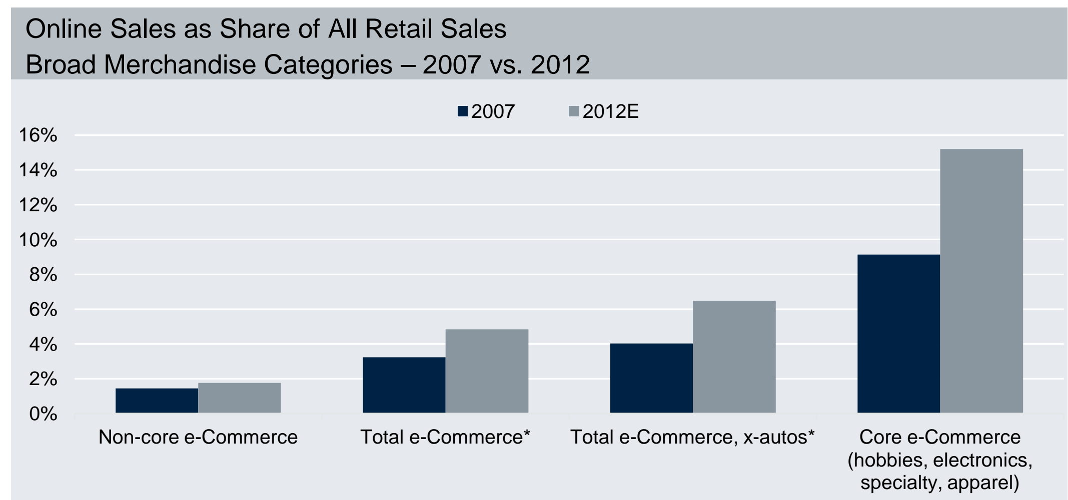
E-Commerce Sales in Perspective

Despite all the attention paid to electronic commerce and its subset, mobile shopping (via smartphone or tablet), it is perhaps surprising to learn that e-commerce still accounts for less than 5% of retail sales nationally. But the gross figures are deceptive. Excluding auto-related purchases drives the online share from 4.8% to 6.5%. But even this figure is distorted by the inclusion of groceries and other items that are rarely purchased online:

- products with low value relative to shipping costs (e.g., building materials);
- expensive items for which on-site assessment is crucial (automobiles);[†]
- less expensive items for which personal selection is still important (produce at a grocery store); and,
- products purchased frequently in small quantities or values (personal-care items).

Excluding these items, the online penetration rate in "core" e-commerce categories soars to over 15%. This grouping includes products commonly associated with e-commerce such as electronics and books, but also apparel & accessories, hobbies, and other appliances – all key segments for malls and power centers. Even furniture and furnishings, which we do not yet consider a core online segment, are increasingly sold online, with a market share approaching 10%.

Online Sales as Share of All Retail Sales
Broad Merchandise Categories – 2007 vs. 2012



*Excluding "nonmerchandise receipts"

Sources: U.S. Census Bureau, Deutsche Asset & Wealth Management.

As of December 2012.

Moreover, while e-commerce overall is growing rapidly, shares in these "core" e-commerce categories are rising faster still, as again the gross figures are distorted by the inclusion of retail segments that rarely transact online. E-commerce retail sales prior to 2000 were trivial, but since then have soared almost eight-fold, 15 times the 50% growth for all retail.[‡] Of course, such comparisons can be misleading due to the small base of e-commerce sales in the early years. (Indeed, growth in the dollar volume of total retail sales over this period was seven times the increase in e-commerce measured in absolute dollars.)

[†] Automobile retailers also benefit from century-old franchise regulations in many states that mandate cars be sold onsite through dealerships.

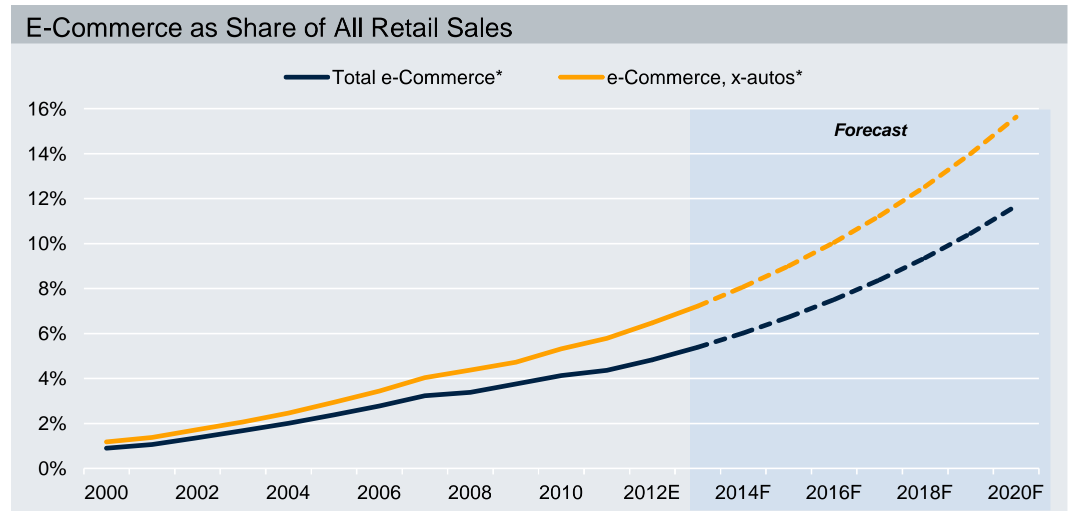
‡ Both e-commerce and total retail sales figures have been adjusted to exclude categories classified by the Department Commerce as "retail sales" but that are not normally considered retail, such as sales from vending machines and nonmerchandise receipts.

