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E-Commerce Is a Bricks and Mortar Hog

"The reports of my death are greatly exaggerated."
– Mark Twain

For years, much has been written about the death of traditional retailing due to online sales with the focus being on Amazon's inherently cheaper-to-operate model. Essentially, Amazon can offer more inventory units to any location in the country without needing a large physical store everywhere. That lack of property means fewer employees and overhead per sale, allowing Amazon to drive sales by undercutting other retailers on price.

This idea has been in place for some time, making Amazon an investor darling for years. Numerous stories like this one from a July 2017 issue of *Time* have proclaimed shopping malls and physical stores dead and called for many more to vanish within a few years. *The Atlantic* agreed in April 2017, noting that e-commerce is growing too fast now that America has too much physical retail space.

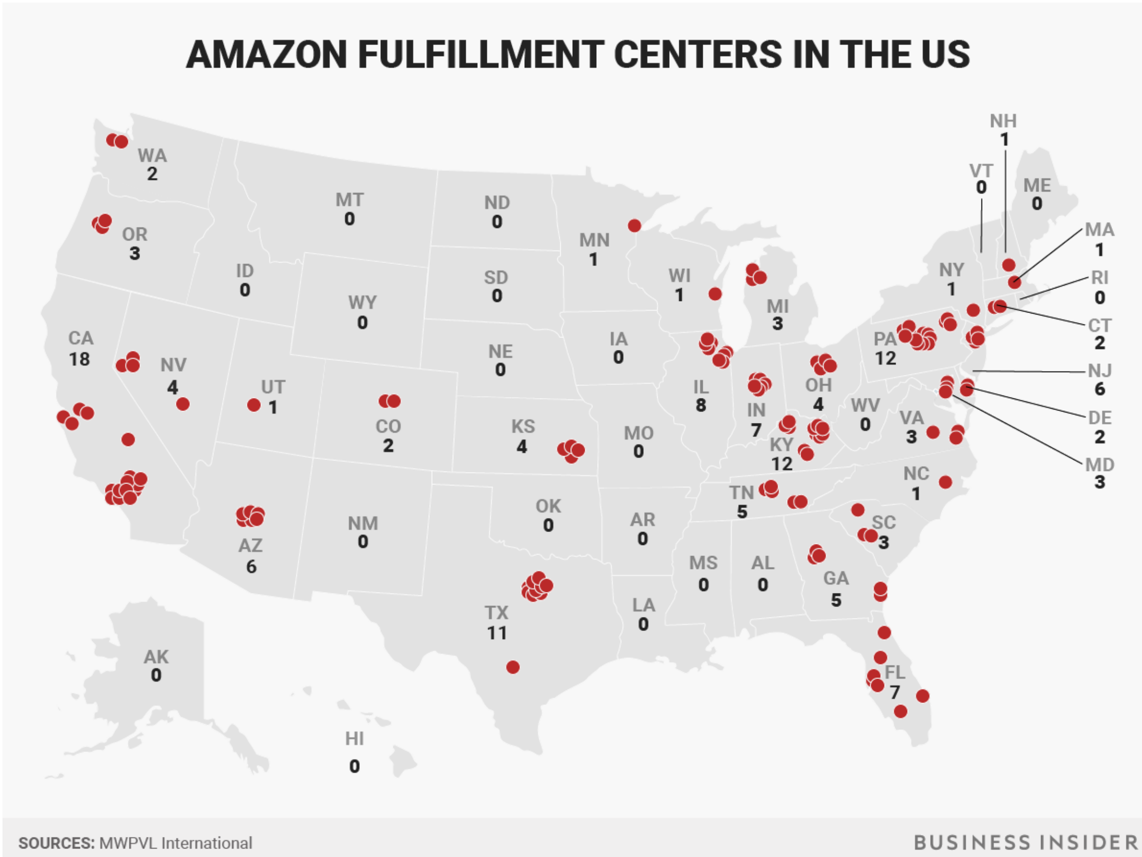
However, there are a few questions about this that should be explored further:

- If E-commerce is the death for physical real estate, why is Amazon building, buying and leasing so much real estate?
- If Amazon has lower overhead and competitors are vanishing, why does it have subpar retail margins?
- Are investors looking at this industry incorrectly?

Amazon Is Becoming a Large Real Estate Company

For an online business that is supposed to be enjoying a lack of rent expense and property costs, Amazon continues to add more real estate. This late September 2017 *Business*

Insider article shows Amazon has 140 warehouse fulfillment centers around the country and that figure continues to expand.



