The Case for Small Bay Warehouse

CBRE INVESTMENT STRATEGY SERVICES

CBRE

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EXECUTIVE SUMMARY

- Small bay warehouse and industrial facilities (up to 120,000 square feet) are a significant property sector, accounting for over one quarter of all competitive, investable industrial space.
- Institutional investors underweight this segment of the industrial market, as small bay warehouse facilities account for only 9.7% of institutional industrial investments.
- In general, these facilities are more likely to be multi-tenanted, serving a broad mix of tenants in local distribution, construction, light industrial, and service industries. The facilities often have ground level doors, and lower clear heights than larger distribution facilities.
- Local economic activity and population growth are key demand drivers, in contrast to large bulk distribution facilities, which are driven by the path of goods movement.
- Small bay warehouse facilities tend to be located in more densely-populated infill areas and thus benefit from higher barriers to entry and replacement costs. On average, they have achieved above average occupancy rates and market rental growth over the long-term.
- Leases tend to be shorter-term, which allow rents to adjust more quickly to market and new demand conditions. As a result, market rents for smaller spaces tend to be less volatile over the long-term. In addition, small warehouse market rents tend to outperform larger bulk distribution spaces in both periods of economic strength and weakness.
- Small bay industrial facilities are more likely to be held by local or regional private owners and developers; hence ownership tends to be highly fragmented. This presents opportunities in creating economics of scale in property acquisitions and management for larger integrated investment platforms.
- Small bay industrial facilities also benefit from low operating and capital expenses, which generate high cash flow efficiency relative to other property types.
- The historical track record of small warehouse investment performance in institutional portfolios has been favorable. NCREIF investment returns have largely matched overall property returns over the long-term. In addition, the volatility of small warehouse returns (as measured by standard deviation) has been considerably less than average.
- The sector's property fundamentals continue to improve, as limited construction and strong demand have caused market rents to appreciate. We believe small warehouses provide better investment value than bulk distribution spaces at this stage of the real estate market cycle. Small warehouses offer limited construction risk, better prospects for rent appreciation, and higher initial investment yields than bulk distribution warehouses.
- We believe that small warehouses will benefit from a number of significant trends related to the growth of e-commerce. As retailers look to establish same-day delivery options for their consumers, small facilities located near densely populated areas are likely to benefit.

Building Size Classification	Up to 70,000 sf	70,000 - 120,000 sf	120,000 - 250,000 sf	250,000 + sf
No. of Buildings	145,589	5,038	10,448	5,478
Stock (MSF)	3,718	462	1,764	2,571
Availability Rate (%)	7.70	8.30	10.70	11.30
Net Asking Rent ($/sf)	6.67	5.83	4.92	4.14
Rent Growth 1-year %	5.71	7.17	3.58	2.99
Rent Growth 5-years %	17.02	19.96	16.86	15.00
Net Absorption (ann. 2015, MSF)	1,229	504	377	779

*Includes all Owner and Renter designations

Source: CBRE-EA, data as of Q1 2016, except where otherwise noted

MARKET OVERVIEW

MARKET CHARACTERISTICS AND SIZE

CBRE has analyzed the small bay industrial sector, which consists primarily of warehouse facilities of less than 120,000 square feet (sf). The properties are both single and multi-tenanted, and generally consist of an 80% warehouse/industrial component, with the remaining 20% an office configuration. They generally have at grade tenant doors and 16-20 foot clear height. The properties serve a broad mix of local tenants and uses, and are located in a variety of areas, including denser urban/in-fill areas of major cities. For comparative analysis, CBRE has defined the segment as warehouse properties with a net rentable area (NRA) of less than 120,000 sf.

According to CBRE-Econometric Advisors ("CBRE-EA"), the competitive, investable industrial real estate market consists of 14.1 billion square feet spread across the 58 largest markets in the US. The space is distributed across the following sectors: warehouse (65%), manufacturing (22%), R&D /Flex properties (10%), and other non-classified properties (3%). Owner and renter-occupied warehouses less than 120,000 sf account for 3.8 billion square feet, or 43% of total warehouse space and 26% of total industrial space.

