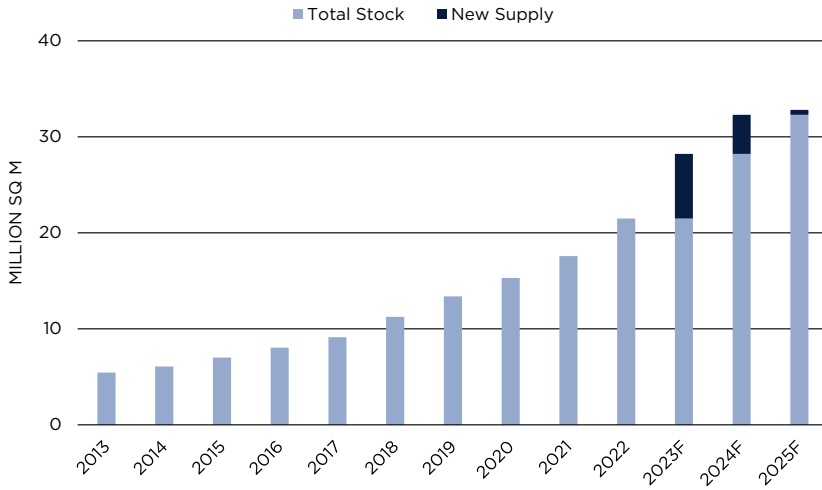


Korea Logistics



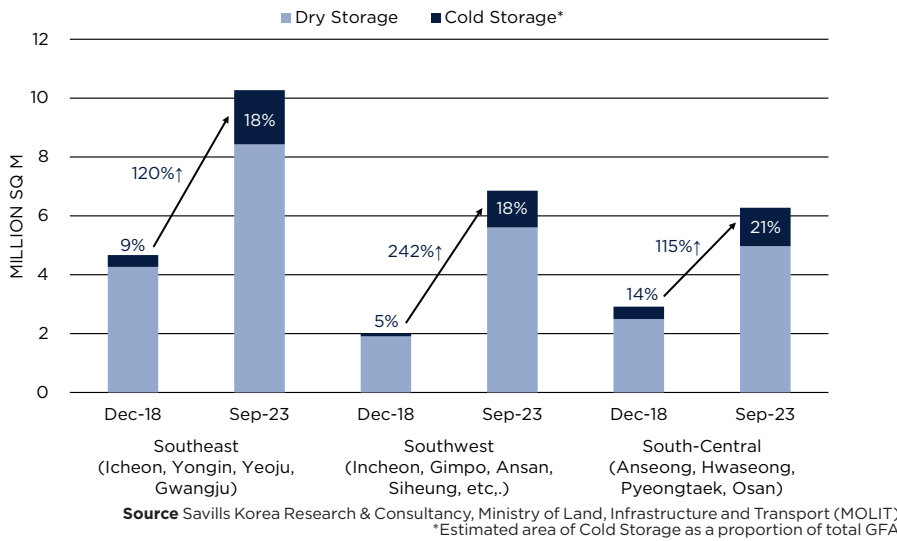
The surge in new supply is projected to taper off after reaching a peak in 2023

GRAPH 1: Total Stock and Future Supply in SMA, 2013 to 2025(F)



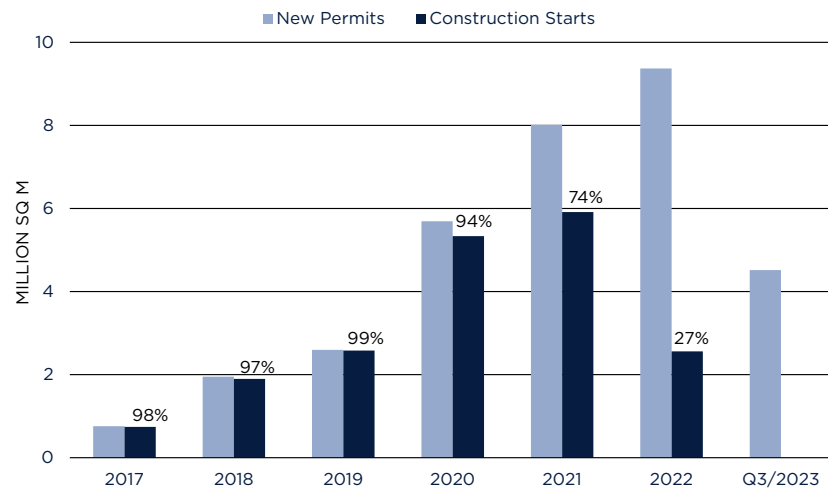
Source Savills Korea Research & Consultancy, Ministry of Land, Infrastructure and Transport (MOLIT)
Note Based on Logistics Centers with GFA > 16,500 sq m in SMA; excludes area which has not yet started construction as of Sept 2023.