Despite this, the online market share has been growing at an *increasing* rate, even as the base gets larger. The online share of retail sales excluding auto-related items grew by an average of 41 bps annually from 2000 until the 2008-09 recession years. Since then, the online share has been growing by an average of 58 bps annually, and 69 bps in the last year, so the online shift seems to be accelerating.

The flight is even greater in the “core” e-commerce categories. As shown in the preceding exhibit, the online share in the “non-core” categories barely budged in the past five years, growing just 30 bps to 1.8% of sales within these merchandise lines. Market share growth was almost 20 times greater in the “core” segments, however, adding over 600 bps between 2007 and 2012, or more than 120 bps annually.

We seem to be approaching a tipping point, where online sales grow via not only ever-greater shares of the traditional e-commerce categories, but also by capturing more retail segments previously considered safe from the online threat. Last year, e-commerce excluding auto-related purchases continued its recent pattern outpacing in-store sales growth five-fold, 16.4% vs. 3.4%, respectively. Put another way, last year e-commerce accounted for barely 6% of all non-auto retail *sales*, yet recorded almost a quarter of all retail sales *growth.* At current trends, the online share of non-auto sales will more than double again to over 15% by 2020, when more than a third (36.7%) of all goods in the ”core” e-commerce categories will be sold online.

E-Commerce as Share of All Retail Sales



*Excluding “nonmerchandise receipts”

Sources: U.S. Census Bureau, Deutsche Asset & Wealth Management.

As of July 2013.

Shopper and Retailer Technology

There are many reasons for the move online. Consumers are becoming more and more at ease with the technology behind e-commerce and are shifting their shopping allegiances online accordingly. Terms like “showrooming” and “flash sales” are entering the popular vernacular – and reshaping how we shop. Mobile shopping is also growing easier and better by the day. With the online shopping experience improving and virtual venues for online shopping proliferating, e-commerce can now beat bricks and mortar stores at their own game: providing shoppers with the superior selection of department stores, greater convenience of power centers, and budget prices of discount superstores – sometimes all on the same site.

Changing growth strategies of major retail chains themselves are an important factor. After years of relentless store expansion in the quest to build market share almost without regard to cost, retailers now are much more concerned with sales productivity and profitability, and often find that selling online is more economical than in-store, though they may lament the loss of impulse sales that are more common in stores than online.

Underlying these factors is the astonishing rate at which consumers adopt the products and technologies that enable and even favor online transactions. Three-fourths of U.S. households own or have access to a computer (95% excluding households earning less than $50,000 annually).[3] Fully 90% of these households have broadband (high-speed) internet service, so the vast majority of U.S. households have easy access to online shopping.[4] But the more profound change has been in mobile device ownership. Almost half of American adults now own a smartphone, which was essentially a niche item as recently as 2005. Adoption of tablets has been growing even faster, nearing one-third of adults, up from almost none just three years ago. As a result, the mobile device share of internet usage tripled from 14% in early 2010 to 48% only three years later. In turn, mobile commerce ("m-commerce") is taking off as well, and already accounts for more than 10% of retail e-commerce.[5]

The Shrinking Share of Physical Goods

The concern for physical retailers and shopping centers extends beyond the switch in *where* we shop, buying online what we used to purchase in stores. More momentous are the changes in both *what* and *how* we buy, facilitated by much the same technology that enables e-commerce. Virtual products like mp3 music files and e-books increasingly displace their physical counterparts. Analysis by PricewaterhouseCoopers shows that that consumer spending on online entertainment and media content globally doubled from 12% of sales to 27% in 2012; PwC anticipates the digital share to almost double again to 47% by 2017.[6]

No segment has been transformed as much as recorded music. Less than ten years ago, all forms of digital music combined totaled less than 2% of all music revenue, according to figures from the Recording Industry Association of America (RIAA).[7] Compact discs (CDs) were the titan then, accounting for 93% of RIAA revenue in 2004. By 2012, the digital share surged to 60%, while the CD share shrank to only 35%. Music downloads, such as from iTunes and Amazon, are now king of the hill, with 40% of all revenue, up from 1.5% in 2004. More significant is the switch within digital music. Music downloads are still gaining market share at the expense of physical products, but sales appear to be cresting, up only 370 bps since 2011. Meanwhile, streaming and other indirect forms of music delivery (that is, not sold directly to end users) have shot up from virtually nothing a decade ago to one-fifth of all recorded music revenue.

