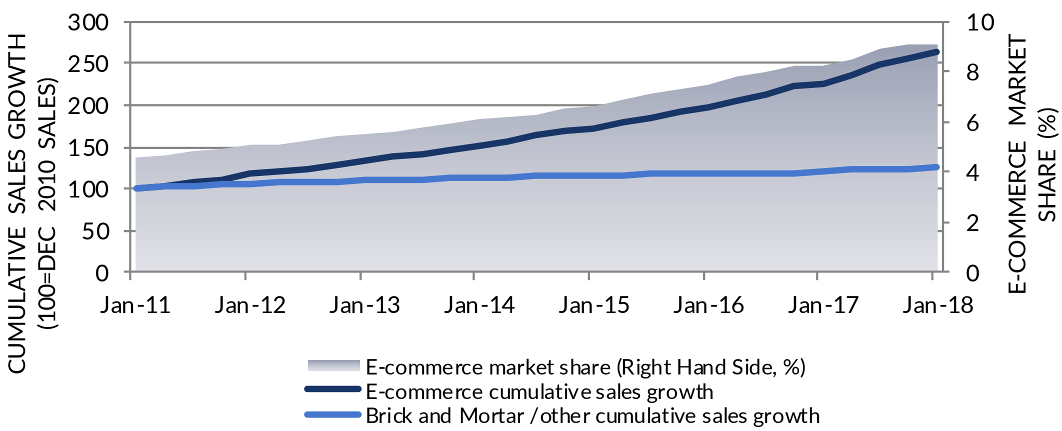
‘Retail Apocalypse’ wreaking havoc on shopping malls across U.S. – but which malls fail is no surprise

- Retail malls have seen significant distress from store closures as part of the ‘Retail Apocalypse,’ leading some malls to be foreclosed or shutdown entirely
- However, which malls fail is not random. The purchasing power of the surrounding community, along with other mall competition, can be a strong predictor of a mall’s ability to avoid distress
- When evaluating U.S. cities with more than 10 retail malls, we found that San Francisco, Chicago, New York City, Seattle and Dallas to be the “strongest” cities for malls. The weakest cities for malls include: Orlando, Las Vegas, Charlotte, Tampa and San Bernardino.
- We use demographic and mall location data to rank which malls are geographically advantaged/disadvantaged – we analyze 18 Atlanta-area malls as a case study to determine the strongest and weakest malls

STRUGGLES OF BRICK & MORTAR RETAILERS WIDELY KNOWN, OUTPACED BY E-COMMERCE SALES GROWTH

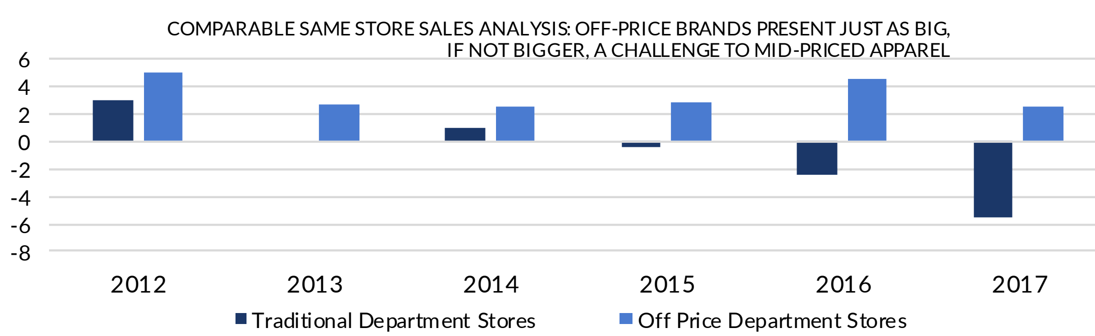
Brick and mortar retailers have faced store closures and declining sales with the rise of e-commerce and a shift away from spending on higher-end and mid-tier apparel. This has led to distress in the retail commercial real estate ("CRE") market, particularly in enclosed malls. While retailers have posted positive growth during the current economic cycle, almost all of that growth has come from e-commerce sales (Figure 1), which has grown 164% cumulatively since 2011. On the other hand, brick and mortar sales have languished, growing only 25% from 2011. Furthermore, the rise in e-commerce sales has been pronounced in apparel, with the e-commerce market share reaching 18% in 2015 and growing at an 11% annual rate in 2015 vs. 2% annual rate for physical stores, according to the Census Bureau, and has likely continued to climb since then. Additionally, of the little growth in brick and mortar apparel, most has come from discount/off-brand retailers who are generally not in enclosed mall locations (Figure 2).