The recent addition of Whole Foods grocery stores added 450 more physical locations for Amazon as it fills in more states that were previously missing warehouses. *Fortune* has a good recent map of the Whole Foods locations:

Some people may have noticed that one of the bear-cases against Amazon has already happened. A few years ago, the Amazon story had two big advantages over bricks and mortar retailing: no rent and no sales tax, which effectively allowed it to reduce its selling prices further. Legally, sales taxes were due only if the company doing the selling had a physical nexus in the state. As the maps clearly show, there are not many places left where Amazon does not have a physical presence.

In 2011, Amazon was collecting sales tax in only five-states. As of April 2017, Amazon now collects sales tax in all 45-states with a sales tax. Recent years have seen a number of legal cases pressed about Amazon having a physical presence in the states either with fulfillment centers or third-party vendors. The addition of Whole Foods essentially completes the list, and Amazon has now decided to have a uniform policy.

Amazon Has Discovered What Other Retailers Know – Online Sales Require Stores

Macy's has enjoyed years of double-digit sales growth in their online business. By having customers pick up orders at the store, it not only can offer free shipping, it adds to total sales as well. According to CEO Jeffery Gennette during the 3Q'17 conference call:

> "The other piece of that is the fulfillment option. So we expect buy online, pick up in store to be a more potent piece of our business in the fourth quarter. And when customers are coming in, you're obviously getting a bunch of those customers that are buying other things. That radiates sales. What you find is that not every customer converts on the radiated sales. And the customers that do, have a bigger up-spend. But the average is for all buy online, pick up in store sales, we get a 25% lift in overall sales."

JCPenney has talked about this even more in the last year. Discussing 2016 results on the 1Q'17 conference call, CEO Marvin Ellison reported that 77% of all online sales touched a physical store. That means people picked up an order, exchanged/returned an item, tried to buy something that was out of stock at the store but ordered it online instead - all at the actual physical store. On the 3Q'17 call, Mr. Ellison said the figure has jumped to over 90% of online purchases touching a physical store.

The 2Q'17 conference call described many of the advantages to using the stores in online sales as Mr. Ellison noted:

> "As we now drive more online customers into the store, we'll continue to minimize our last-mile delivery costs and drive meaningful traffic to our stores. In fact, in-store order pick-up drives over 600,000 customer visits to our stores each week. And there's very little argument that the future of retailing is omnichannel. In other words, with last-mile fulfillment and customer acquisition costs increasing and the customers demanding speed and value, the retailer who can most effectively combine physical stores, e-commerce, and simplicity will be the winner."

> "What's unique about JCPenney is that we have a customer that really operates in a household income of roughly $80,000 and below. So when you make an appliance purchase, a couple of thousand dollars, you want to come into the store, physically touch it, see it and you want to get some level of consultation from the associate. So although e-commerce is a great platform for us from the appliance perspective, it is tied to the physical store and the associates' product knowledge in the store."

> "We completed the expansion of our ship-from-store fulfillment strategy, expanding it from 250 stores to 100% of our store network during the second quarter. This means that all JCPenney stores now have the ability to fulfill online ship-from-store orders, and this also significantly expands the fulfillment capacity of our company, while helping us reduce the last-mile delivery cost. Not only did this initiative enhance our fulfillment capabilities, it also allowed us to expose over $1 billion of

> additional inventory to our customers without one dollar of investment in new inventory."

Other retailers have seen success in controlling the last-mile distribution and demonstrating products in stores such as Williams Sonoma and Best Buy. Those retailers relied on online sales for 53.1% and 12.7% of their total business in the last quarter, respectively.

Williams Sonoma considers its retail stores as a way to build brand awareness for customers and advertising for products that can be ordered online (even at the store), picked up, or shipped to customers' homes. In addition, a considerable amount of retail square footage is devoted to inventory storage and order fulfillment. With just over half its sales from online orders, Williams Sonoma has 9.3 million square feet of fulfillment, distribution, and manufacturing space along with 6.36 million square feet of retail space with a good percentage of that also devoted to fulfillment.

Best Buy believes it is easier for customers to start their buying process online doing research and looking at the many options available in the electronics/technology world before completing the process in the store. The stores allow Best Buy to sell additional products to a customer for a system, arrange delivery and set-up of products, as well as take away an older television or appliance.

The retailers like Williams Sonoma and Best Buy are using physical real estate to boost sales in relation to online business. This is something Amazon has difficulty matching. With an Amazon order for a pair of pants or a new cable modem, customers never walk past belts or high-performance cables to match with their online order they are picking up like they may at Macy's or Best Buy. Also, most people know where the Macy's store is located and it is convenient to their home. They aren't going to locate a giant Amazon warehouse outside of town and pick up their package.

