

Research, updated August 2022

Long-term demand drivers behind logistics real estate

The logistics sector was the pandemic recession's winner – but is its rise built to last?

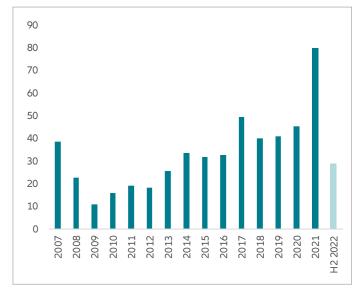
The logistics sector has come out of the COVID-19 recession more sought-after than ever. The European logistics sector had an outstanding 2021: investment volumes reached record levels, almost doubling year-on-year (Figure 1); yields continued to decline to historic lows with transacted cap rates recorded 60 bps below the office sector. As a result, INREV fund-level logistics returns has posted a five-year annualized return of 17.2% (Figure 2). This outperformed all other sectors, including residential (13.3%) and office (7.5%).

Macroeconomic and geopolitical developments since the start of 2022, however, represent headwinds to last year's bullish outlook. The situation in Ukraine disrupted global recovery and international trade, which had already taken a big hit from the pandemic. Shifting consumer spending from retail towards services and deteriorating household purchasing power due to high inflation levels have slowed down the pandemic-driven e-commerce boost. Furthermore, given historically low logistics property yields, the rise in real government yields since the start of this year implies repricing risk for the sector.

Despite these near-term headwinds, however, the European logistics sector's secular long-term demand drivers persist. As further yield compression is unlikely in the current environment, future returns will be driven by rental growth. Supply fundamentals are healthy with the European logistics vacancy rate at 3.3% in Q1 2022¹, an all-time low. Development costs are rising amid spiking construction costs and higher interest rates, slowing down new supply. Long-term demand drivers remain in place, supported by an even greater importance on near-shoring of supply chains after Russia's invasion of Ukraine. As a result, rental growth in the logistics sector is expected to outperform other property sectors in Europe. Understanding logistics' long-term demand trends is therefore more important than ever.

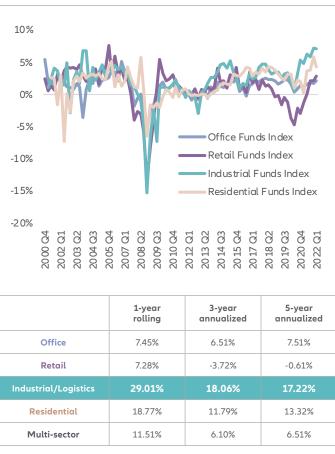
1 Green Street, Industrial Insights: Frugal Consumer = Slower Ecommerce Growth, July 2022.

Figure 1. Europe industrial investment volume (billions)



Source: Real Capital Analytics; as of Q2 2022, Preliminary results.

Figure 2. INREV fund-level returns



Source: INREV (Q1 2022).

Acceleration of e-commerce

The rise of e-commerce has resulted in more complex global supply chains. Logistics now has more diverse space requirements than before. New necessities include e-fulfilment centers and parcel hubs, as well as sorting and delivery centers of varied sizes and locations. Facilities must be able to handle a greater product variety, easy returns, higher sales volatility, and lower space efficiency of parcel shipping.

The pandemic hastened ten years of e-commerce adoption into just a few months.2 Even though some of the boost proved to be transitory, there are lasting impacts on consumer preferences. Lockdowns expanded online penetration of new product categories, such as online groceries and home improvement products. The pandemic also forced adoption by older age cohorts: 70% of Baby Boomers who bought groceries online in France from mid-March to mid-April 2020 were first-time buyers.3 As a result, global e-commerce sales continued to rise in 2021, reaching US\$3.1 trillion by the end of the year, marking a ca. 140% increase in five years. Global online penetration rose from 9% in 2016 to 20% in 2021.4 CBRE estimates that annual global ecommerce sales will rise by USD 2.2 trillion to USD 5.2 trillion by 2026 which will require 160-200 million square feet of additional e-commerce dedicated logistics space.⁵

The pandemic marked a tipping point in Europe's e-commerce adoption (16.3%)⁶ which has typically lagged the U.S. (ca. 20%)