FIGURE 1. E-COMMERCE SALES HAVE GROWN DRAMATICALLY MORE THAN BRICK AND MORTAR IN 2010s



Source: U.S. Census Bureau data as of February 2018.

FIGURE 2. APPAREL IS STILL HOT – JUST NOT AT DEPARTMENT STORES



Source: CreditNtell, Cushman & Wakefield Research as of February 2018.

STORE CLOSURES ARE EXPECTED TO CONTINUE TO TAKE A TOLL ON MALL PERFORMANCE

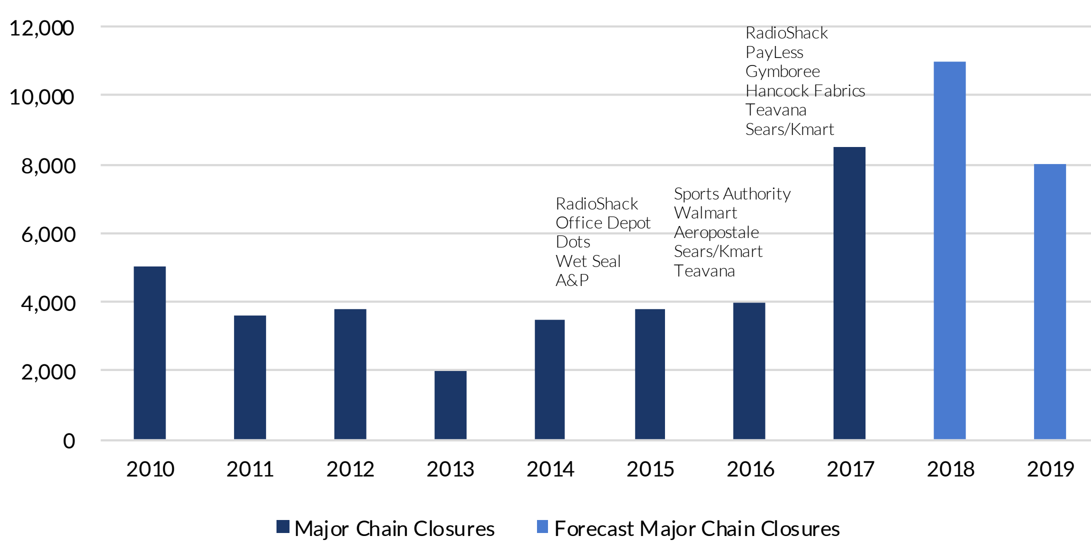
Many mall store operators have already shown distress from the decline in sales, and we expect this trend to continue. Buying online or at discount/off price apparel stores (such as Burlington, Saks Off Fifth, Macy's Backstage, etc.) has taken away sales from large mall-anchor department stores such as JCPenney, Sears, Bon-Ton, Macy's and many mall specialty retailers such as Rue21, Radio Shack, Aeropostale, Payless and The Limited. As a result, retailers have closed thousands of stores in 2017 and this trend is expected to continue in 2018 (Figure 3).

In 2018, this has already been confirmed by the bankruptcy of Toys R Us, which announced it will close all stores on March 15, 2018 (Bloomberg). Department store operator Bon-Ton is also bankrupt and faces a significant chance of closing all U.S. stores as well (Bloomberg).

These store closures and subsequent rental income reductions have caused many malls to face financial distress, often leading to mortgage defaults with large losses and even entire closures in some cases. From 2010-Jan 2017, just in commercial mortgage backed securities (CMBS), 93 malls have defaulted on their mortgages or have been modified, and we expect this number to continue growing (Deutsche Bank, Intex).

