

# Japan Logistics



# Demand remains firm, but the industry faces many challenges

## Summary

- In Greater Tokyo, high levels of new supply continued to exceed demand, and vacancy rates rose 2.1 percentage points (ppts) year-on-year (YoY) to 4.4%. That said, demand remains firm and vacancies are moderate in Tokyo.
- The Greater Osaka market was slightly more stable than Greater Tokyo, and the balance between supply and demand was tighter, owing to few new completions in 2022. As such, vacancy is still relatively low and only saw an increment of 0.9ppts, reaching 2.4%.
- Rents in Greater Tokyo declined 3.6% half-year-on-half-year (HoH) and 2.4% YoY, and are now at JPY4,510 per tsubo.
- Rents in Greater Osaka increased by 1.4% YoY but saw a contraction of 4.5% HoH, and now stand at JPY4,220 per tsubo.
- Investment levels in 2022 slightly lagged those of the previous year. Although demand was strong among both domestic and international investors, an increase in construction costs and interest rates led some investors to reconsider development and acquisitions in the logistics sector.
- New supply in 2023 is forecast to exceed the significant levels seen in 2022 in both the Greater Tokyo and Greater Osaka markets. This wave of new supply will further intensify competition for tenants. As such, poorly located and older facilities will struggle with vacancies.
- Japan faces chronic labour shortages in the logistics sector, and the cost of labour has risen significantly over the past few years. New regulations on delivery drivers in 2024 are likely to worsen this. Logistics firms operate on tight margins, and this may cap rental growth going forward.

## INTRODUCTION

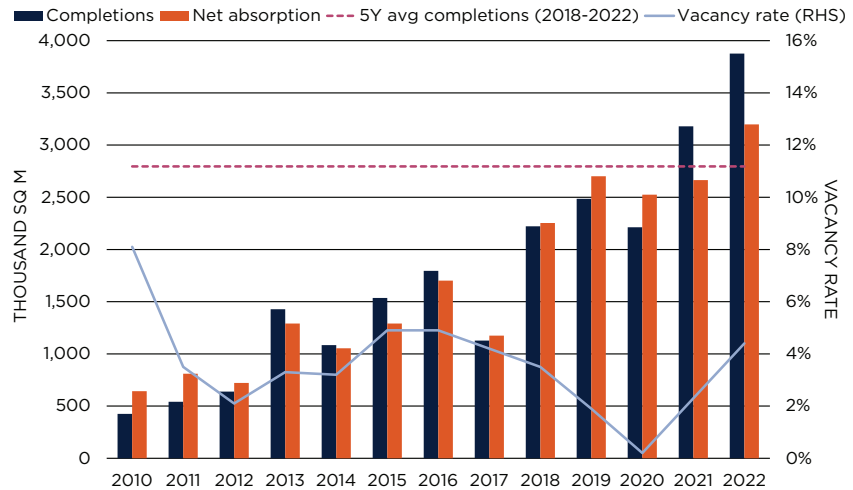
Interest in the logistics sector has persisted over the past half-year, and both development and transaction activity have remained strong. That said, the market appears to be entering a period of transition, and there are some concerns that the previously tight balance between demand and supply has already started to loosen. Although vacancies in Greater Tokyo<sup>1</sup> and Greater Osaka<sup>2</sup> remain moderate overall, average rents experienced a contraction over the past half-year. Furthermore, some existing facilities

<sup>1</sup> Greater Tokyo is defined as the region which consists of Tokyo, Kanagawa, Chiba, and Saitama  
<sup>2</sup> Greater Osaka is defined as the region which consists of Osaka, Kyoto, Hyogo, and Nara

are reportedly struggling with vacancies, and pre-leasing activity has been sluggish in several new developments.