GRAPH 2: Stock Breakdown by District, December 2018 vs September 2023



Source Savills Korea Research & Consultancy, Ministry of Land, Infrastructure and Transport (MOLIT)
 *Estimated area of Cold Storage as a proportion of total GFA

GRAPH 3: New Permits and Construction Starts in SMA, 2017 to September 2023



Source Savills Korea Research & Consultancy, Ministry of Land, Infrastructure and Transport (MOLIT)

SUPPLY

The surge in online shopping and a corporate presence in the retail and distribution sector has led to a significant increase in the construction of logistics centers since 2020. In the Seoul Metropolitan Area (“SMA”), the annual number of permits for logistics centers with a GFA exceeding 16,500 sq m averaged 26.5 between 2013 and 2019. However, from 2020 to 2022, this figure rose to 119, an increase of 4.5 times. This accelerated development resulted in the SMA’s logistics area expanding to 3.9 million sq m in 2022 and further escalating to 4.28 million sq m in the first three quarters of 2023, nearly three times the average annual figure of 1.4 million sq m recorded in the SMA between 2013 and 2021.

As of Q3/2023, logistics centers exceeding 16,500 sq m in the SMA totaled 25.76 million sq m of GFA (488 units) – about five times larger than the cumulative supply of 5.44 million sq m at the end of 2013. Furthermore, the growth of the fulfillment industry has led to an enlargement in logistics center size, with the average GFA increasing from 35,100 sq m in 2013 to 51,700 sq m in 2023, marking a growth of approximately 47%.

Around 2020, heightened demand for fresh produce including beverages, groceries, and meal kits, coupled with the expansion of early morning delivery services, led to a notable increase in both the supply and demand for mixed and cold storage facilities. This heightened demand for logistics centers drove greater investment and development, leading to a surge in land prices in favorable locations. To optimize high-cost development projects, investors and developers leaned towards developing mixed or cold storage facilities for relatively higher rents. Consequently, this trend has resulted in an oversupply of cold storage facilities, particularly in the southwest, where the total GFA of new cold storage facilities is approximately 12 times larger than it was five years ago.

However, over the past two years, a surge in construction delays has occurred due to escalating construction costs, benchmark interest rates, and risks associated with project financing. Analysis of permits and construction starts for GFAs exceeding 16,500 sq m in the SMA from 2017 to September 2023 indicates that while most projects permitted in 2020 began construction, only 74% of projects permitted in 2021 commenced construction, with a further decline to 27% in 2022. Considering the average 6 to 8 months from permit issuance to construction initiation, a significant decrease in construction starts has been observed since 2022. In the event of a rebound in real estate project financing

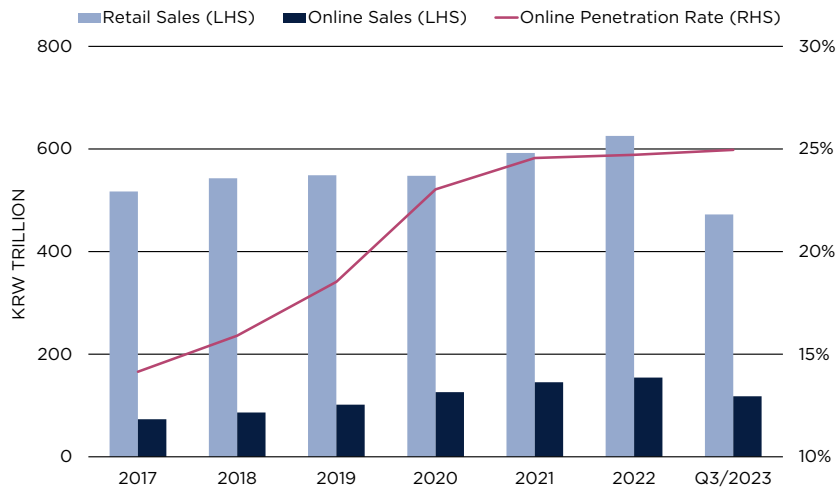
leading to successful fundraising initiatives and project commencement, it is expected that new supply in 2024 will resemble that of the previous year. However, persistent construction delays and a declining trend in the number of permits suggest that new supply will follow a downward trajectory after 2025, ultimately finding a supply and demand equilibrium.