However, while some malls have faced these difficulties, many malls, even within the same metro area, have continued to perform successfully. Which malls in a metro will succeed or fail can at times seem random; however, we feel that using robust demographic and geolocation data helps us rank malls overall and in a particularly metro to highlight which malls are most at risk of financial distress.

FIGURE 3. MAJOR CHAIN STORE CLOSURES – 2017 SURPASSED GREAT RECESSION LEVELS



Source: Cushman & Wakefield Research as of February 2018.

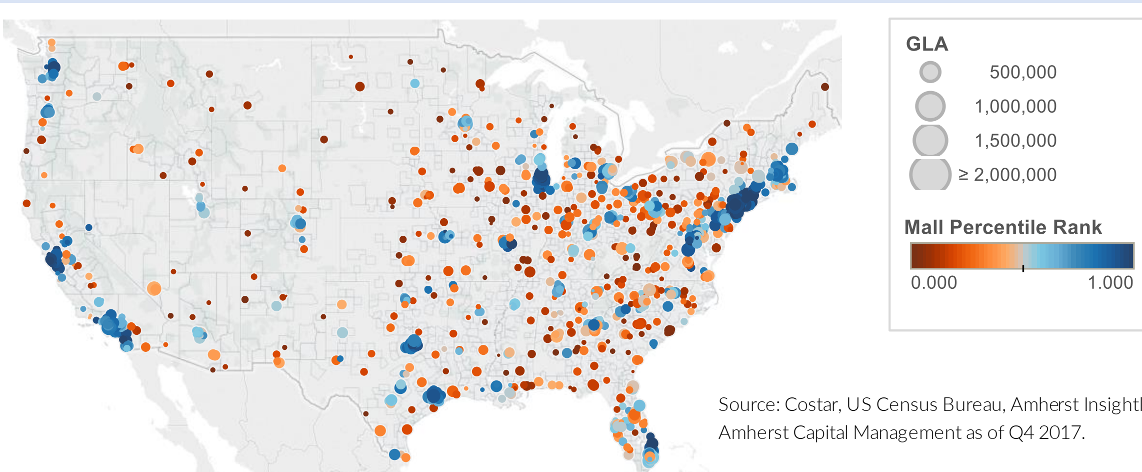
AREA PURCHASING POWER AND COMPETITION CAN BE USED TO WEIGHT MALLS

To determine a ranking system for each mall, we use a Costar dataset of mall properties combined with demographic data for each mall. Malls depend on having sufficient purchasing power, taking into account the size of the population and the amount of disposable income that population has to support sales and traffic at the mall. Malls surrounded by fewer people with lower incomes are most exposed to a decline in demand from ecommerce and discount retailers, particularly if there are better positioned malls nearby. To analyze malls across these metrics, we use census population and income data to estimate the disposable income within 20 miles of each mall, and then divide this by the number of Costar malls within 20 miles to take into account competition. From this data, we arrive to a score for each mall, and then percentile rank the entire mall dataset.

As illustrated in Figure 4, scoring the nation's malls provides a quick relative ranking of malls across the country. The mall score ranking generally favors malls in dense, high income cities versus those in rural areas. This is because many malls in secondary and tertiary locations may not have sufficient population and disposable income to support a mall even if competition is minimal, as even a modest switch to e-commerce can jeopardize a mall. For example, the Rushmore Mall in Rapid City, South Dakota has a ranking of just the 4th percentile due to the relatively small population and income served. Unsurprisingly, the mall has already seen distress through a hope-note (principal forgiveness) modification of its existing mortgage (Trepp). While the percentile ranking cannot capture all features about performance for a specific mall, it can provide a quick relative ranking – however, it does not on its own, indicate that a specific mall will fail.

When evaluating ranking of U.S. cities with greater than 10 malls, we found that San Francisco, Chicago, New York City, Seattle and Dallas are best-positioned. On the other hand, we believe that the weakest cities for malls are Orlando, Las Vegas, Charlotte, Tampa and San Bernardino, Calif.