If extreme, the music segment is not alone. PwC forecasts that consumer ("trade") ebooks will surpass print books within five years. PwC expects sales of ebooks to increase almost 1.5x, more than doubling its current market share, while sales of print books decline by a third. Video, gaming, newspapers, and other forms of entertainment and media are seeing similar trends. All of which translates directly into fewer sales in bricks and mortar stores for a given level of consumer spending, and hence less retail space that can be supported.

But perhaps the most pernicious trend for physical retailers is one being greeted avidly by consumers. Free products and services are supplanting physical goods previously sold in stores. The number of such free services from websites alone is almost endless:

- Electronic maps have replaced printed maps, first on PCs, then on phones.
- Crowd-source encyclopedias and search engines have rendered printed reference books almost obsolete.
- Free news sites have undermined traditional printed newspapers and magazines.
- Rating websites have virtually eliminated printed travel guides.

Add to that the seemingly inexhaustible number of products and services being displaced by one small device: the smartphone. (A sample is shown in the following exhibit.) The almost universal camera function alone reduces the need for the camera and electronics stores that sell cameras, the photo processing stores that develop film, the stationary store that sells photo albums. Standard features on most smartphones include an alarm clock, radio, thermometer, dictionary, mp3 player, address book and scheduler – all of which replace goods formerly sold in stores. A compass and flashlight can be added via an app download. Virtually all of these are free to the consumer, though some are supported by ads. And few would even count as a retail sale!

To cite only one example: Since peaking in 2010, the number of cameras shipped by Japanese camera manufacturers (which accounts for the vast majority of cameras made worldwide) has declined about 20% through 2012, while the number of digital cameras shipped this year through May has plunged more than 40% from early 2011.[8] The shake-out is even more precipitous when measured by value, as camera shipments are down by a third since peaking in 2008. One can assume that smartphones are almost entirely to blame. Thus, despite the meteoric rise in smartphones and tablets over the past five years, sales of electronics and appliances overall – whether in-store on online – are virtually flat since 2007 (+0.9%), with barely a tenth of the gain in overall retail sales, excluding auto-related (+8.8%).

No wonder that retail sales account for an ever-shrinking share of the consumer wallet, notwithstanding the post-recession recovery in spending. Continuing a trend going back to the 1970s, the retail share of household consumption has been dropping at the rate of about 50 bps annually over the last two decades, mostly in discretionary spending.[9] As shown in the following graphic, this share is cyclical, falling more during recessions and then rising somewhat during the recovery, but the long-term secular trend is clearly downward. This decline is on top of the retail market share migrating from physical to online retailers. Certainly there are a variety of factors at play here including the rising cost of health care and education, which take bigger bites out of household budgets. Consumers also benefit as technology drives down the costs of products – not only electronics, but also many goods that are manufactured or processed, from food to clothing. But a key factor causing the drop in retail sales is the vaporizing of retail goods into virtual products and services.

Retail Displacement by Smartphones and Tablets	
Item / Service / Application	Retail Store Type Affected
photo processing services	photo shop
cameras	camera, electronics
photo albums	stationary, camera, drug
maps	convenience, drug
CDs and CD players	electronics, "record" shops
DVDs and DVD players, TVs	electronics
novels and non-fiction books	book stores
newspapers and magazines	newsstands, convenience
encyclopedias and reference books	book stores
software and computers	electronics, software, computer
radios	electronics
travel booking	travel agents
schedulers, address books	stationary, convenience
stamps and mailboxes	post office
thermometer	convenience
alarm clocks	convenience, electronics
flashlight	convenience, sporting goods
compass	convenience, sporting goods
calculator	convenience, electronics
scanner and fax machines	electronics, computer
banking services	bank branches
games	games, convenience, electronics
clocks and watches	jewelry, department, convenience
pens, paper, scissors, glue, etc.	stationary, convenience
cook books	book stores

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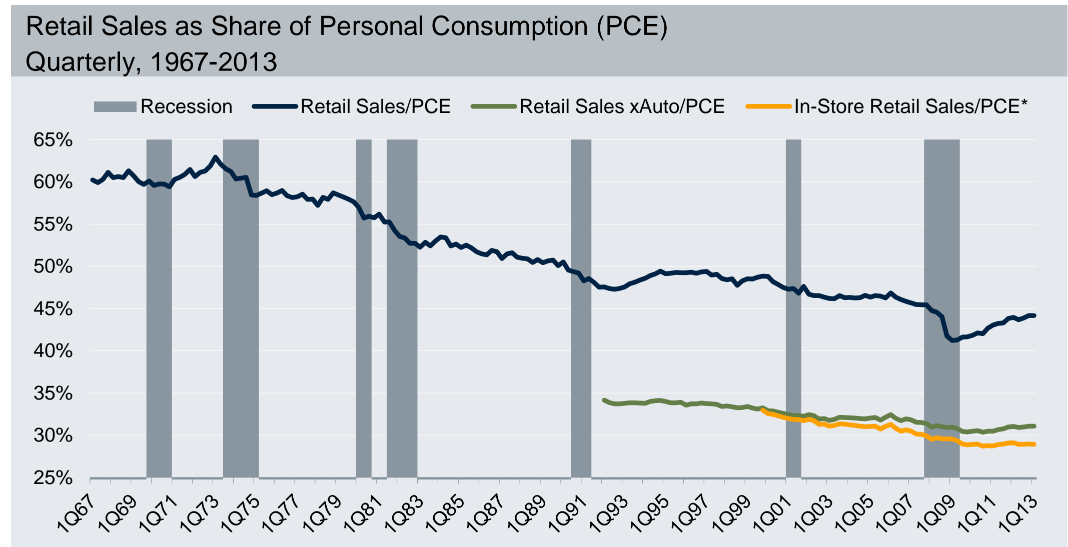
Of course, one of retailing's hallmarks is its relentless pace of change in the name of fashion, innovation, or just a better value. In this dynamic framework, "creative destruction" has continually changed the mix of goods and services being sold since society first organized commerce in commercial centers millennia ago. Consumer tastes, technology, and marketing are forever changing consumer demand. The difference now is that in key retailing categories, virtual products are displacing physical products, which in turn are being replaced by virtual services, for which there is no retail transaction at all, thereby further reducing the need for retail space.