INSTITUTIONAL INVESTMENT

Remarkably, while the small warehouse market represents over a quarter of total industrial square footage, it accounts for only 9.7% of institutional industrial investments and only 1.4% of total institutional real estate investment. (Exhibit 1) As a result, institutional investors forego a large swath of the industrial market, which may provide diversification benefits across property and tenant/industry types.

We find that institutional investors have generally shied away from smaller spaces, as leases are often shorter-term, and they perceive that tenant credit may be weaker than leases signed to large retail distributors or third-party logistics firms. However, an increasingly broad number of investors have been attracted to the sector, due to its favorable yields and stable cash flows.

Exhibit 1. Institutional Investment in Warehouses

Property Sector	% of Real Estate Market Value
Apartment	24.3%
Office	36.9%
Retail	23.2%
Hotel	1.1%
Industrial	14.4%
Total	100.0%
Warehouse <= 120k sqft	1.4%
Warehouse >120k sqft	11.7%
Total Warehouse	13.2%

Source: NCREIF, CBRE, 2016Q1

Unlike larger distribution and logistics space, which is held predominantly by REITs, opportunity funds and institutional investors, ownership in the small industrial market tends to be fragmented among smaller private investors or developers. In turn, we believe there may exist significant efficiencies in property acquisitions and management that can be gained from a scalable investment platform that targets smaller properties.

Investors in the small bay warehouse market face less competition for deals from larger funds and REITs due to smaller deal size and lower perceived market liquidity. However, investors are compensated with higher initial yields on investment than are found in bulk distribution space.

In 2015, private investors accounted for two-thirds of individual small warehouse acquisitions, but only 50% of the overall warehouse acquisition market, according to CBRE's analysis of transaction data from Real Capital Analytics

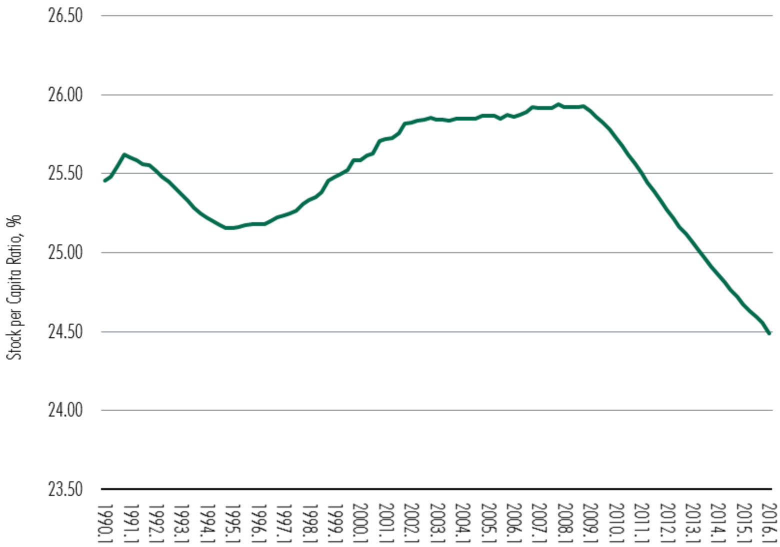
(RCA). Public REIT and institutional investors accounted for a comparably lower share of small warehouse transactions.

ECONOMIC INDICATORS

In addition to economic growth and changes in inventories, we find that population and general economic activity are key drivers of demand for small bay industrial spaces. Many tenants in this sector serve local distribution activities, housing and construction-related industries, light industrial and service-related enterprises. Areas that are considered distribution and logistics hubs (as measured by concentration of space 250,000 sf and greater), also tend to have high concentrations of smaller space.