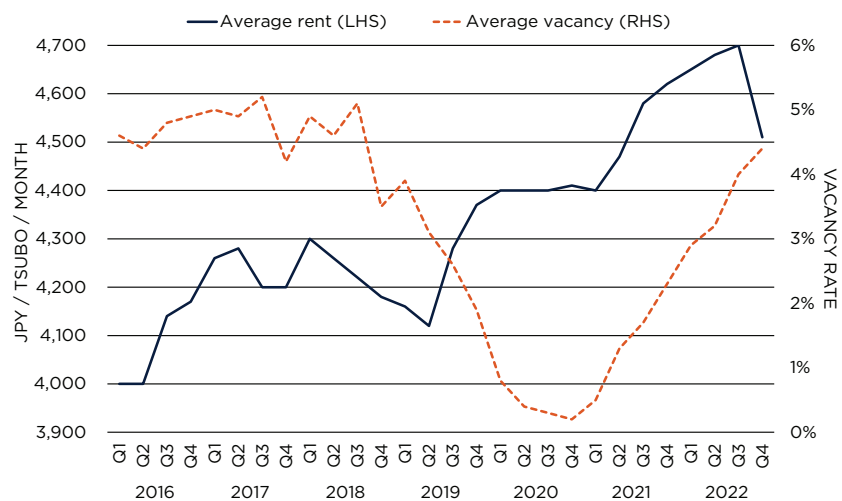
Indeed, a wave of new supply is forecast over the next few years in both submarkets, and competition for tenants will increase, which is likely to contribute to some upward vacancy movement and revisions in rents. Meanwhile, structural factors also look set to affect confidence in the logistics sector. The ongoing labour shortage continues to increase labour costs for logistics companies, while the increase in construction costs and interest rates are forcing some investors to reconsider acquiring

**Graph 1: Supply, Net Absorption and Vacancy in Greater Tokyo, 2010 to 2022**



**Source** Ichigo Real Estate Service, Savills Research & Consultancy  
**Note** Annual periods from February to January. Vacancy rates are as of the year end for each annual period, while the rate presented for 2H/2022 is as of January 2023.

**Graph 2: Greater Tokyo Rent vs Vacancy, Q1/2016 to Q4/2022**



**Source** Ichigo Real Estate Service, Savills Research & Consultancy  
**Note** Annual periods from February to January.

land for development as well as logistics facilities for the meantime.

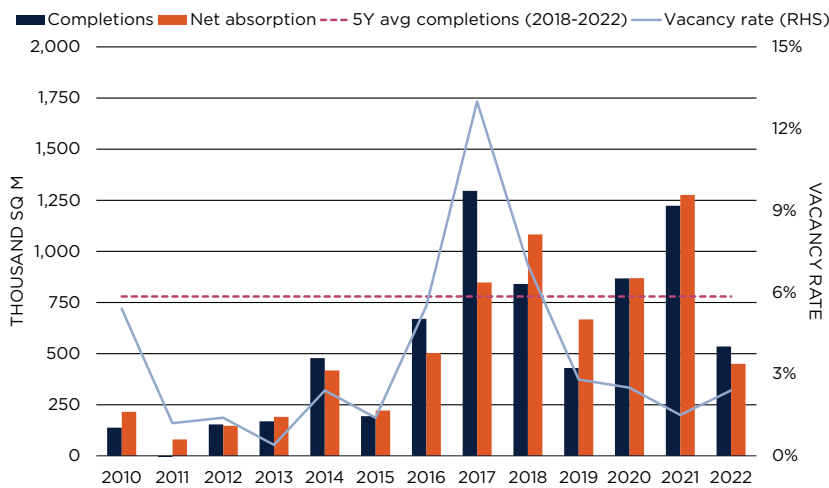
Nonetheless, the fundamentals in the sector are still strong, and tenant demand will likely persist due to the strong growth potential of the e-commerce industry. Hence, the outlook should remain positive overall for the logistics market going forward.