To be fair, as some retail segments recede, others inevitably grow, and still other new categories are invented. Think of spas and massage stores, small format grocers, and cupcake bakeries, none of which were found with any frequency in shopping centers a decade ago. With Starbucks' seemingly ubiquitous in retail centers – having 13,000 stores in the United States and another 6,000 abroad – it is perhaps startling to realize that the chain had fewer than 130 units a short 20 years ago when it went public. Annual lists of top retailers are poignant reminders of retailing's breathless pace of competitive change. Fifty years ago, when Wal-Mart and Target opened their doors, Sears was the nation's leading retailer, with

Montgomery Ward not far behind. Today Sears is a shell of its former self, and Montgomery Ward a distant memory. And Wal-Mart is by far the world's dominant retailer with 11 times the sales of Sears, and Target is the third largest retailer in the U.S.[10]



*Excluding "nonmerchandise receipts"

Sources: U.S. Census Bureau, Deutsche Asset & Wealth Management.

As of July 2013.

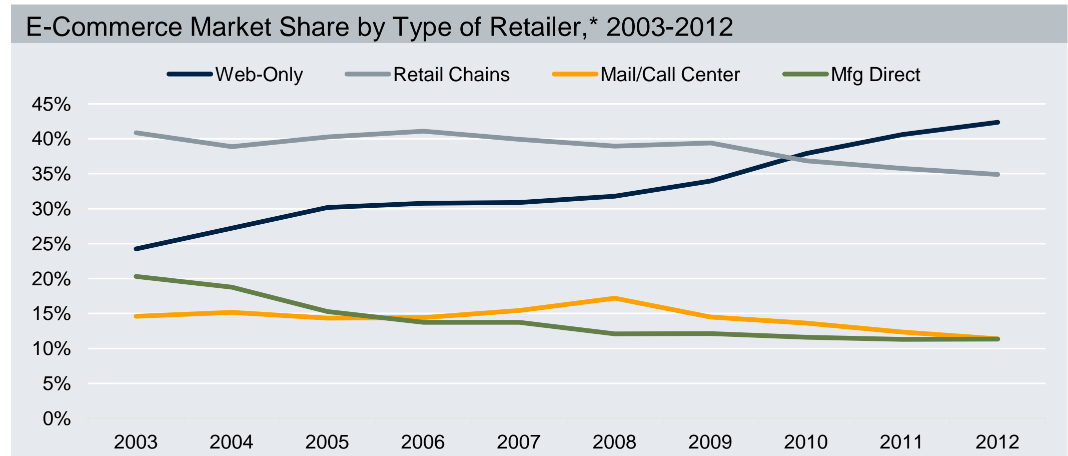
So changes in the retail sector are nothing new, whether in the top retailers or the bundle of goods in the consumer basket. Few households buy castor oil, coal, or horse feed anymore. What's different about the recent shifts, however, is that the new paradigm is transferring so much spending away from retail stores.

If You Can't Beat Them…

These trends are well known to retailers, who have been fighting the online onslaught with increasing firepower. Their response has been dubbed "omni-channel" retailing, the convergence of e-commerce with bricks-and-mortar stores to best serve their customers, wherever and however they shop. This takes many forms, but central to the concept is leveraging technology to enhance the shopping experience, combining the superior convenience and selection of online shopping with the experiential and tactile attributes of the physical world. It's an expensive bet, in terms of both financial investment and risks to the brand, though the risks to standing pat are likely greater still.

Consequently, retailers have dramatically increased their commitment to e-commerce. Capital that formerly would have been allocated to store openings and inventory are increasingly being invested in expanding and improving their e-commerce platforms.[11] Despite these significant recent investments, the paybacks have been modest. Not only are the nation's leading retailers continuing to lose market share to web-only retailers. Worse, they are not even keeping pace within the e-commerce realm. As measured by Internet Retailer's Top 500 listing, the share of non-store sales sold by retail chains declined six full percentage points in the past decade to just under 35% in 2012. Only three years ago, the retail chains were outselling the web-only retailers online. No longer. While online sales by retail chains grew an

impressive 360% over the past decade, this pales in comparison to the web-only category, which grew almost ten-fold, increasing its share from under 25% to over 40%. (The remaining share is taken by factory-direct sellers like Apple and call centers/catalogues.)