Is E-commerce Really a More Profitable Way to Do Retail Sales?

While it is not as easily quantifiable, it is likely the other retailers are able to fulfill orders cheaper than Amazon. Distribution before e-commerce involved large shipments to warehouses which were moved around with forklifts. Those large shipments were then moved directly to stores. Inventory could be packed very tight and high in the warehouse. Fewer large movements of goods minimized transportation costs.

An e-commerce warehouse does not operate as efficiently. Every inventory item needs to be open and available to people walking around. The warehouse needs more lighting, more parking, and packing goods 20' high isn't useful. Less space is devoted to simply storing and sorting inventory. On top of that, filling one truck to make three stops at various stores in a city is much cheaper on delivery costs than delivering the same amount of goods to 700 individual homes. Prologis, a REIT that leases e-commerce style warehouses, has noted that online fulfillment requires 3x the amount of space as bricks and mortar retailing.

Think of a common example-a sale on closeout DVDs. A retailer fills 5 boxes with 500 DVDs each and sends the boxes on one truck to each of the Dallas Best Buys along with other inventory. The incremental cost to ship the boxes is zero. An employee at each store opens the one box and dumps the DVDs into a basket with a sign that says "All DVD's $5." The time consumed may be 2 minutes and customers will sort through the basket for what they want at no cost to the store.

With Amazon-style e-commerce, every DVD has to be sorted by Amazon employees and held in a manner easy to access. A sale depends on a customer knowingly looking for a DVD of the early Bill Murray movie *Meatballs* or the original *Vacation* with Chevy Chase. There are likely very little impulse buys of these older DVD's through Amazon. So, the sales take longer and consume warehouse space for longer. On top of that, every sale involves packaging each DVD individually in a box and sending it to a customer at his house. There may be 2,500 different packaging and delivery steps with this method. That is going to cost more than the store model.

Looking at the retailing margins for several of these companies, we think these higher fulfillment costs and the need to offer lower prices is translating into lower profit margins for Amazon:

Table 1

Operating Margins

	2015	2016	3Qs16	3Qs17
Macy's	8.6%	7.3%	4.4%	3.2%
JC Penney	1.1%	2.5%	1.1%	0.4%
William Sonoma	9.8%	9.3%	7.3%	7.1%
Best Buy	3.5%	4.7%	4.0%	3.9%
Amazon US	2.2%	3.0%	2.9%	1.7%
Amazon Intl	-2.0%	-2.9%	-2.7%	-5.9%

* Amazon numbers exclude the Datacenter business AWS

Amazon's margins are seeing some pressure from rising rent costs too. As noted above, the company is leasing more and more real estate which is the main reason for the increase in rental expense. It also primarily uses capital leases to pay for technology equipment at its data centers that is unrelated to retail. There are likely some operating leases that cross into the data centers and some capital leases that impact the retail operations. So, we are only taking these lease costs as an indication of a trend, not a hard and fast number.

In addition, part of Amazon's retail sales include third-party sales that largely pay a platform fee to Amazon. In many cases, Amazon does not have to cover the cost of product or fulfillment costs associated with these sales. Plus, retail sales also include Amazon Prime subscription memberships. These payments should result in more sales overall and offset some incremental fulfillment costs. Both platform sales and Prime subscriptions are significant sources of revenue that have little direct cost and thus inflate Amazon's margins. There is nothing wrong with that at all, but comparing the true cost of Amazon's retail model looks even tougher when adjusting for these items:

Table 2

Amazon Adjusted Rent as % of Retail Sales

$ in mm	2015	2016	3Qs16	3Qs17	Last Q16	Last Q17
Rent Exp.	$1,100	$1,400	$1,000	$1,400	$367	$553
Total Retail Sales	$97,416	$120,818	$81,684	$102,148	$28,774	$38,037
3rd-Party Sales	$16,086	$22,993	$15,537	$21,357	$5,652	$7,928
Subscription Rev.	$4,467	$6,394	$4,264	$6,544	$1,532	$2,441
Adj Retail Sales	$76,863	$91,431	$61,883	$74,247	$21,590	$27,668
Rent % Retail Sales	1.1%	1.2%	1.3%	1.4%	1.3%	1.5%
Rent % Adj. Retail Sales	1.4%	1.5%	1.8%	1.9%	1.7%	2.0%

So, in the last quarter, the rent expense to adjusted retail sales jumped 30bp. Look at the retail margins Amazon is posting in the prior table- that is a large percentage of retail operating margins. Rising rent expense may be a serious impediment to profits.