**MARKET TRENDS**

2022 saw a large supply of new logistics facilities come to the Greater Tokyo market, and this pace of completions is forecast to continue in 2023. However, supply continues to outpace demand and the absorption of new supply remains an issue in Greater Tokyo. As such, vacancy has risen further to 4.4% in 2H/2022, up by 2.1 percentage points (ppts) year-on-year (YoY). Although the appetite for logistics space remains high overall,

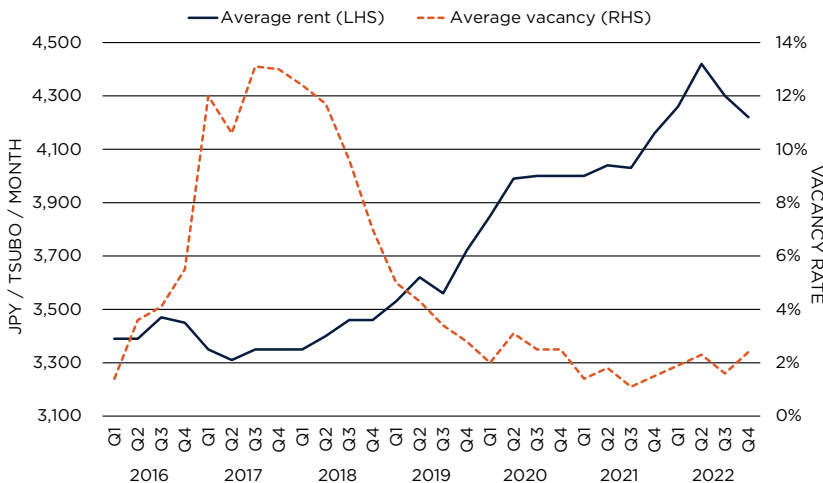
**As the e-commerce industry continues to expand, the demand for logistics services remains strong. However, a combination of substantial upcoming new supply and cost pressures on tenants due to inflation and labour shortages make rental growth increasingly difficult. Interest rate increases also threaten to soften yields, and investors might look to other sectors for opportunities.**

**Graph 3: Supply, Net Absorption and Vacancy in Greater Osaka, 2010 to 2022**



Source Ichigo Real Estate Service, Savills Research & Consultancy  
 Note Annual periods from February to January. Vacancy rates are as of the year end for each annual period, while the rate presented for 2H/2022 is as of January 2023.

**Graph 4: Greater Osaka Rent vs Vacancy, Q1/2016 to Q4/2022**



Source Ichigo Real Estate Service, Savills Research & Consultancy  
 Note Annual periods from February to January.

pre-leasing has been weak in some new facilities, and potential tenants are becoming increasingly selective. Nevertheless, vacancy remains on the lower end of the spectrum and demand is strong overall.

Asking rents declined over the past half-year, dropping to JPY4,510 per tsubo in 2H/2022, a contraction of 2.4% YoY. Throughout the pandemic, demand has been strong and vacancy was low, largely due to the rise of e-commerce in Japan. However, anticipating further increments in demand, there was a rush of development activity, creating greater competition for tenants throughout 2022. The large new supply scheduled for completion in 2023 is likely to further distort the balance between demand and supply, and although well-located properties with modern facilities will likely remain popular, vacancies may persist elsewhere, particularly in properties with poor accessibility and high rents.

The Greater Osaka market has been stable over the past half-year and has continued to perform well relative to Greater Tokyo. The balance between supply and demand remained tight, with few completions taking place in the latter half of 2022. Meanwhile, many new multi-tenant facilities in Greater Osaka were fully occupied upon completion, and many existing vacancies have been filled over the past half-year. That said, overall vacancy rates experienced an increment in Q4/2022, up 0.9ppts YoY to 2.4%. Indeed, large levels of new supply are forecast for completion in the coming years in Greater Osaka, which may bring about some new vacancy trends going forward.