*Among Internet Retailer Top 500 retailers
Sources: Internet Retailer, Deutsche Asset & Wealth Management.
As of December 2012.

Clearly, much of investment by chains is too recent to yet bear fruit. And to be sure, the web-only sales disproportionately reflect the performance of just one retailer – Amazon, which alone has an astonishing 28% of online sales among the IR500. Still, the nation's retail chains are not only seeing their sales drained online from their stores, but their share of e-commerce is also declining, requiring more innovative strategies to drive shoppers into their stores.

One concept is to turn the threat of “showrooming” on its head, by actually encouraging customers to shop online in the store, with the product delivered directly to the customer’s home. The store can reduce its in-store stock by keeping on hand only a representative sample of sizes and colors for each product, but not necessarily every size in every color. Nordstrom has been a leader, installing Wi-Fi in their stores and providing iPads for customers to order products not available in stores. They are even testing same-day delivery in select markets. Shoppers can thus fully assess the product in the store and then have the purchase waiting for them at home, even if the store they visit is out of stock. Wal-Mart and Kohl’s are implementing their own versions of in-store online shopping.

Another idea being tested is to re-engineer stores to double as “fulfillment centers,” enabling retailers to deliver merchandise quickly and efficiently to customers while leveraging existing store personnel. Macy’s has perhaps the most prominent omni-channel strategy among U.S. department store chains, giving shoppers the choice of either home delivery or in-store pickup. Electronics stores such as Best Buy have been using versions of this “click & collect” approach for years and other retailers such as the Gap are now testing in-store pickup for online purchases.[12] Many actually retailers prefer this “click & collect” model over home delivery, which not only saves the delivery expense but also encourages more impulse purchases when the shoppers comes into the store to collect their merchandise.

But is this a sustainable long-term model? Amazon is not siting their new, massive warehouse fulfillment centers in downtowns or suburban shopping districts. The reason is obvious: the economics just don’t work. In-town space is too expensive, and the skill-set of the staff

(people-oriented, knowledgeable about the product) is not appropriate for the task (finding and shipping the stock). Rather, fulfillment centers are better located in less expensive, yet accessible locations in a region.

At best, the store-as-fulfillment center is a short-term fix, perhaps wishful thinking by bricks and mortar retailers and their landlords. For how long can the best-located, most expensive real estate – which is what retail space usually is, whether downtown or in malls – function as glorified warehouses? Longer term, retailers will simply offload expensive, unneeded space.

What Next?

Despite significant recent gains, e-commerce still accounts for only 6.5% of non-auto-related sales. As noted earlier, at current growth rates, the online share will rise to at least 15% by the end of the decade. But there are at least three reasons to expect the online shift to accelerate even faster: expansion of e-commerce to other retail segments; significant improvement in the home delivery infrastructure; and continued expansion in mobile shopping by more consumers. Most importantly, the overall e-commerce share is constrained by several categories that are less amenable to online selling, notably groceries and personal care items, which alone account for half of all non-auto-related retail sales.

Shoppers value the ability to select their own groceries, especially fresh produce, which is hard to do online. With so many items in a typical basket, the online grocery shop also requires considerable forethought and planning. (e.g., Do I need a 14 ounce bottle or 28 ounces? Plastic or glass? Which brand? Sugarless or fat-free?) Meanwhile, grocers have resisted expanding home delivery due to the outsized handling and delivery expense relative to the typical transaction size. Thus, with rare exceptions, the online grocery business has been limited to very densely-populated markets.

But with $1.2 trillion in combined sales between the grocery and personal care segments (including health-related), the potential for online sales capture is perhaps just too tempting to ignore. Amazon has been quietly pilot testing its AmazonFresh grocery delivery in its Seattle hometown since 2008, and now is planning a major roll-out. They launched in Los Angeles in June and reportedly plan to expand to 20 or more markets by 2014, including San Francisco later this year.[13] Wal-Mart is testing same-day and next-day delivery of merchandise, including groceries, in the San Francisco Bay Area, and will expand as market conditions dictate. Among supermarket chains, Harris Teeter is often viewed as having a strong “click & collect” business, which reportedly was a factor in Kroger’s recent move to acquire the chain.

And despite some notable failures among early pioneers like Webvan, entrepreneurs and investors are testing the grocery delivery waters again. MyWebGrocer, which just received more than $150 million in capital from private-equity firm HGGC,[14] lets consumers plan shopping trips online, schedule pickup or delivery, download coupons and other services. Sequoia Capital led an $8.5 million capital raise for Instacart, a mobile app and website that launched last year that enables customers to shop for groceries from leading grocers with same-day delivery. Perhaps the largest internet grocer in the United States is Peapod, owned by giant Dutch retailer Royal Ahold NV since 2001. Peapod is expanding in several major markets including New York, Chicago, and Washington, DC.