The development of small industrial spaces has failed to keep pace with overall population growth, which has led to lower than average availability rates and rising rent levels. This has particularly been the case in the aftermath of the Great Recession, as small space development was virtually shut off. As of Q1 2016 there were 24.49 sf per capita of warehouse space less than 120,000 square feet across the 58 largest markets, according to CBRE-EA, down from a peak of 25.93 sf measured at the end of 2008. This recent figure is at its lowest point in the past measurable 25 years. (Exhibit 2)

Exhibit 2: On a Per Capita Basis, Small Warehouse Space at Record-Low Levels



Source: CBRE-EA, Moody's Analytics; Reflects CBRE-EA's Sum of 58 Markets

TENANT MIX

In addition to the potential asset diversification benefits of adding small warehouses to a multi-asset class real estate portfolio, tenant diversification may be a consideration, especially for investors with limited funds to invest in portfolios. Small bay properties are often easy to divide among several users, thereby creating a more diversified tenant rent roll. A higher percentage of smaller properties are multi-tenanted: for industrial properties less than 120,000 sf, 49% of space is multi-tenanted, compared with 38.4% for properties 250,000 sf and greater, according to CBRE-EA.

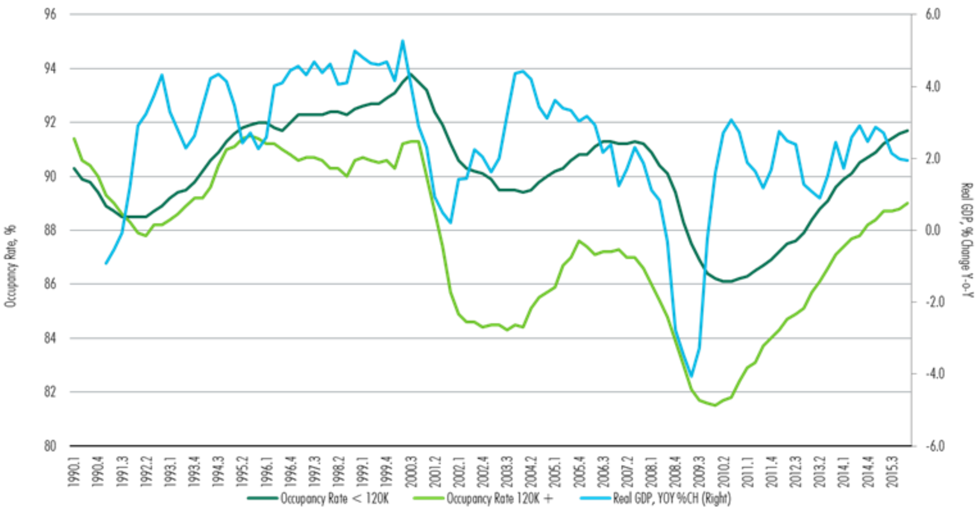
Investors that acquire a portfolio of smaller properties may thereby achieve significantly more tenant diversification than investors in large distribution or logistics spaces. This may be an important factor for portfolio risk management considerations. As we discuss below, this feature contributes to significantly lower volatility in rents and investment returns.

STRUCTURAL INDICATORS

Small warehouse properties also tend to have a number of structural features that make them attractive investments. Many of these smaller properties are located in dense, in-fill areas of major metropolitan areas. Due to higher land values and demise costs in these locations, replacement costs for smaller facilities tend to be higher than bulk distribution facilities, which are often located in suburban areas along major interstates and rail lines. Therefore, high replacement costs for small properties create significant barriers to entry.

As a result, we find that long-term occupancies in smaller warehouse properties are consistently higher over the real estate cycle than larger bulk distribution facilities. (Exhibit 3)

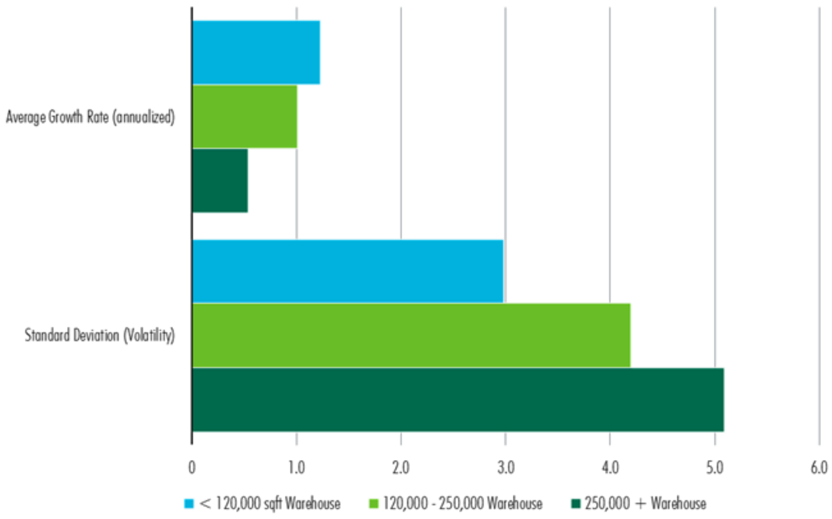
Exhibit 3: Occupancy Consistently Higher in Smaller Buildings