FIGURE 4. LOCATION SCORING FOR U.S. RETAIL MALLS



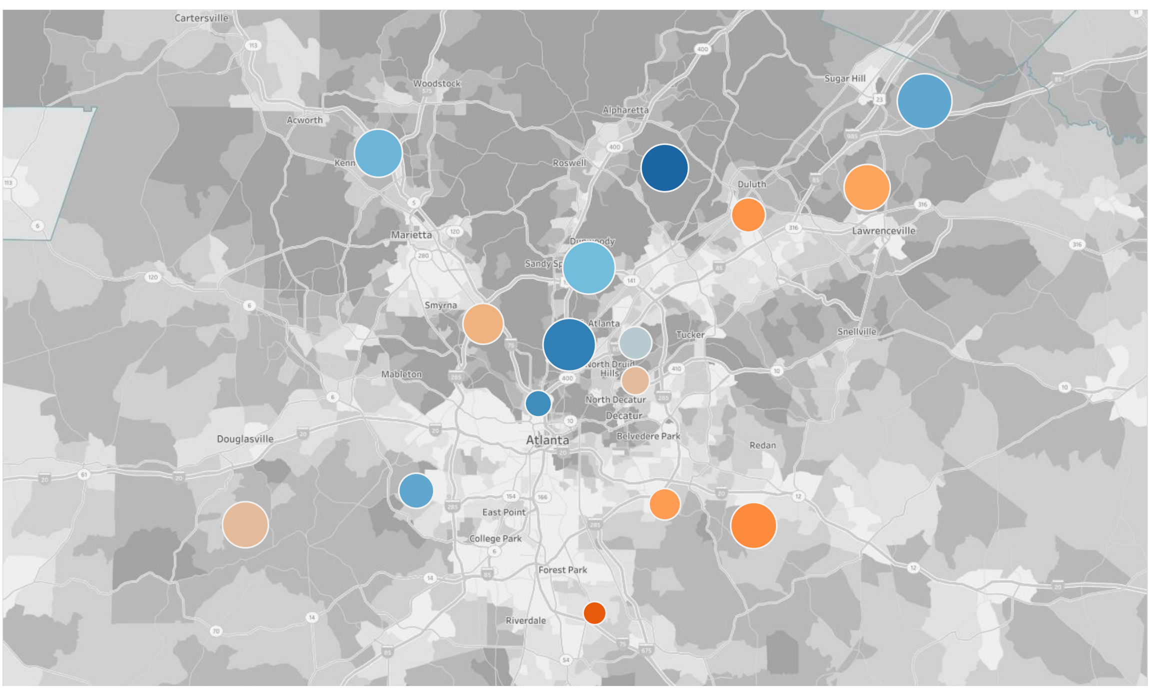
Source: Costar, US Census Bureau, Amherst Insightlabs, Amherst Capital Management as of Q4 2017.

CASE STUDY: ATLANTA'S WORST PERFORMING MALLS HAVE ONE THING IN COMMON – THEY'RE POORLY LOCATED

The mall rankings by demographics are particularly useful to compare malls within a metro area. Beyond the national percentile ranking, it is a negative sign if a mall is the weakest mall within its Metropolitan Statistical Area ("MSA"). To take a closer look at this, we analyze the Atlanta metro area, which has 18 malls according to Costar, with a wide variation in mall percentile rankings based on our system.

A map highlighting the size, location and percentile ranking of each Atlanta mall can be seen in Figure 5. Blue malls indicate a higher ranking, while orange-red malls indicate a lower ranking and higher risk malls based on location.

FIGURE 5. ATLANTA HAS A WIDE VARIATION OF MALL LOCATION QUALITY



Note: Map based on Longitude (generated). Color shows sum of Score Rank Count Percentile. Size shows sum of GLA. Details are shown for various dimensions.

Source: Costar, US Census Bureau, Amherst Insightlabs, Amherst Capital Management as of Q4 2017.

2017 Household Effective Buying Income (median)
- 0 to 32,900
- 32,900 to 41,700
- 41,700 to 50,500
- 50,500 to 65,800
- 65,800 to 501,000

GLA
- 500,000
- 1,000,000
- 1,500,000
- ≥ 2,000,000

Mall Percentile Rank

0.000 – 1.000

The percentile ranking for malls in Atlanta range from 23% to 87% on a national scale, but it is even more valuable to compare the malls within the metro area. Of the 18 malls in Atlanta, seven have experienced distress from either CMBS defaults/modifications or reported sales at distressed valuations. These seven malls all fall within the bottom half of our percentile rankings, highlighting the concern for malls in disadvantaged locations within a city (Figure 6).