With groceries and personal care items such a big share of the retail pie, the consequences of any significant leakage in this segment could be devastating to traditional grocers and shopping centers, particularly the neighborhood and community centers that are the bedrock of U.S. retailing. These centers, typically anchored by a regional grocer, account for the greatest share of the retail space in the country. Any significant decline in shoppers at these magnet stores would likewise reduce customer traffic to the smaller in-line shops selling specialty goods and services – a double whammy for the retail centers – though these impacts would be reduced to the extent that shoppers choose "click & collect" over home delivery for their groceries.

Equally impactful could be any significant improvement in the home delivery infrastructure. Again, it is Amazon blazing new trails. Already the firm is testing same-day delivery is key markets. With the goal of dramatically increasing its capacity for next-day or even same-day delivery, Amazon is building a network of warehouse fulfillment centers on the edge of major metropolitan areas. Other retailers are making their own investments to improve delivery. If quicker delivery is one of the few remaining benefits of in-store purchases, the prospect of widespread same-day delivery would amplify the challenge to shopping centers further.

Finally, this threat would be magnified to the extent that smartphone and tablets continue to proliferate and consumers become increasingly comfortable with buying online. For all of these reasons, we do not see the rate of increase in online sales migration plateauing in the near term, and may actually accelerate in the coming years.

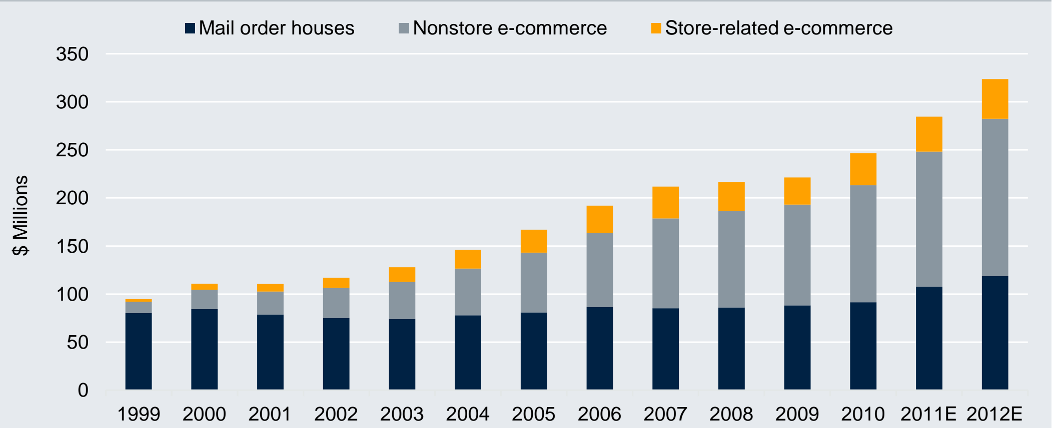
Does it Hurt Yet?

Beyond the ultimate online market share, one question hangs over the industry more than any other: when will e-commerce begin to have more material effects on the viability of shopping centers? Certainly there have been some concentrated impacts. The virtual demise of electronics stores, camera and photo processing stores, stationary stores, and travel agencies all can be directly linked to online sales migration and/or digital products and services. Otherwise, the impacts have been diffuse and seemingly limited.

One reason commonly cited is that retailing has long had a non-store segment, previously dominated by catalogue and mail order sales. So, the theory goes, e-commerce is merely displacing mail order sales. Well, yes and no. It is true that e-commerce overtook catalogue shopping as the dominant form of non-store shopping almost a decade ago in 2005, and this year will account for more than two-thirds of such off-site sales. Nonetheless, mail order sales are actually still increasing in dollar terms, as shown in the following graphic, and represent almost the same share of non-auto retail sales now (4.1%) as in 1999 at the dawn of e-commerce (4.4%). It's just that e-commerce has been growing even faster, in both absolute dollar and percentage terms. Accordingly, the overall share of goods sold outside of stores (including both online and mail order sales) more than doubled during this period, to 10.5%, meaning that e-commerce has grown *in addition to* – not at the expense of – mail order sales.

In short, e-commerce sales are not replacing mail order sales; catalogue shopping is not growing much, but neither is it going away. Rather, the share of retail sales transacting beyond the nation's malls and shopping centers continues to grow.[§]

[§] The composition of mail order sales has changed, however. Mail order used to be dominated by the classic catalogue items: apparel and computers (41% of mail order sales in 1999, 18% in 2012). But these items have been migrating online, though less since the recession. Instead, personal care items (drugs, health aids, beauty aids) now account for the majority of sales (55% in 2012, up from 13% in 1999).



Sources: U.S. Census Bureau, Deutsche Asset & Wealth Management
As of December 2012.

To gauge the impact on shopping centers, we can ignore mail order sales, because they account for about the same share of sales now as before. The difference is e-commerce. By our calculations, online sales excluding auto-related items amounted to about $180 billion in sales last year. A small, but unknown portion of these online sales are of the "click & collect" variety, which could just as correctly be considered in-store sales with online product selection (and sometimes payment, too). Excluding these sales conservatively leaves $160 billion in delivered online sales, which translates into some 400 million square feet of space based on typical store sales volumes. For perspective, that amount of space is equivalent to about a third of all vacant retail nationwide.[**] Currently the retail sector vacancy rate stands at 12.8%, 40% above its long-term, pre-recession average.[15] There are many of reasons for retail's elevated vacancies, some with no direct tie to e-commerce. But clearly much more of the vacant space in the nation's shopping centers would be filled were it not for e-commerce's diversion of sales.