Source: CBRE, CoStar Group, Moody's Economy.com

Due to their consistently higher occupancy rates, smaller warehouse properties are able to achieve higher average rent levels than larger warehouse properties. Over the long-term, small warehouse rent growth has also tended to outpace rent growth in larger properties. In addition, smaller properties have achieved higher rent growth with less volatility, as measured by the standard deviation of growth rates. (Exhibit 4)

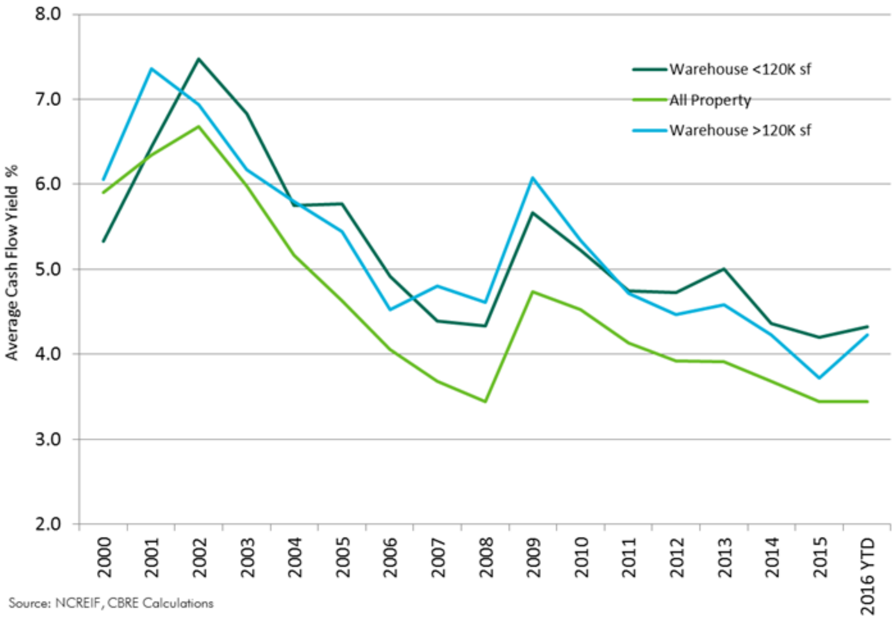
Exhibit 4: Small Warehouse Rents Outperform Over the Long-Run, with Less Volatility



Source: CBRE-EA, reflects averages from 1990.1 through 2016.1

Small bay warehouse facilities also benefit from low operating and capital expenses, which generate high cash flow efficiency to investors. CBRE analyzed historical operating performance measures from the National Council of Real Estate Investment Fiduciaries (NCREIF) for small and large warehouse properties, and the operating performance of all properties in the Council's research database. After adjusting net operating income for common recurring capital items, such as leasing commissions, tenant improvements, and building improvement expenditures, small warehouse properties generated relatively higher adjusted cash flow yield (expressed as a percentage of current market value). Since 2000, this yield for warehouse properties 120,000 sf and less averaged 5.31% per year, slightly better than the average for all industrial properties, and 62 basis points above the average for all property in the NCREIF database. (Exhibit 5)

Exhibit 5: Small Warehouses Provide Superior Cash Flow Yields



Source: NCREIF, CBRE Calculations

LONG-RUN PERFORMANCE

CBRE has identified several favorable long-run performance features of small warehouse and industrial properties. These characteristics are summarized below:

- Demand is often driven by local economic activity and population growth, featuring tenants focused on distribution activities, housing / construction, and business services. This differs from large bulk distribution facilities, where demand is often driven by the path of goods movement, featuring large retail and logistics tenants.
- Leases are often signed for shorter time periods than larger bulk distribution facilities, which allow rents to adjust to market levels more rapidly. In addition, rent rolls are often more diverse, due the fact that properties are more likely to be multi-tenanted.
- Over the long-term, market rents for smaller spaces tend to grow at higher rates and with less volatility than larger spaces.
- Such outperformance is related to smaller space's higher long-run occupancy rates and limited construction activity.
- While the small industrial segment is exposed to national economic factors including changes in economic growth, industrial production, and inventories, rents tend to be less volatile over the economic cycle. In fact, CBRE has found that market rents in smaller warehouse properties tend to outperform large spaces in both times of economic strength and weakness. (Exhibit 6)

Exhibit 6: Small Warehouse Outperforms in Periods of Economic Strength and Weakness

Average Net Asking Rent Growth, Quarterly Year-Over %Change		
Period of:*	Warehouses < 120,000 sf	Warehouses 120,000 sf +
Strong Growth	1.63	0.79
Weak Growth	0.56	-0.63
Strong growth: quarters where real GDP growth is one-quarter standard deviation above its mean		
Weak growth: quarters where real GDP growth is one-quarter standard deviation below its mean		

Source: CBRE, CoStar Group, Moody's Economy.com

In addition, the long-run investment return characteristics of small warehouses are favorable:

- CBRE examined the long-run investment performance of different warehouse size classifications and major property sectors in the NCREIF database. Five-year rolling average investment returns were calculated on an annual basis beginning with the five-year period ending Q4 1990.
- Across the various holding periods, total returns for warehouses less than 120,000 sf averaged 7.83% (annualized), close to the overall NCREIF Property Index (NPI) average of 7.99%.
- However, the small warehouse sector has the lowest overall volatility, as measured by the average standard deviation of five-year holding period returns, of the major property sectors since 1990.
- As a result, the small warehouse sector has enjoyed a superior return-to-risk ratio to the overall NPI index and has matched the ratio for large warehouses. It has lagged only the apartment and retail sectors, which have experienced a high degree of cap rate compression in recent years.
- Given the low volatility of returns and favorable cash flow characteristics, the small warehouse sector is suited to investors seeking low-volatility, and high current income from their commercial real estate portfolio.

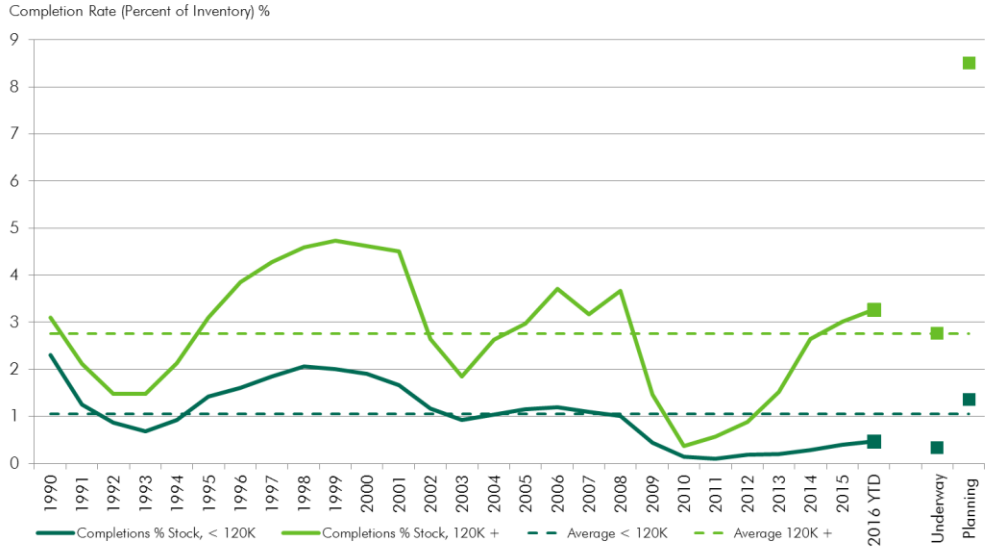
RECENT FUNDAMENTAL PERFORMANCE

CBRE believes the property fundamentals of the small warehouse sector continue to improve considerably, offering investors better current prospects for income and capital appreciation than bulk warehouses and certain other commercial property sectors. New construction activity remains low, while improving demand is causing market rent growth for small spaces to accelerate.