For example, the Gwinnett Place mall had a ranking in the 38th percentile due to 12 other malls within a 20 mile radius, despite having a somewhat higher than metro-average $72k median income and serving a smaller portion of the metro's population relative to other malls. This mall was liquidated at a 94% loss from CMBS after facing significant distress (Intex as of Jan 2018). These percentile rankings are somewhat limited by other factors which may have an impact on mall performance. For example, the Cumberland Mall is a lower ranked mall (45th percentile) in our model, but its location is well-positioned at a highway intersection, owned by a higher-end mall operator (GGP), and current CMBS data indicate this particular mall is performing well.

Similarly, having a high ranking alone does not guarantee that a mall will avoid distress if it is poorly managed – one example of this is the Summit Place Mall near Detroit, Michigan, which shut down in 2014 despite its solid geographic location. This risk could increase going forward if the woes of lower-tier malls spread to higher-end malls, which have so far proved more resilient to the decline in brick and mortar retail sales.

FIGURE 6. ATLANTA MALL PERCENTILE RANKINGS

MALL	DEMOGRAPHIC PERCENTILE RANKING (NATIONALLY)	SPONSOR	HISTORY OF FINANCIAL DISTRESS	NOTES
North Point Mall	87%	GGP	No	Paid off
Phipps Plaza	78%	Simon	No	Not in CMBS
Lenox Square	77%	Simon	No	Not in CMBS
Atlantic Station	73%	UNK	No	Not in CMBS
Mall of Georgia	68%	Simon	No	Not in CMBS
Greenbriar Mall	68%	Hendon Properties	No	Not in CMBS
Town Center At Cobb	62%	Simon	No	Performing in WFRBS 2012-C7/C8
Perimeter Mall	61%	GGP	No	Not in CMBS
Plaza Fiesta	52%	UNK	No	Paid off from CMBS in 2016
Northlake Mall	51%	ATR Corinth Partners	Yes	not in CMBS, sold at low value in 2016
North Dekalb Mall	47%	Lennar	Yes	Liquidated in 2014 for 51% Loss
Arbor Place	46%	CBL	No	None (in 2012 CMBS)
Cumberland Mall	45%	GGP	No	None (in 2013 CMBS)
Sugarloaf Mills	40%	Simon	Yes	Loan received 5y maturity extension
The Gallery At South Dekalb	39%	Thor Equities	Yes	Hope Note Modified Loan
Gwinnett Place	38%	Moonbeam Capital (Simon before liquidation)	Yes	Liquidated at 94% loss
The Mall at Stonecrest	35%	Urban Retail Properties	Yes	Loan received maturity extensions
Southlake Mall	23%	Vintage Real Estate	Yes	Liquidated with 65% loss in 2014

Source: Costar, US Census Bureau, Amherst Insightlabs, Amherst Capital Management, Bloomberg as of Q4 2017.

CONCLUSION

Overall, analyzing which malls are best positioned geographically within their metro through demographic analysis can provide insights on which malls are most likely to face distress and which are better positioned to survive the growing distress in retail. Additionally, demographic and geolocation data can be used to analyze retail beyond malls, digging deeper into smaller retail centers such as grocery-anchored retail, which are likely to face similar distress in the coming years as e-commerce growth spreads into new product lines.

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(1) As of September 30, 2017. This amount includes \$4.4 billion assets pertaining to certain discretionary multi -sector fixed income clients of our affiliate Standish Mellon Asset Management Company, LLC ("Standish"), for which certain Amherst Capital employees provide advice acting as dual officers of Standish. In addition, discretionary portfolios with approximately \$386 million are managed by certain of our employees in their capacity as dual officers of The Dreyfus Corporation. AUM includes gross assets managed in the single family equity and commercial real estate strategies, which includes \$244 million and \$28 million of leverage, respectively.

(2) Seed capital Investor. It is not known whether the listed client approves or disapproves of the adviser or the advisory services provided.