Thus, e-commerce's impact is, in fact, material, and cannot be dismissed as merely replacing the catalogue sales of yore. Online shopping and e-products are already slowing the retail property sector recovery, and the expected growth in these trends will only reduce space demand further.

Online Sales Taxes to the Rescue?

The shopping center industry's decade-long quest to require online retailers to collect sales taxes seems to be finally getting traction, in the form of the federal Marketplace Fairness Act. The legislation's goal is to achieve parity for physical retailers and thus restore competitive balance by raising the effective costs of shopping online.

State and local governments have a stake in this too. A new report prepared by IHS Global Insight estimates that "collectively, state and local governments in the United States

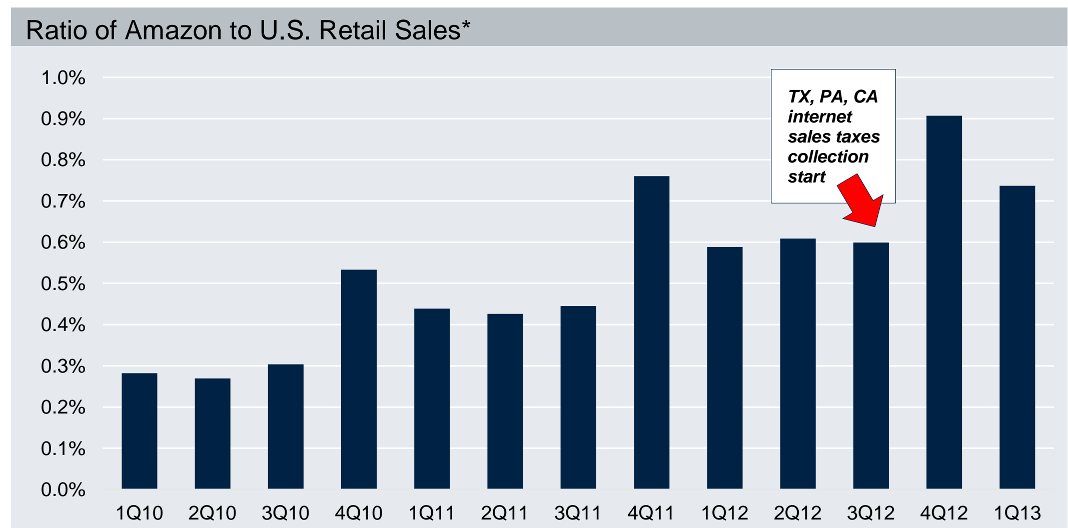
[**] The data source CoStar estimates that at the end of 2012 there was 825 million square feet of vacant retail space in the 142 metros it tracks. In turn, those metros account for about three-quarters of the nation's retail space. Assuming comparable vacancy rates in the non-tracked areas, there would be 1.1 billion vacant square feet of retail space nationwide, so 400 million equals 36% of the total.

experienced a direct loss of revenues due to uncollected taxes on e-commerce of nearly $12 billion in 2011, rising to almost $14 billion by 2013."[16]

The industry-backed legislation has passed the Senate and has the support of the White House, but faces an uncertain fate in the House of Representatives. In our view, it wouldn't much matter. There is no doubt that some consumers could be swayed to redirect some of their purchases from online back into the physical world, particularly for price-sensitive commodity goods. But a universal sales tax would be unlikely to reverse or even blunt the trend toward e-commerce. Numerous surveys reveal that e-commerce shopping decisions are motivated primarily by the superior selection and convenience available online. Prices tend to rank much lower, and taxes per se are only a minor consideration.

More directly, we now have direct evidence via Amazon's agreements to begin collecting sales taxes, which appear to have done little to slow its sales juggernaut. Amazon began collecting sales taxes on purchases last year in Texas on July 1, followed by Pennsylvania on September 1, and California on September 15. Amazon does not release state-level sales data, but we can infer the tax impact by analyzing their recent national sales trends. Together these three states account for almost a quarter of retail sales in the United States (share of Amazon's sales not available).[17] As shown in the graphic below, the collection of sales taxes seems to have had little to no impact on Amazon's overall sales volumes – sales continued to grow after the taxes were imposed. Moreover, Amazon claims to generate more than half of its revenue in jurisdictions where they already collect sales tax or its equivalent,[18] and three more states (Connecticut, New Jersey, and Virginia), with another 7% of the nation's sales, are coming into the camp this year.

Of course, e-commerce is broader than just Amazon, albeit Amazon is by far the largest player,[19] and other retailers may find different patterns. But the available evidence suggests that universal online sales tax collection would do little to stem e-commerce, even if the bill does level the playing field and recapture sales tax revenues for state and local governments.



*U.S. sales excluding auto-related products, not seasonally adjusted; Amazon sales include only Electronics and Other General Merchandise in North America

Sources: U.S. Census Bureau, Company reports, Deutsche Asset and Wealth Management.