Construction in the warehouse sector continues to be focused on larger spaces and bulk distribution facilities. In contrast, construction in the small warehouse market has been constrained, both currently and during the past market peak of 2008. As illustrated by Exhibit 7 below, building completions as a percent of inventory for small warehouse spaces remain well below their pre-recession peak and long-term average. There is also limited space currently under construction or in the planning stage.

The same cannot be said of the larger warehouse market (spaces over 120,000 sf), where building completions as a percent of inventory are now above their long-run average and are closing in on their pre-recession peak. In addition, the planning pipeline for larger spaces is quite active, as speculative activity is now taking place in the bulk distribution market. A significant 8% of space inventory in this category is currently in the planning stages, according to CBRE's analysis of the Dodge Construction Analytics database. (Exhibit 7).

Exhibit 7: Large Warehouses Account for a Majority of New Construction and Planning Projects



Source: CBRE, CoStar Group, Dodge Construction Analytics

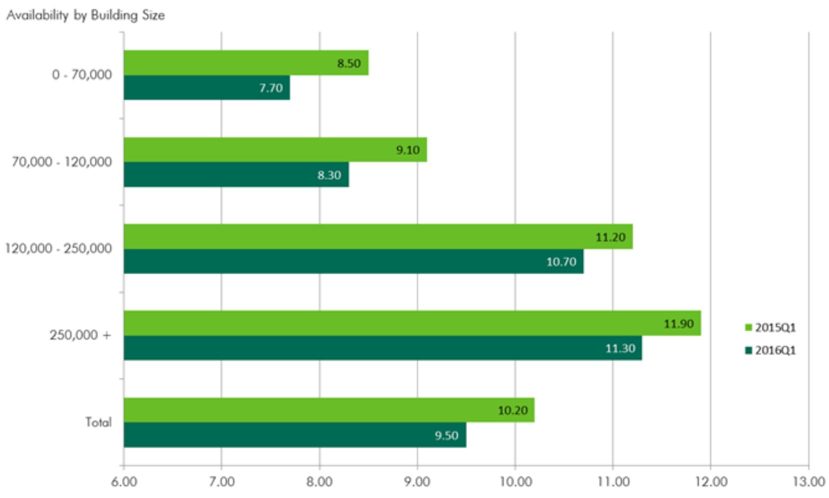
Demand for small warehouse spaces remains quite favorable, as increased economic activity has helped lift prospects in a number of light industrial and service activities that support demand for small bay warehouse space. Furthermore, the housing and construction industries have witnessed a strengthening recovery in recent months. In particular, housing starts were up 9% over year-earlier levels in May 2016, a sign that demand for housing continues to expand.

CBRE-EA net absorption estimates indicate that one-third of the total increase in warehouse demand in 2015 came from the small warehouse segment of the market for space less than 120,000 sf.

Recent leasing activity has also been concentrated in small spaces. According to CoStar leasing counts, 57% of leases signed in 2015 were for industrial spaces smaller than 15,000 square feet. Since smaller buildings tend to house smaller tenants, we believe that there are tenant diversification benefits from smaller spaces. For instance, only 4% of the leases signed in 2015 were to tenants that occupied spaces 200,000 square feet or larger.

Following the growth in demand, availability in the small bay warehouse sector is dwindling. The largest declines in availability, according to CBRE-EA, occurred in two segments of the small warehouse sector: less than 70,000 sf and 70,000 to 120,000 sf, which have both seen availability rates decline by 80 bps over the past year. These declines exceeded the fall in the national availability rate over the same period by 10 bps. (Exhibit 8)

Exhibit 8: Small Warehouse Availability Falls Below Market Averages



Source: CBRE-EA, CoStar Group

Falling availability and a lack of new supply in the small warehouse sector is pushing rents upward at a higher than average pace. The 70,000 to 120,000 sf segment overall has generated quite favorable rental growth, outpacing bulk distribution (greater than 250,000 sf) by 418 bps over the past year with a 7.17% year-over-year growth rate, according to CBRE-EA. The smaller space category (those spaces less than 70,000) have also seen strong growth, as rents have increased by 5.71% over the past year, outpacing bulk distribution space by 272 basis points.