Average asking rents in Greater Osaka have increased by 1.4% YoY to JPY4,220 per tsubo, and demand appears to be stable. However, with the upcoming expansion of

the Shin-Meishin Expressway, more locations will become suitable for developing new facilities, and a large uptick in new supply is predicted for after 2024. Hence, the market may see rental revisions in coming periods as the greater supply brings greater competition for tenants. Furthermore, this may redirect some demand away from less modern and poorly-located units, exacerbating regional and property-level disparities.

**INCOMING SUPPLY**

In Greater Tokyo, the pace of completions remained consistently high, with nearly 2.2 million sq m of new logistics space introduced to the market in the second half of 2022, bringing the 2022 total to around 3.9 million sq m. Daiwa House made the most significant contribution to this new supply over the past half-year, adding an aggregate 530,000 sq m to the Greater Tokyo market,

while the GLP ALFALINK Nagareyama 5 and 6 facilities by GLP Japan were the largest completions of significant scale<sup>3</sup> this year with an aggregate GFA of 234,000 sq m.

Meanwhile, Prologis completed its 161,000 sq m Prologis Park Yachiyo I in Chiba in September 2022, and due to strong tenant demand, Prologis is also aiming to develop another facility, the 93,000 sq m multi-tenant facility Prologis Park Yachiyo II, on the adjacent site in 2023. The largest upcoming development in 2023 will be the ESR Ogishima Distribution Centre in Kawasaki, which will deliver a GFA of 365,000 sq m. The facility is located very close to Tokyo bay, and will benefit from convenient connections to central Tokyo. While development activity was significant in 2022, Greater Tokyo looks to welcome a record 4.3 million sq m of new supply in 2023. These include developments by Daiwa House, GLP Japan, and Prologis, among others, several of which will be over 100,000 sq m.

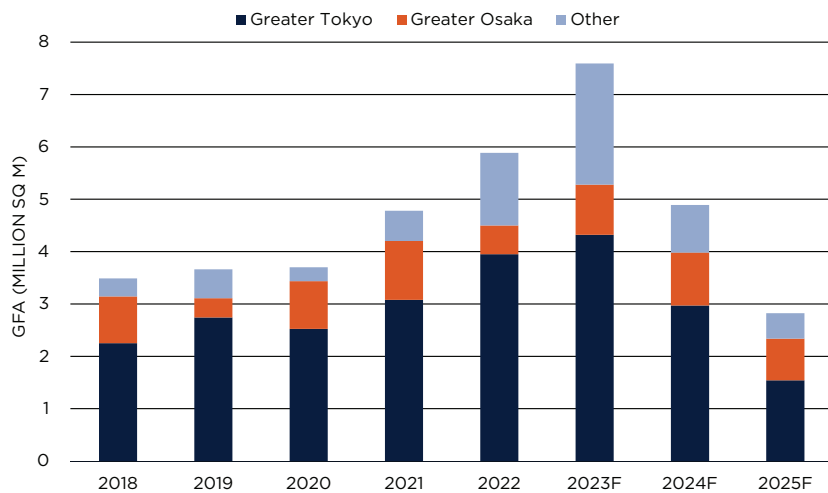
On the other hand, new supply in Greater Osaka was limited in the second half of 2022, and the total new supply for the year sits at around 550,000 sq m. Although most new logistics facilities were under 40,000 sq m, the largest addition in the last half-year was Daiwa House’s DPL Ibaraki Kita in Osaka, which has a GFA of 116,000 sq m, by far the largest new facility in Greater Osaka. The facility is located around 1km away from the Shin-Meishin expressway, providing convenient access between Osaka, Kyoto and the wider west-Japan region.

Looking forward, development activity is scheduled to accelerate rapidly in Greater Osaka in 2023 and 2024. Aside from the notably large GLP ALFALINK Amagasaki facility scheduled for completion in 2026, which will comprise 370,000 sq m, GLP Japan will also develop the adjoining GLP ALFALINK Ibaraki I and GLP ALFALINK Ibaraki III in Osaka, which will deliver a combined 283,000 sq m of new space. Meanwhile, CenterPoint Development will develop two facilities in the northern outskirts of Kobe with a combined GFA of 300,000 sq m. Overall, new supply is forecast to reach 960,000 sq m in 2023 and then 1.0 million sq m in 2024, a notable increment from the subdued levels in 2022.