ONLINE RETAIL

Between January and September 2023, online retail sales reported by Statistics Korea reached KRW117.9 trillion, marking a 3.4% increase compared to the same period in

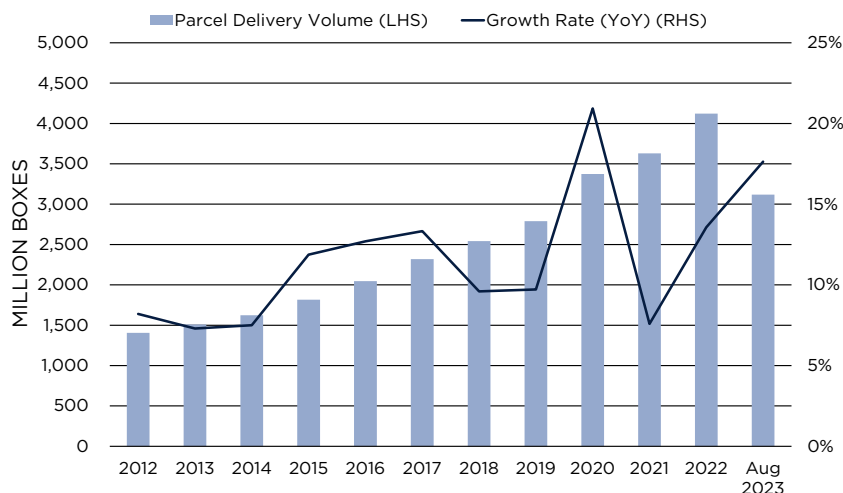
With robust growth in online retail sales and the expansion of quick-commerce in the open-market sector, the imbalance between supply and demand is expected to be gradually addressed after 2025.

GRAPH 4: Online Sales Penetration Rate, 2017 to September 2023



Note Online retail excludes goods not associated with logistics facilities, such as travel, transportation, leisure, culture, etc. **Source** Statistics Korea

GRAPH 5: Parcel Delivery Volumes, 2013 to August 2023



Source Ministry of Land, Industry and Transport, Korea Integrated Logistics Association

2022. Despite the rebound in offline shopping due to relaxed social distancing measures, the overall growth rate of total retail sales during this period was a modest 1.8%, highlighting that online retail sales outpaced overall retail sales growth. Although online retail sales posted an average annual growth rate of 16.1% from 2017 to 2022, there has been a noticeable recent slowdown. The online penetration rate, indicating the proportion of online retail sales to total retail sales, has remained consistent since reaching 24.6% in 2021.

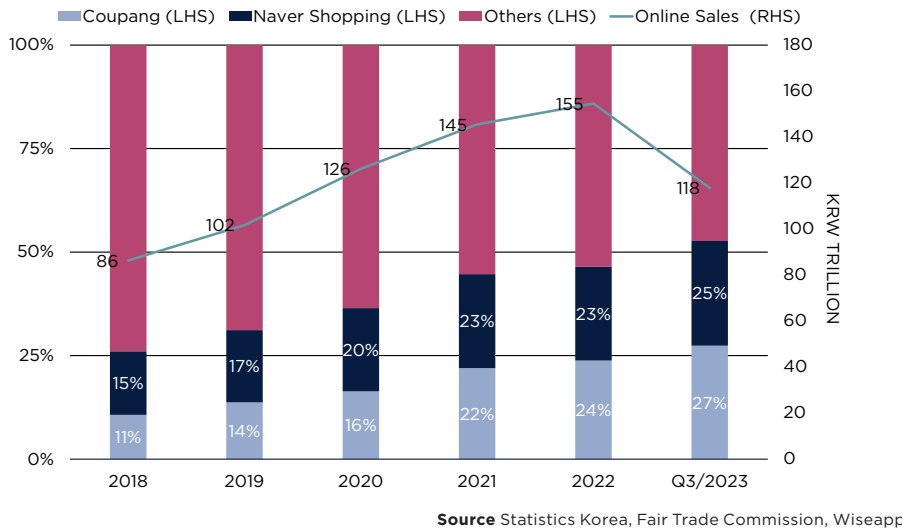
The online retail market, which saw rapid expansion during the COVID-19 lockdowns, is now displaying signs of slowing down. Regardless, parcel volume continues to exhibit double-digit growth. Data from the Korea Integrated Logistics Association demonstrates that domestic parcel volume saw a 21% annual growth rate in 2020, during the surge in contactless consumption due to COVID-19, compared to growth rates ranging between 7% and 15% pre-pandemic. The total volume of parcels from January to August 2023 reached 3.12 billion boxes, averaging about 400 million per month. This suggests that individuals use services 7 to 8 times monthly, considering national population. The significant growth in parcel volumes, surpassing the slower growth of online retail sales, is primarily attributable to the increase in online small-item sales.