CURRENT INVESTMENT PROSPECTS

The investment potential of smaller warehouse space appears better than larger spaces at this point of the real estate cycle:

- The cyclical positioning of the small warehousing sector's fundamental leasing and demand-to-supply characteristics is much better than larger logistics and distribution space. Construction remains constrained, in contrast to larger distribution space, where speculative construction is taking place. Availability rates are lower and have been declining rapidly. Rents for smaller spaces are also rising at faster rates due to strong growth in demand. Due to the fact that smaller spaces tend to have shorter lease lengths and respond more rapidly to changing market conditions, we believe there is greater potential upside to property net operating income growth over the near term.
- In addition, smaller warehouses offer higher initial yields, or capitalization rates, than larger logistics spaces. We believe that there exists a premium for properties and portfolios held outside of institutional portfolios. Cap rates can range 6.5-9% on small warehouse/industrial product, compared with a 4.0-5.5% average for class-A distribution facilities.
- For investors that are concerned about sales transaction volume and liquidity, the sector has witnessed positive investment momentum over the past several years. According to Real Capital Analytics, the volume of individual warehouse sales transactions 120,000 sf or less has risen threefold over the past four years, topping $12.1 billion in 2015.
- Given small warehouses' higher cap rates and prospects for stronger income growth over the near term, it is our view that they may offer better relative investment value than larger bulk distribution facilities at this point of the cycle.

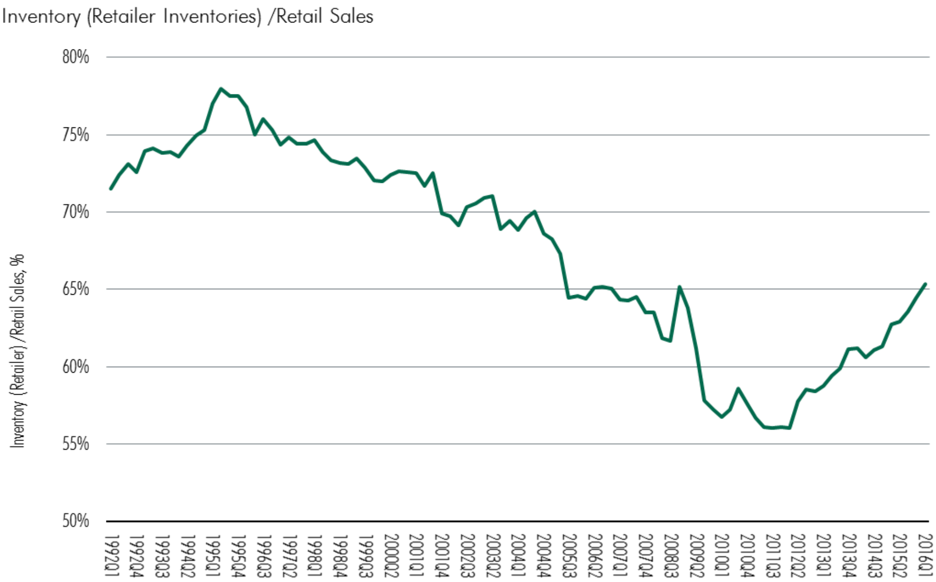
OUTLOOK

We believe there are certain "game changing" trends underway that could help boost the investment performance of small industrial spaces. These include developments in e-commerce, service of "the last mile" of customer distribution, and reverse logistics.

E-COMMERCE AND INVENTORIES

Internet retailing is creating a shift in inventories back to warehouses. Last year, 7% of retail sales were online, compared to 3.9% in 2009 according to US Census Bureau data. Inventory levels have been rising faster than retail sales since 2011. The retailer's inventory to retail sales ratio has increased from 56.0% in Q2 2011 to 65.3% as of Q1 2016. (Exhibit 9 below). E-retailers are forced to keep more inventories on hand to satisfy increasing demand for shorter delivery times which have shortened to as little as one hour.