This discussion is not an attack on Amazon, which has several things working for it. It is the largest retail platform and third-parties pay to use it, which is very profitable for Amazon. The company can sell memberships. It also has an ancillary business in operating data centers that is much more profitable and throws off cash flow to support the rest of the company, as shown in Table 3.

Table 3

Amazon Web Service (AWS) Profits

$ in mm	2015	2016	3Qs 16	3Qs 17
Amazon AWS Op. Margin	19.1%	25.4%	25.1%	24.1%
Amazon AWS Op. Profit	$1,507	$3,108	$2,182	$2,977
Total Amazon Op. Profit	$2,233	$4,186	$2,931	$1,979

As JC Penney's CEO noted above, e-commerce allows a company to show inventory to greater numbers of people without investing in higher inventory levels. That is a big positive too. So, Amazon has advantages in some areas, it just doesn't make much money as an actual retailer. That runs counter to what many people believe.

Is It Easier to Turn Physical Stores into E-Commence, or Build a Physical Base Out of E-Commerce?

That is what is going on in our view. This may be the question investors should be more focused upon. Amazon may already have a more expensive fulfillment operation to run, and that may be very difficult to overcome. It is already trying to have people pick up packages in Whole Foods stores, essentially copying what the other retailers are doing.

If Macy's sells clothes online and the customer picks the order up and returns it at the store, not only did the fulfillment cost less for Macy's than what Amazon is currently doing, but also Macy's store may be able to resell the clothes without shipping them back to headquarters again, thus stimulating a new sale from someone else shopping for clothes. Amazon sells almost everything from books to electronics to perfume. Even if Whole Foods becomes a customer center for Amazon sales, Whole Foods is not going to set up an operation to sell one returned open-box television or a biography of Ted Knight. Nor is Whole Foods going to have a replacement item for someone looking for a different watch. We believe that unless Amazon can overcome sending the bulk of items individually to peoples' homes, it will face higher delivery costs than the legacy retailers.

Macy's, Best Buy, and others are using online sales as a way to drive additional sales in the store. They are seeing some success in this area. They are also running some of the online sales through their existing fixed-cost fulfillment models. Thus, incremental sales for the physical store model are more likely to boost profitability. Amazon is trying this type of crossover sales too. Rewards cards are earned by shopping at Whole Foods and can be used to buy more online at Amazon. However, that effectively lowers pricing for Amazon for incremental sales and may still lead to additional expensive shipments to the customer's home.

There are other advantages and disadvantages to both models. Amazon has many people committed to shopping there due to the Prime Membership they purchase each year. Amazon also allows customers to shop for many different categories of items at the same time. No one is going to look for clothes and jewelry at Best Buy or car supplies at Macy's. All the shopping can be done at home and sending gifts may be even easier. And, let's not forget Amazon's other businesses such as the Data Centers which generate billions of cash flow annually. Amazon has a much cleaner balance sheet than many in the retail world and has been growing sales as well. Amazon's debt-to-EBITDA is essentially zero with cash and securities of $24.3 billion, long-term debt of $24.7 billion, and over $16 billion of EBITDA.

The physical store companies have advantages in that they are paying less rent for their stores. We estimate Macy's is paying less than $5/sq foot on the 54% of its stores that it leases and the rest of its real estate is owned. Prologis calculates that the global price of e-commerce logistics space is between $8-$9/sq foot and rising, which is for property that is not near high-population densities like a mall is. Macy's can use real estate in a more flexible manner such as building more fulfillment space in parking lots and even using part of the retail store. Customers know where their stores are. The stores are conveniently located in high-density areas. They have staff, who can educate customers on specialty items like appliances and electronics. Both physical stores and Amazon win from having weaker me-too type retailers vanish, which is currently happening.

Revamping malls and the related real estate has the potential to attract even more people to those locations. Moreover, developers may add apartments, hotels, entertainment, medical office space, other commercial workers, and more e-commerce fulfillment to the area. All of that may result in people being near the physical retailers even more, and picking up items at the store may not even require driving. We think the following discussions on this topic from industry players shows some good promise for the transformation that may be coming:

Bruce Flatt the CEO of Brookfield Asset Management (BAM) spoke of this Forbes in May 2017:

> "We also have the opportunity to reclaim some of the best real estate we know of: department store spaces at our existing properties. As department store companies

rethink their business models, they have been sellers of assets at prices we find attractive. We can integrate these boxes into our malls and redevelop these assets to bring in new tenants, and earn 7% to 10% unlevered returns on cost. Not only are we generating 15% to 20% leveraged returns on incremental capital, but we are also improving the existing centers.