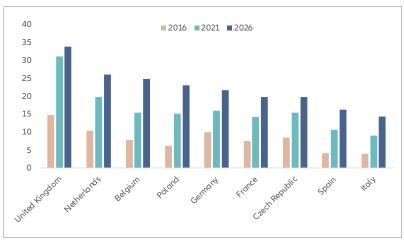
³ Statista, E-commerce and corona: first-time online buyers France 2020, 2021 (https://www.statista.com/statistics/1111384/online-grocery-shopping-coronavirus-generations-population-france/).



and Asia Pacific regions (South Korea >40%; China >25%).⁷ Across Europe, divergent e-commerce penetration offers many different opportunities (Figure 3). Most European countries are below the e-commerce penetration rates seen in Asia, and therefore would need more logistics space. Advanced ecommerce markets such as the UK and the Netherlands have been forerunners at the adoption of innovative solutions such as instant grocery delivery. Given that online penetration has exceeded a certain threshold with the help of the pandemic, online shopping will grow faster in laggard countries and new solutions will be more easily adopted going forward.

7 Europe refers to simple average of nine countries covered by CBRE forecasts.

Figure 3. Europe e-commerce penetration



Source: CBRE; as of Q2 2022.

⁴ CBRE, Global E-commerce Outlook 2022, 2022.

⁵ Europe refers to simple average of nine countries covered by CBRE forecasts, data as of Q2 2022.

⁶ CBRE, Global E-commerce Outlook 2022, 2022.

The impact of e-commerce demand is visible on logistics leasing activity. E-commerce share in take-up doubled in 2016 and remained high ever since making up around a quarter of overall logistics demand (Figure 4). The pandemic has proved this relationship even stronger. Despite significant downturn in industrial production and international trade, logistics take-up in Europe increased concurrently with the fast rebound of e-commerce sales driven by lockdowns and pent-up demand (Figure 5).

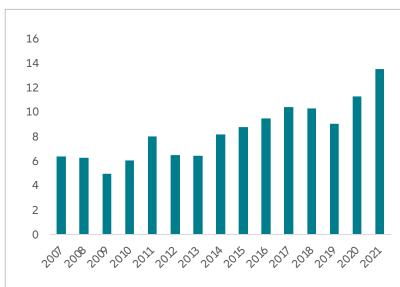


Figure 4. Europe logistics take-up by tenant type



Source: PMA, Spring 2022.

Figure 5. Europe logistics take-up (million square meters)



Credit: VGP Source: PMA, Spring 2022. Aggregate of 26 city markets.

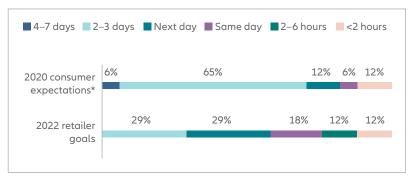
Increased importance of urban locations

Demand for urban logistics space will rise as delivery times continue to compress. Fast and reliable delivery provides a significant competitive advantage to retailers. A survey published in March 2021 shows that retailers have ambitious delivery targets for the near future exceeding what consumers are currently asking for (Figure 6). Improvements in delivery speed will require significant supply chain investment towards end-consumers.

A social focus on sustainability and new technologies will also reinforce the trend towards urban logistics. An MIT study found that adding an urban fulfilment center in a given market cut transportation emissions in half compared to out-of-town distribution. Moreover, cities offer wider opportunities for the use of electric vehicles, autonomous vehicles, drones, and green delivery options, such as bike couriers.

Dense European cities have scarce available land and many zoning restrictions, and so will require innovative approaches to logistics. There are a few viable solutions to accommodate more industrial space within densely populated cities. Multi-story warehousing, already used in Asia, may become more popular in Europe if the necessity for last-mile facilities and land values remain high. (New vertical last-mile logistics hubs include G Park London Docklands and Paris Air2 Logistique.) Alternatively, mixed-use buildings with logistics included may provide a compromise that opens up new locations.

Figure 6. Delivery speed: Consumer expectations and retailer goods



Source: McKinsey, Retail speaks. Seven imperatives for the industry, 2021. Figures may not sum to 100%, because of rounding.

