



Trajan's Market, constructed in 100 A.D., was an earlier version of modern multi-story malls. Above: a view of the ruins of Trajan's Market that still stand in Rome today.

Lessons from history

Retail and industrial properties respond to never-ending change

by Jeffrey Kanne and Darob Malek-Madani

Retail trade and the supply chains enabling it have existed since the dawn of human civilization.

From the humble beginnings of storing food in village granaries and recording transactions on clay tokens, massive social and technological advancements throughout millennia have ultimately led to modern department stores, global supply chains, massive data centers, and same-day deliveries. Throughout these transformations, retail trade and the systems connected to it have both reflected society's changes and been a driver of social and industrial development.

Today, the retail sector appears to be going through a new period of transformation. The rise of the Internet is luring consumers out of brick-and-mortar stores, causing unprecedented numbers of store closings despite steadily increasing retail sales and consumer spending that routinely makes up nearly 70 percent of U.S. economic output, according to Federal Reserve Economic Data from the Federal Reserve Bank of St. Louis. As real estate investors seek exposure to U.S. consumer spending, it is vital to understand how the retail environment and its supply chains are changing, and where those changes are likely to lead.



A typical Amazon location that allows customers to pick up orders, allowing faster and more secure deliveries — particularly in very dense urban areas, apartment buildings and college campuses

The history of retail and warehousing

Ancient history. Retail sales and the business systems surrounding it appear to be truly fundamental to civilization. The earliest receipts appeared roughly 10,000 years ago in Mesopotamia in the form of clay tokens. These basic records predate the earliest-known written words by 5,000 years. These tokens grew to be more sophisticated and abstract over time, representing more complex transactions and helping to spur the growth of versatile writing systems that eventually led to the current versions that underpin modern civilization.

Pre-industrial revolution. For much of history, technological change was very slow. Populations were largely rural, and small retail shops were concentrated in village centers. Because transportation was very slow, expensive and dangerous, these shops primarily sold goods that could be produced and consumed locally — they were butcher shops, blacksmiths, shoemakers and bakeries. There were exceptions, of course, in places such as ancient Rome, which sported multilevel shopping malls and 225,000-square-foot warehouses devoted to the storage and distribution of goods that had been shipped in from all over the empire. But these exceptions were relatively rare and, in retrospect, appear to be an ancient foreshadowing of the retail and distribution centers developed after the industrial revolution.

Industrial revolution and the demographic transition. As a result of the industrial revolution, we begin to see widespread retail establishments that resemble modern, urban stores. The rise of manufacturing and the widespread use of railroads led to the growth of urban centers. Railroad depots and the surrounding multi-story warehouses became the distribution

centers for the first modern department stores. These stores, such as Wanamaker's in Philadelphia, Macy's in New York and Marshall Field's in Chicago, arose in the late 1800s, and were among the first stores to use electric lights, attach price tags to their products and offer easy returns. Such innovations allowed these stores to appeal to a wide range of middle-class consumers and to expand into massive operations encompassing entire city blocks. These stores catered to the rapidly growing segment of urban consumers, which made up about 25 percent of the U.S. population in the late 1800s, according to the U.S. Census Bureau.

With department stores focused on the urban population of the United States, the 75 percent of the population living in more dispersed rural areas was left for the taking, and Sears, Roebuck and Co. did just that. Sears was founded in 1888 as a purely mail-order operation, which in essence was a mirror of today's Amazon.com Inc. business plan, albeit without the ability to guarantee two-day shipping. And, instead of a digital display, Sears' offerings were displayed in a catalog that was hundreds of pages long and offered seemingly everything you could need — from tools, clothes and jewelry, to farm equipment and prefabricated homes. Sears developed centrally located and very efficient fulfillment centers as well as pickup locations. The most sophisticated locations were filled with hundreds of pneumatic tubes relaying customer orders among different departments, according to Derek Thompson for *The Atlantic*. Sears became masterful at following consumers and adapting to the changing demographics and retail landscape of the United States. In 1920, the majority of the U.S. population was concentrated in cities and, that same year, Sears opened its first physical store and began to aggressively expand into cities. By 1929, it had 300 stores and was growing fast. Then, as car ownership and suburban living became paramount in the 1950s, Sears opened its first locations in the suburbs and began to create car-centric stores, where its auto centers drove traffic.

