



Investor Appetite for Cold Storage

Investors' interest in industrial real estate has grown significantly as a result of strong market fundamentals and growth in e-commerce sales. Furthermore, this demand growth has pushed industrial cap rates to historically low levels, often pricing buyers out of gateway U.S. markets. As a result, investors are looking towards secondary markets and alternative industrial assets to garner additional yield.

Given attractive supply and demand fundamentals, cold storage is emerging as a favorite alternative industrial asset class for investors. More specifically, according to CoStar data, cold storage sales figures have continued to rise with \$560 million in sales of refrigerated and cold storage space in 2016, \$783 million in 2017 and \$963 million in 2018. ⁽¹⁾

What is Cold Storage?

Cold storage distribution facilities typically serve as an intermediary between farmers and food production facilities, which are more specialized facilities that process and handle food at the initial stages of preparation, and companies that sell food directly to consumers, such as grocery stores and online food delivery platforms. Furthermore, while production facilities focus on food preparation, distribution warehouses focus on providing storage, product handling, and logistics services for large food companies that are focused on serving the end user: the consumer.

According to CBRE, cold storage distribution facilities are typically measured by cubic feet, are cross-docked and feature clear heights of 40 to 60 feet. The high clear heights represent the need from users to maximize the space of the facility in order to increase the number of pallet positions available. According to JLL, due to the complexities and expenses involved in developing cold storage facilities, development costs often reach \$150 to \$170 per square foot compared with \$50 to \$65 per square foot for typical, non-refrigerated distribution facilities. ^{(2) (3)}

1) Lou Hirsh. "US Cold Storage Demand to Heat Up in Next Five Years." CoStar, July 2019.
2) "2019 U.S. Food on Demand Series: Cold Storage Logistics Unpacked." CBRE, June 2019.
3) "US Cold Storage Demand Expected to Heat Up in Next Five Years." SVN, June 2019.

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Supply & Demand Review

Demand Fundamentals

Changes in consumer preferences for online food delivery and fresh food are driving increased demand for cold storage facilities. First, online grocery sales are growing as consumers become more accustomed to ordering groceries online given the additional convenience online ordering provides relative to driving to traditional grocery stores. Currently, online grocery sales only account for about 2% of the grocery market. However, Nielsen expects this number to grow to 13% by 2020. Grocers like Walmart, Kroger and Whole foods are starting to invest into the online marketplace, which is driving demand for cold storage industrial product. Additionally, meal kit delivery services like Amazon Fresh, BlueApron, and HelloFresh are driving increased demand for cold storage facilities. ⁽¹⁾

Secondly, consumers' food preferences are shifting towards fresh and organic food products. More consumers are avoiding frozen foods prepared with preservatives in an effort to eat healthier. Consumers are seeking more "farm to table" options, consisting of more fruits and vegetables, and less processed food. With a need to ship more fresh food across the country, demand for cold storage space is expected to continue to rise.

Supply Fundamentals

From a supply perspective, as of 2019, the cold storage sector comprises 3.6 billion cubic feet, which represents approximately 214 million square feet of cold storage space across the U.S. Historically, new construction has been limited due to higher development costs relative to other industrial sectors and the specialized nature of the facilities. With that said, due to significant demand growth, the sector has witnessed a mismatch between supply and demand. According to CoStar, the vacancy rate for the sector was near 4% in June 2019. ^{(1) (2)}

Developers are expected to increasingly capitalize on the supply shortfall as demand continues to grow. According to CoStar, the total size of the cold storage industry may grow as much as 50% over the next five years. Cities with excellent transportation infrastructure, particularly those with accessible ports such as Los Angeles and New York, in addition to midwestern farming towns, are expected to benefit the most from future cold storage development. Additionally, considering the average age of cold storage warehouses in the U.S. is approximately 34 years, according to CBRE, the increased need to store fresh food products is expected to drive an increased demand for newly constructed, modern cold storage facilities that can refrigerate substantial quantities of fresh food products. ^{(1) (2)}

1) Lou Hirsh. "US Cold Storage Demand to Heat Up in Next Five Years." CoStar, July 2019.

2) "2019 U.S. Food on Demand Series: Cold Storage Logistics Unpacked." CBRE, June 2019.

Major Players

Major Cold Storage Industry Players

The cold storage industry is currently relatively concentrated at the top levels of the industry as two companies comprise more than half of the total market share based on occupied space. Lineage Logistics, who occupies over 1.3 billion cubic feet in Canada and the United States has a market share of approximately 32% while Americold Logistics occupies 29% with approximately 900 million cubic feet. The next closest competitor is United States Cold Storage, Inc., who occupies a little under 10% of the North American market share, and the remainder of the competitors occupy just under 5%. ^{(1) (2) (3)}

The cold storage industry market is clearly dominated by the two largest players. As a result of consolidation through M&A strategies, the large companies that dominate the market will continue to benefit from economies of scale. For example, Lineage Logistics acquired Preferred Freezer Services which helped secure their top position in the market based on total cold storage space. Americold Logistics acquired Cloverleaf Cold Storage for \$1.24 billion. The deal will boost Americold's market share with the addition of 132 million cubic feet of storage space in 22 facilities. ⁽⁴⁾

Top 10 North American Cold Storage Providers

Rank	Company Name	Cubic Feet (Millions)	# of Properties
1	Lineage Logistics	1,300	200
2	Americold Logistics	918	155
3	United States Cold Storage	270	38
4	XPO Logistics Inc.	175	400
5	VersaCold Logistics Services	118	31
6	Interstate Warehousing	100	7
7	Cloverleaf Cold Storage	76	17
8	Burriss Logistics	75	15
9	Henningsen Cold Storage	60	12
10	Midwest Refrigerated Services	46	7

1) "IARW North American Top 25 List of Refrigerated Warehousing and Logistics Providers." Global Cold Chain Alliance, March 2019.

2) 2019 U.S. Food on Demand Series: Cold Storage Logistics Unpacked." CBRE, June 2019.

3) Company filings and press releases to estimate the potential impact from M&A activity.

4) "Americold Agrees to Acquire Cloverleaf Cold Storage." Transport Topics, April 2019.

Conclusion

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Considering increasing valuations for Class A, industrial distribution facilities are pricing many investors out of the sector, investor capital is expected to be deployed in alternative asset classes that may offer higher yields, such as the cold storage sector. Furthermore, the sector is expected to benefit from attractive supply and demand fundamentals as growth in online grocery sales and increasing demand from consumers for fresh food are expected to drive significant demand growth for the cold storage sector.

In addition to attractive demand outlook, supply has failed to meet the needs of demand in recent years as highlighted by falling vacancy rates. Furthermore, supply growth has historically been limited, primarily due to the higher development costs and specialized nature of the facilities, which is currently resulting in a mismatch in supply and demand for the sector. While developers will likely look to capitalize on this opportunity, supply growth typically takes years to come to fruition. As a result, the current mismatch between supply and demand is expected to provide an opportunity for rental growth in the sector over a mid-term horizon.

Additionally, the cold storage sector may offer a counter-cyclical investment strategy. The sector generally benefits from an inelastic demand curve as demand for food products typically remains consistent regardless of the state of the economy. The steady demand through economic cycles may aid in mitigating asset valuation risk for the sector as occupancy and rental rates should remain relatively consistent. As a result, the non-cyclical nature of the sector is expected to draw increased investor interest, particularly considering the length of the current real estate cycle relative to historical trends.



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