Consequently, the demand for fulfillment logistics centers, responsible for handling the receipt, storage, dispatch, and delivery of goods, persists due to the ongoing growth in online retail sales and small-item deliveries. E-commerce companies are implementing diverse strategies to expand their market share in the online retail sector, especially optimizing fulfillment networks for prompt delivery services.

DEMAND FROM ONLINE RETAIL

The sustained expansion of the online retail market is primarily driven by leading e-commerce platforms, such as Coupang,

GRAPH 6: Market Share of Leading Online Retailers, 2018 to September 2023



Naver Shopping, SSG, 11Street, Kakao Shopping, and others. According to a 2022 press release by the Fair Trade Commission, Coupang and Naver Shopping held dominant market shares, with 24.5% and 23.3%, respectively. Together, they accounted for almost half of the total online retail sales based on transaction value.

Coupang, holding the largest market share, has not only focused on expanding its e-commerce operations but has also invested substantially in the logistics market through the development of logistics centers and involvement in master lease agreements. Recently, Coupang launched the 'Rocket

Growth' delivery service, facilitating same-day or next-day deliveries for open market sellers by utilizing Coupang Logistics Services ("CLS"). The parcel volume market share of CLS surged from 12.7% in 2022 to 24.1% by the end of August 2023, indicating notable growth in both the online shopping and logistics sectors.

In contrast, Naver Shopping partners with logistics companies like CJ Logistics, Fassto, and Ourbox have begun to offer a 'Guaranteed Arrival' delivery service. This service entails Naver's logistics partners pre-storing products from open market sellers and delivering to consumers on preferred dates.

As a Naver Fulfillment Alliance member, CJ Logistics has strengthened its logistics infrastructure and delivery services to compete with the rapid growth of Coupang's logistics subsidiary, CLS. CJ Logistics has established new fulfillment logistics centers in Majang-myeon and Janghowon-eup in the Icheon area, dedicated to efficiently supporting the Guaranteed Arrival service. Moreover, CJ Logistics has launched the integrated delivery service 'O-NE,' providing various guaranteed arrival services including holiday delivery, next-day delivery, and early morning delivery.

Despite concerns of potential oversupply in the logistics market, e-commerce companies continue to experience substantial growth, posing a threat to major offline distribution firms. A growing trend involves collaboration between e-commerce players and third-party logistics (3PL) operators to enhance overall logistics services. Swift and distinctive delivery services are recognized as crucial competitive advantages in the e-commerce, logistics, and parcel industries. To cultivate customer loyalty through rapid delivery, companies are prioritizing securing storage space to hold products in advance and establishing cutting-edge fulfillment infrastructure which seamlessly integrates with online platforms. As swift delivery services expand in open market distribution channels, we anticipate consistent demand for leased logistics centers. Given the noted slowdown in the supply of new logistics centers, the gap between supply and demand in the logistics market is expected to narrow gradually, possibly after 2025.



For more information about this report, please contact us

Savills Korea

Crystal Lee
 CEO
 South Korea
 +82 2 2124 4163
 csjlee@savills.co.kr

Savills Research

JoAnn Hong
 Senior Director
 South Korea
 +82 2 2124 4182
 jhong@savills.co.kr

Simon Smith
 Regional Head of Research
 & Consultancy, Asia Pacific
 +852 2842 4573
 ssmith@savills.asia