Modern car-centric retail. The rest of the retail sector began to follow the population out of cities in the 1950s, as well. In 1950, the number of cars equaled the number of households in the United States, according to the Federal Highway Administration, while the interstate highway system allowed 18-wheelers to carry large loads anywhere connected to a road. For the first time, the typical middle-class family had access to personal transportation, freed from mass-transit systems, and retailers were decoupled from the train depots of central cities. Following these

developments, 1956 saw the first enclosed mall built in Edina, Minn., outside of Minneapolis. This original mall was envisioned to capture the feel of a European village, creating a haven away from auto traffic and, of course, the Minnesota winter, reports *The Economist*. The idea spread quickly, and hundreds of enclosed suburban malls were built across the country in the ensuing decades. Malls became monuments to modern consumer and retail society, superseding the Sears catalog and downtown department stores. The most successful malls tended to be enormous complexes located at interstate exchanges, allowing consumers from an entire metro area to come and spend a day shopping, eating, going to the movies or simply hanging out. What they weren't, however, was a place to quickly buy something and be on your way.

The rise of the Internet. The mall building boom began to ebb around the same time the next technological revolution began. The World Wide Web went live in 1990, and the United States quickly became the global leader in Internet consumers. By 1998, Google (now a unit of Alphabet Inc.), eBay Inc., Craigslist Inc., Match Group,

The current state of retail and a glimpse of its future

Online sales have climbed rapidly since 2000 and have only begun to affect brick-and-mortar sales. Over the past 10 years, online sales have increased at an average annual rate of 13.4 percent, while brick-and-mortar sales have grown at the considerably slower rate of 1.5 percent, albeit from a much larger base. The incredible growth rate of Internet sales indicates we are in the middle of a major reorganization. It is notable, however, that brick-and-mortar sales remain, for the moment, the dominant force in the sector, according to the U.S. Census Bureau. In 2017, in-store sales, excluding grocery and automobile sales (which, at that time, were almost all completed in person), still held more than 80 percent market share, and nine of the top 10 U.S. retailers remain traditional chain stores. In fact, Walmart is still by far the largest retailer in the world, and *Forbes* reports only about 3 percent of the chain's 2017 sales were completed online. It also is notable in 2017, Amazon opened a variety of retail locations, including package pickup/return locations in high-density neighborhoods and high-tech convenience stores in Seattle, as well as acquiring Whole Foods Market and its hundreds of grocery locations across the United States, Canada and the United Kingdom.

During the current reorganizational period, a huge number of retail stores have closed. More than 8,000 total stores closed in 2017, the largest number since at least 2000, according to *Business Insider*. At the same time, however, more stores than ever have been opening, and the year ended with a net increase in total stores. This undergirds the fact that brick-and-mortar store sales are still growing, even as online sales are rising faster. Those stores that closed tended to be traditional department and clothing shops geared toward middle-class shoppers.

The list of brands opening stores seems to tell a two-part story. One group is focused on cheap, perishable or instant-gratification goods that are difficult to deliver to customers' doorsteps in a cost-effective way. The other group, which includes many online retailers, is setting up stores that serve as showrooms and service-oriented boutiques. Notably, these stores tend to appear in dense urban neighborhoods that exhibit the traditional real estate fundamentals of growing, affluent populations and significant barriers to entry.