In addition to re-developing department stores for new retail tenants, we also have the opportunity to increase density on the land we own. Regional shopping centers are horizontal assets with large parking footprints, which can allow for great creativity in the redevelopment process. We are finding significant opportunities with continued urbanization to add multifamily residential rentals, condominiums, hotels and office uses to these large pieces of real estate.

Retail real estate has always evolved, and we expect this to continue. Change presents opportunity for those that have the vision, capital, and skills to be able to capitalize on the market change. We plan to be a part of it, as great real estate always wins."

Brookfield is working with Macy's now and the Macy's CFO, Karen Hoguet, confirmed some of the potential in the 4Q16 conference call:

"As you know, we are working with Brookfield on approximately 50 properties to identify redevelopment ideas and get moving on execution. We're very excited about how this partnership could help us to optimize the potential of these properties and potentially many others. Let me just give you two examples of how these could work. First, we have the opportunity to redevelop a 25-plus acre site in a top-ten market. The site enjoys tremendous trade area demographics with household incomes well into the six figures. Underutilized today by our existing store, the site presents an opportunity to once again create a dynamic mixed-use development with a mix of complementary retail, residential, and hotel uses. The potential value creation on the Macy's land from such a development could be substantial.

And the second example is an opportunity where we would participate in a larger redevelopment or densification of a high potential mall in a top-20 market. This mall could be reinvented to become a mixed-use destination, encompassing a mix of uses including retail, multi-family, and again hotel uses. Increasing the density of the site could reasonably add 1 million square feet of additional commercial and residential GLA, creating significant value. Not only would this create value for the site, but would also create beneficial synergies for the ongoing Macy's retail operation."

Another Real Estate Investor, Barry Sternlicht of Starwood, also sees the repurposing of mall real estate into other functions as a great opportunity to drive more sales to healthy retailers and bring in more people who come to the mall for entertainment, gyms, and living. In the Starwood Property Trust 1Q17 conference call, Mr. Sternlicht said:

> “The mall will probably survive much more easily frankly than the strip center, because you have parking, you got visibility, you got access. Everybody knows where it is and it’s going to repurpose itself and you are seeing a lot of restaurants and deals with more entertainment.
>
> We say it, but it happens to be true is what – we have a deal it’s not in here – it’s not in our portfolio, but in Texas, we are putting an Equinox, [indiscernible] kids club, a new movie theater, etcetera, 8 new restaurants and we chew up the GLA and we improve and make it a must-see destination for the local community. And it’s just raised the game for retailers. It just can’t be a passive owner anymore. And that’s our approach to the malls we own and we take the long-term view. So, we don’t think the mall is dying and we just think it’s under CNBC assault. So, it’s got a lot of – it’s fun to talk about everybody shops somewhere, so we talk about – if you [the list of] stores that went bankrupt pre-existence of the internet before it ever existed, it’s as long as the hairs I have lost on my head. So, a lot. So, the Caldor’s, the Bradley’s and my neck of the woods, where I grew up in New England they all went bust. Alexander’s, everybody went bust. So, it is just a constant churn business. It’s the way it is.
>
> And what’s interesting about the mall – the only interesting that’s happening about the mall, I just say about the last comment about value is going to be defensive. But we signed I think 10 deals with H&M in our portfolio and I think 7 or 6 with ZARA. So you are taking little guys out and you are putting big guys in and the credit quality of the big guys is better than the little guys and so the mall is actually changing and becoming, I think in many cases a better credit portfolio than it was in the old days and it’s just interesting, because it’s subtle.”

Conclusions:

We are not forecasting the demise of Amazon in this discussion, nor are we forecasting that all other existing retailers are fine and will prosper going forward. We are noting that

Amazon may have some fairly pronounced disadvantages as a retailer going forward in that it is rushing to add physical real estate that may not be as flexible and costs more than what its competitors already have. The bricks and mortar retailers may be figuring out how to use e-commerce better these days and can do it more inexpensively than Amazon. Also, real estate investors are not going to let valuable assets rot, and are actively working to drive more people for more hours per day to their real estate. This benefits traditional retailers more than Amazon.

The hidden assets at Amazon are known: data centers, subscription fees, monetizing its platform with third-party sales-and the stock is already 140x forward earnings.

The hidden assets at a place like Macy's are not widely known: desirable real estate on the books at 1920s values, dozens of consecutive quarters of e-commerce sales growth, a higher profit margin than Amazon, and deep-pocket investors looking to drive more people to Macy's real estate. That stock is selling for 10x forward earnings.

Transition is happening at both, but maybe the valuations help make the investment decision.

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