As of March 2013.

Conclusion

E-commerce is a large and rapidly growing phenomenon, with significant consequences for physical retailing. Consumers' growing comfort with shopping virtually is translating into ever-greater online sales migration, even without the benefit of physical products to examine in person, reducing demand for retail space.

This is obviously not meant to suggest that the need for stores will vanish. For most people in most circumstances, in-store shopping will remain the preferred means of procuring goods and services for the foreseeable future. One ray of hope: fully three-quarters of teens in a recent Pew Research poll prefer shopping in stores, versus less than one-fifth who prefer online.[20] (Of course, that one-fifth is still far greater than online’s current share of retail sales.) And already a counter-trend is taking root: web-only retailers setting up small shops or at least retail spaces where consumers may better evaluate or experience the goods being sold online, though these “stores” often function more as showrooms, with no onsite commerce.

Nonetheless, the trend is clear: more spending in more retail segments by more shoppers is moving online, reducing the demand for shopping center space for a given level of overall retail sales. For this and other reasons, the nation's major chains now focus more on the best centers and markets, and are content to occupy fewer and smaller stores, especially when they can capture sales with their online division. Together with the replacement of physical products by virtual goods and services, the need for retail space is that much less.

The implications for shopping centers are stark. While many chains (better capitalized, more innovative) are successfully integrating their online and physical retailing and will emerge even stronger, the challenge to retail landlords is more daunting. Retailers will continue to reduce their physical presence, pushing more merchandise to less costly warehouses for direct shipping to their customers. The collective loss in leased retail space will be considerable, particularly for poorly located centers and those selling goods most amenable to online transactions. We continue to believe that power centers, big-box retail generally, and weaker centers will be especially vulnerable.

Also at risk are the neighborhood centers filled with smaller chains and independent stores, which already were hamstrung by credit availability for funding inventory and store improvements; lacking capital, the nation’s mom & pop stores cannot compete for online sales. Even the venerable grocery-anchored community center could be at risk, particularly those with weak supermarkets, once shoppers adapt to online grocery shopping.

Ironically, the segment that may thrive best as a group is that most traditional of retail space, street-front retail in the nation’s downtowns, as retailers increasing rely on high-profile flagship stores to showcase their brands. And, so long as most consumers shop for most of their purchases in stores, dominant, well-located malls and centers will continue to thrive as social crossroads and centers of commercial activity. By necessity, shopping centers will rely more on entertainment, services, and eateries, both as a means of filling space formerly occupied by sellers of goods, as well as a draw in of themselves. But overall, retailers will need less and less shopping center space.

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Office Locations:

Chicago
222 South Riverside Plaza
24th Floor
Chicago
IL 60606-1901
United States
Tel: +1 312 537 7000

Frankfurt
Mainzer Landstraße 178-190
60327 Frankfurt am Main
Germany
Tel: +49 69 71909 0

London
One Appold Street
London EC2A 2UU
United Kingdom
Tel: +44 20 754 58000

New York
345 Park Avenue
24th Floor
New York
NY 10154-0102
United States
Tel: +1 212 454 6260

San Francisco
101 California Street
26th Floor
San Francisco
CA 94111
United States
Tel: +1 415 781 3300

Singapore
One Raffles Quay
South Tower
Singapore 048583
Tel: +65 6538 7011

Tokyo
Floor 17
Sanno Park Tower
2-11-1 Nagata-cho
Chiyoda-Ku
Tokyo
Japan
Tel: +81 3 5156 6000

Research & Strategy Team – Alternatives and Real Assets

Global

Mark Roberts
Head of Research & Strategy
mark-g.roberts@db.com

Americas

Ross Adams
Industrial Specialist
ross.adams@db.com

Bill Hersler
Office Specialist
bill.hersler@db.com

Ana Leon
Property Market Research
ana.leon@db.com

Andrew J. Nelson
Retail & Sustainability Specialist
andrewj.nelson@db.com

Jaimala Patel
Quantitative Strategy
jaimala.patel@db.com

Alexander Makarovski
Performance & Risk Analysis
alexander.makarovski@db.com

Alex Symes
Economic & Quantitative Analysis
alex.symes@db.com

Brooks Wells
Apartment Specialist
brooks.wells@db.com

Jay Wengang
Performance & Risk Analysis
jay.wengang@db.com

Europe

Simon Durkin
Head of Research & Strategy, Europe
simon.durkin@db.com

Tom Francis
Property Market Research
tom.francis@db.com

Lisa Strohbuecker
Property Market Research
lisa.strohbuecher@db.com

Maren Vaeth
Property Market Research
maren.vaeth@bd.com

Simon Wallace
Property Market Research
simon.wallace@db.com

Asia Pacific

Leslie Chua
Head of Research & Strategy, Asia Pacific ex-Japan & Korea
leslie.chua@db.com

Koichiro Obu
Head of Research & Strategy, Japan & Korea
koichiro.obu@db.com

Minxuan Hu
Property Market Research
minxuan.hu@db.com

Natasha Lee
Property Market Research
natasha-j.lee@db.com