It is important to remember, although an ongoing reorganization of traditional retail space is clearly occurring, the retail sector itself is not shrinking, and consumer spending overall remains the dominant force in the U.S. economy. Much



A view of a modern, capital-intensive warehouse/fulfillment center. While malls or big-box stores can be stocked from a traditional warehouse made up of boxes stacked on shelves, delivering products to customers' doorsteps requires efficiently processing hundreds of thousands of orders into individual boxes everyday in a single warehouse.

Expedia Group and Netflix Inc. were all operating, and Amazon already had expanded well beyond selling books. As of 2000, more than 40 million Americans had bought something online, and the Department of Commerce began tracking online sales separately from the rest of retail. Increasingly, our lives became saturated by the Internet, with everything from work and shopping, to dating and education occurring online.

as previous transitions reorganized the dominate players through demographic and technological revolutions without depressing the overall success of the sector, so too will retail sales continue to climb going forward, even as the current major players are reorganized. So where, then, should real estate investors look for exposure to the sector?

The first option is to invest in traditional retail that can serve as an amenity to a larger devel-

Given the current pace of technological change, however, investors need to broaden their outlooks and follow the lead of consumers as they chart new territory in the technological frontier — even if that leads them out of the traditional retail sector.

opment, or is located in a dense and vibrant neighborhood where shopping online might not be the most convenient option. In the same way consumers continually ask themselves if something is more easily bought online, retail owners need to ask what is going to draw consumers to their location. A selection of big-box or department stores on the highway will likely not be good enough but perhaps a vintage arcade, a few restaurants and a great bakery, enveloped by residential or office buildings, would be. Demand will always exist for vibrant retail spaces full of restaurants, bars, salons, convenience stores and

Moving from online to brick and mortar – Warby Parker

Warby Parker Retail began operating as an online-only glasses retailer in 2010. Its model allows customers to order five frames to try on at home and return to the warehouse. They can then select a pair to have their prescription filled, and their final glasses are shipped to them. Shipping is free both ways, for the trial pairs and the final prescription pair.

In 2013, Warby Parker opened its first store and now operates nearly 100. It began by opening showrooms primarily in major cities, focusing on high-street locations. These function primarily as traditional glasses shops, selling the same inventory that consumers can browse online, while offering customers the ability to try out their products in-person.

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other places where consumers enjoy spending time, or are very difficult to replicate online or through delivery. While many traditional stores will adapt to changing tastes and remain successful, we believe consumer demand to shop in generic retail malls will continue to lag retail associated with vibrant, mixed-use environments, and investment returns will as well.

The second opportunity to tap the retail economy is through investing in warehouses and data centers. As retail continues to move online, it is becoming more of a logistics business. While the pure retail sector has been turbulent recently, the industrial sector has been expanding rapidly and providing some of the best investment returns in the real estate industry. The industrial sector, which is primarily composed of warehouses but also includes data centers, was the fastest-growing sector in the NCREIF Property Index database of institutionally owned real estate. At the same time, industrial and data-center REITs were among the fastest-growing segments of publicly traded REITs, according to data from Nareit. Both data centers and warehouses are responding to huge increases in demand, as the continued exponential growth of the Internet pushes more activity online, and more shopping activity into warehouses and fulfillment centers. Modern distribution warehouses, like the ones now being constructed by Amazon, and data centers share many critical characteristics. They both must contend with their capital-intensive nature; the highly technical nature of their design, construction and maintenance; their need for large tracts of land; their need for robust connectivity to the Internet; and their need for access to substantial electricity capacity at reasonable prices. One difference between the two is, for the most part, data centers can be remote from their users, while warehouses are best placed as close to their customers as possible. If you can overcome these barriers, data centers and warehouses are worth considering for a modern real estate portfolio and as a way to participate — albeit indirectly — in the retail economy.

As long as U.S. consumers continue to be a dominant force in the economy, investment opportunities will be available to real estate investors. Given the current pace of technological change, however, investors need to broaden their outlooks and follow the lead of consumers as they chart new territory in the technological frontier — even if that leads them out of the traditional retail sector. ♦

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