PCCP Market Commentary

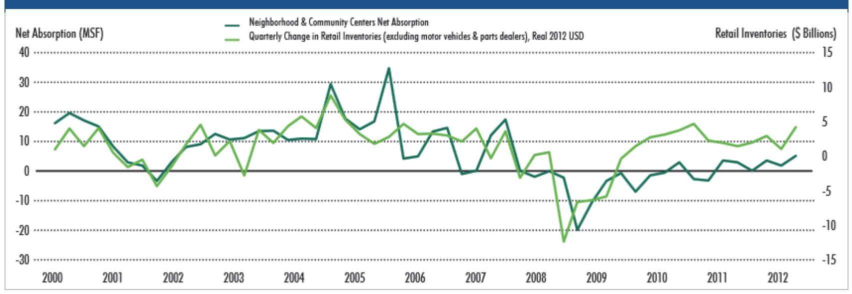
E-Commerce's Impact on Industrial and Retail Sectors

First Quarter 2015

Holiday season 1998. Do you remember having to drive to six different stores to find the Furby doll that everyone wanted? If no, you're lucky. If yes, you know that today the world is a different place, where we buy virtually anything we want on the Amazon app on our phones and it arrives on our doorstep in 48 hours or less.

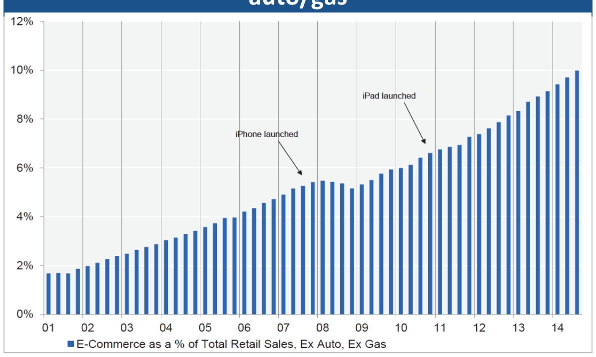
Historically, as the economy grew and retail sales increased, demand for both retail and industrial real estate grew in tandem. The retailers who opened more brick and mortar stores needed more distribution space to service those stores. As the graph to the right indicates, historically there has been a direct correlation between demand for retail space and retail inventory/sales.

Retail Inventories tied to real estate demand



Source: U.S. Census Bureau, 2013; CBRE Econometric Advisors, 4Q2012

E-commerce as % of total retail sales excluding auto/gas



Source: U.S. Census Bureau; CoStar; PPR Global *As of 14Q3*

E-commerce has begun to change that. It's no surprise that e-commerce sales in the U.S. have almost doubled from $167 billion in 2010 to over $300 billion forecasted in 2014, with sales projected to reach almost $500 billion by 2018.[1] Annual year-over-year growth has hovered between 15-20% and is expected to remain at that level in the coming years, compared to only 4% annual growth for non- e-commerce sales. As a percentage of total retail sales in the U.S. (excluding auto and gas sales), e-commerce has grown from less than 2% in 2001 to a projected 10% in 2014.

We decided to take a look at the whole "demand chain" – how e-commerce affects demand for warehouse and retail space – and see where the opportunities lie. Unquestionably, the e-commerce boom has caused the decoupling of growth in demand for retail and industrial space. Demand for brick and mortar space is not as directly correlated with retail sales and is no longer the only force driving demand for industrial space. Instead, e-commerce is directly increasing demand for logistics space, as traditional distribution activities to retail stores transition to fulfillment centers focused on direct-to-consumer.

According to Prologis, logistics facilities used by e-commerce retailers support about $1,000 of annual sales per square foot, compared to $400-450 of sales per square foot for traditional brick and mortar retail space.[2] As a hypothetical example, a $1 billion e-commerce retailer would need 1 million SF of fulfillment space to support

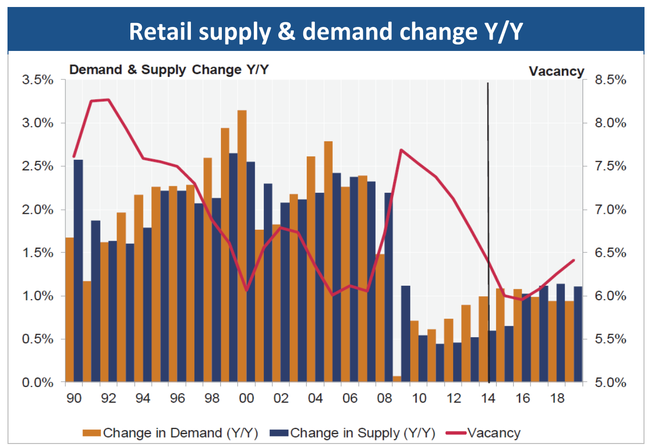
[1] eMarketer, http://www.emarketer.com/Article/Total-US-Retail-Sales-Top-3645-Trillion-2013-Outpace-GDP-Growth/1010756
[2] Prologis, http://www.prologis.com/docs/research/supply_chain/E-Commerce_Logistics_Real_Estate_Final_July2014.pdf

operations. A traditional $1 billion retailer would need about 2.5 million SF of brick and mortar space, in addition to about 350,000 SF of distribution space (supports $3,000 of sales per square foot). E-commerce needs about a third of the total square footage compared to traditional retailers, but needs triple the logistics space.

What we have now is huge demand for logistics space and overall more stagnant demand for traditional retail space. The demand for logistics space is changing rapidly because order fulfillment is a relatively new concept and fulfillment models are still evolving. Prologis has found that as e-commerce tenants continue to refine their business models and grow sales, they move from multi-tenant shared facilities to dedicated facilities to specialized distributed fulfillment facilities. And many of these buildings are not newly constructed – 40% of Prologis' e-commerce customers are in buildings that are 10+ years old.

So as more retailers improve their online sales channels, demand for these different types of space will continue to grow. In particular, the ability to offer customers same day delivery, for which many retailers are aiming, will require distribution space in in-fill locations near large population centers. This highlights the opportunity to take older vintage, in-fill warehouse assets and reposition them for distribution and/or logistics space for e-commerce retailers seeking to offer quick service to large urban populations.

As retailers put more resources into developing their online sales channels and downsize their brick and mortar square footage, more retail centers (particularly in suburban markets) become vulnerable to higher vacancy rates and dark boxes. Of course, this does not mean the end of brick and mortar. Physical demand for retail space actually has continued to rise since the trough of the recession, but with growth in demand more concentrated in the sectors that are not affected as heavily by e-commerce, including food (grocery and restaurants) and specialty and service-related companies (entertainment, health and fitness).



Source: CoStar Portfolio Strategy; PPR Global

Retailers in urban centers, for example, are more heavily focusing on shopping-as-entertainment and non-commoditized products, which has allowed urban retail to perform well. Retail assets in top tier urban demographic areas traded for over $250/SF in 2014, compared to retail assets in more suburban bottom tier demographic areas that traded for less than $75/SF according to data from Real Capital Analytics.

Given the projected growth in e-commerce, we see opportunities to build new e-commerce logistics buildings as fulfillment models continue to evolve, and to reposition older warehouse assets in strategic in-fill locations for distribution/logistics space as retailers look to offer same day delivery service. Urban retail is doing fine, but select centers and older B malls will provide redevelopment opportunities to retenant for tomorrow's shopper or redevelop into mixed use retail/office/housing projects.

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