Exhibit 9: Retailers Are Holding More Inventories to Satisfy E-Commerce Demand



Source: Federal Reserve Bank of St. Louis, CBRE

THE LAST MILE

Retailers have struggled to serve the "last mile" of distribution, or that which is closest to their customers. Last mile distribution centers are generally a smaller type of facility, where inventory holding times are much shorter. Location is the most critical component for these properties. As online retailers have added same day delivery to their service lines, fulfilment centers and local service centers need to be positioned within a short drive time from each other. Retailers in major cities such as Dallas, Chicago, and New York have already adopted these strategies. Other metropolitan areas are likely to follow this trend in order to maintain a competitive e-commerce infrastructure.

Trends in online shopping have shifted towards the millennial generation - aged 21-34 - along with those earning over $50,000 annually. Estimates suggest this pool of online shoppers could total 24 million people. According to CBRE's 2015 market analysis, twenty four of forty four industrial submarkets were deemed favorable for owners with twenty being favorable for occupiers.

REVERSE LOGISTICS

Lastly, reverse logistics creates additional demand for well-located warehouse spaces. Reverse logistics is the process of removing unsold or damaged goods from stores or receiving them from customers and either repackaging them for distribution or disposing of them.

In 2015, $290 billion of sales were returned in the US and Canada, which accounts for 8% of total retail sales. E-commerce return rates were as high as 30%. The reverse flow of inventory can cost retailers up to 4.4% of their total revenue each year, ample reason to maximize the efficiency of processing returns.

The opportunity with this trend is in the potential for improvement or expansion of supply chain networks, which includes the addition of warehouse and distribution centers. Third party logistics facilities are poised to benefit from these benefits as companies look to outsource their reverse logistics to maximize efficiency.

CONCLUDING COMMENTS

The small bay warehouse sector is a significant portion of the overall industrial market, accounting for close to one-quarter of all competitive industrial space, according to CBRE estimates. Small warehouse properties tend to serve a broad mix of tenants connected to local construction, light industrial, and distribution activities, offering investors the ability to diversify significantly across industry and tenant type.

We believe that small warehouses offer several structural features that are attractive to investors. Firstly, since many small properties tend to be located in dense, infill areas of major metropolitan areas, they benefit from higher replacement and demise costs, which create greater barriers to entry than those in the bulk distribution market. Secondly, long-run occupancy and rent growth for smaller warehouse spaces has been higher. Thirdly, small warehouse market rents are less volatile, and they tend to outperform larger spaces in both periods of economic expansion and weakness.

Overall, the investment track record of small warehouse space has also been good: over the long-run, average investment returns have nearly matched the overall property average, but with less volatility. Small warehouses generate high cash flow efficiency, as the sector benefits from lower capital expenditures for tenant improvements, leasing commissions, and building improvements.

We believe that smaller warehouse spaces are poised to offer better investment value at this point of the real estate cycle. Cap rates on small warehouse space remain much wider than those for Class A distribution space, while the prospects for further gains in occupancy and rent appear greater, due to the lack of new building supply entering the market. As leases in smaller spaces roll to higher market rents, we believe that may investors in small warehouses could achieve higher growth in net operating income than what would be achieved for bulk distribution space.

Furthermore, there are several important trends related to e-commerce that could also influence the growth in demand for smaller warehouse space. In particular, the need for online retailers to service their customers with same day delivery options is likely to increase demand for nearby infill distribution spaces. The rapid growth of e-commerce and reverse logistics will also force retailers' supply chains to evolve, creating opportunities for a variety of flexible, well-located warehouse facilities.

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The team works closely with CBRE-Econometric Advisors ("CBRE-EA"). The CBRE-EA platform and team of analysts provide a rigorous approach to commercial real estate data analysis, modelling, forecasting for five property types across all major US and Canada markets. Combined with the transactional knowledge and the local market research expertise of CBRE, the Investment Strategy team provides access to an unmatched research platform. The Investment Strategy team leverages its data and this research platform to provide directional advice, insightful decision making and ultimately enhanced investment performance. The core client base for ISS includes institutional advisors, plan sponsors, opportunity fund managers, and insurance companies.

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