⁹ MIT Real Estate Innovation Lab, Retail Carbon Footprints: Measuring Impacts from Real Estate and Technology, 2020



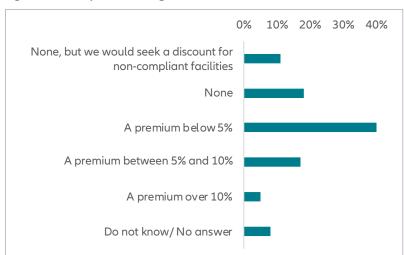
⁸ PWC consumer survey published in in June 2021 finds fast and reliable delivery ranked as the most important attribute of online shopping globally (41% of respondents).

Focus on ESG performance

Strong demand for ESG performance will lead to green building rental premiums. This is especially true in Europe: the region has stringent regulations, higher consumer sensitivity, and ambitious corporate sustainability targets. According to a survey published in June 2022, 78% of occupiers have a net-zero target. Consequently, occupiers value considerations for space is affected by properties green qualifications. 63% of survey respondents state that they are willing to pay a premium for a green-certified property whereas 11% say they would ask for a discount if the facility does not have a green certification (Figure 7).

Germany, the government is supporting a company called Clean Logistics that converts heavy diesel trucks to hybrid hydrogen power. Warehouses will need to accommodate new requirements that come with these changes. For example, charging points for electric vehicles or easy access to hydrogen filling stations could become essential.

Figure 7. Rental premium for green warehouses



Source: CBRE and Analytiqa, "European Logistics Occupier Survey 2022".

Europe's eco-friendly warehouses are setting new standards from design to construction and operations. Many new developments are designed to be carbon neutral with renewable energy sources such as solar panels and onsite wind turbines. Further innovative solutions include using rainwater to irrigate green spaces and clean interiors are also being tested.

Future-proofing assets to meet ESG expectations will require a holistic approach. Other parts of the supply chain will need to be transformed to make them more sustainable. For example, delivery vehicles are expected to electrify rapidly as more lowemissions zones are introduced in Europe. Similarly, there are efforts to decarbonize freight transport by using hydrogen as a fuel. In



¹⁰ CBRE and Analytiqa, European Logistics Occupier Survey 2022, 2022.



Credit: PicMyPlace

Shifting needs in supply chains

Vulnerabilities of global supply chains were laid bare by the disruptions caused by the Covid-19 pandemic and have now been amplified by the war in Ukraine. The automobile sector alone was forecast to lose US\$210 billion in revenue due to semiconductor shortages in 2021. A McKinsey study has shown there have been more frequent and severe supply shocks in recent years: disruptions lasting a month or more now occur every 3.7 years on average. As a result, companies may lose more than 40% of a year's profits every decade.

After the invasion of Ukraine, companies are thus under pressure to improve the resilience of their supply chains through re-shoring/near-shoring and to hold higher inventory levels closer to the centers of production or consumption. In Europe, Green Street estimates a modest

change away from just-in-time would require 5-10% more industrial space.¹³ Some early examples of supply chain diversification are evident in semiconductor manufacturing in Europe.

Against the backdrop of rising labour and transportation costs, logistics building costs (rent and service charges) are constrained representing less than 10% of total operating costs. ¹⁴ This increases the rationale for re-shoring/near-shoring and could present opportunities for Central and Eastern European countries once the geopolitical tensions are resolved. With accelerating automation, this trend could mitigate challenges of higher wages and tight labor supply, and thus spread across additional regions in Europe.

¹¹ AlixPartners, Shortages related to semiconductors to cost the auto industry \$210 billion in revenues this year, says new AlixPartners forecast, 23 September 2021 (https://www.alixpartners.com/media-center/press-releases/press-release-shortages-related-to-semiconductors-to-cost-the-auto-industry-210-billion-in-revenues-this-year-says-new-alixpartners-forecast/).

¹² McKinsey, Risk, resilience, and rebalancing in global value chains, 2020.

¹³ Green Street, Industrial: Supply Chain Disruption Beneficiary, 18 November 2021.

¹⁴ CBRE and Analytiqa, European Logistics Occupier Survey 2022, 2022.



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