Average vacancy rates remain moderate across most logistics facilities in Japan, while demand remains strong with the expansion of e-commerce, and some possible delays to construction due to pandemic-induced supply chain constraints and labour shortages might have helped to maintain the balance of demand and supply overall. However, a number of existing facilities are already facing issues in recruiting tenants, which could worsen as the completion of new facilities accelerates. Hence, some rental adjustments are likely to take place, the extent of which will depend largely on location and current rents, among other factors.

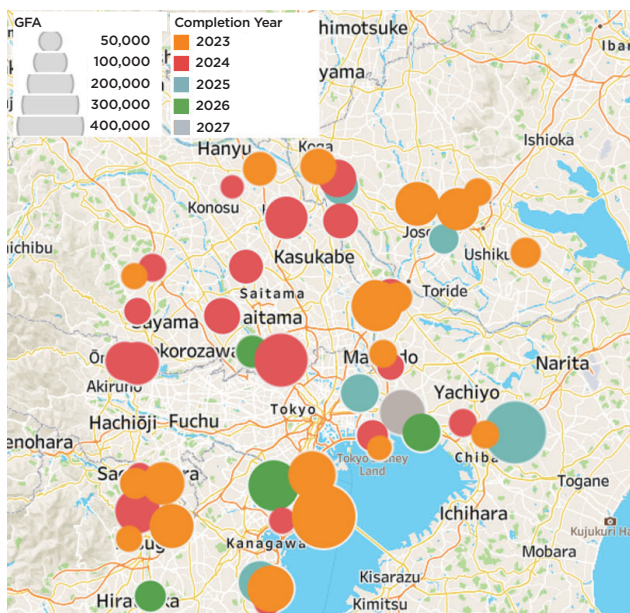
<sup>3</sup> Defined as exceeding 100,000 sq m in GFA

**Graph 5: Annual New Supply\* in Japan by Region, 2018 to 2025F**



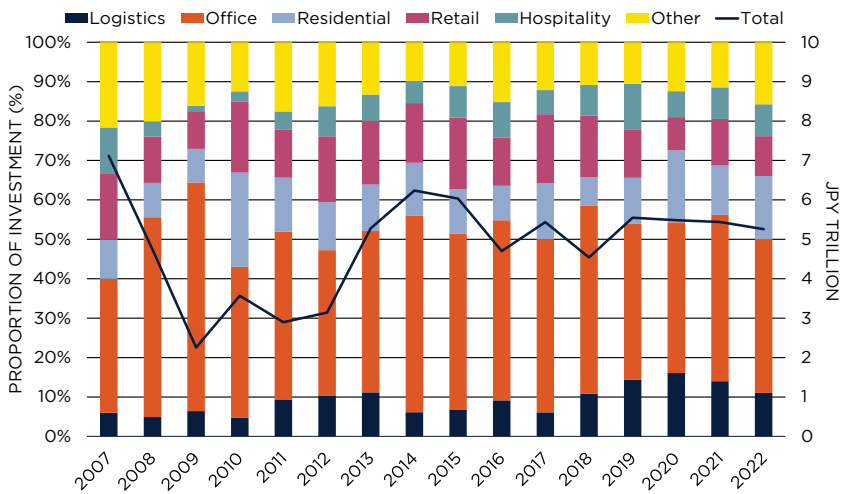
**Source** Ichigo Real Estate Service, Savills Research & Consultancy  
 \* Projects in 2022 and beyond tend to be added later once details are ready to be announced. The data provided by Ichigo only considers facilities with GFAs > 10,000 sq m and is as of 1 February 2023.

**Map 1: Upcoming Completions in Greater Osaka with GFA greater than 50,000 sq m, 2023 to 2027\***



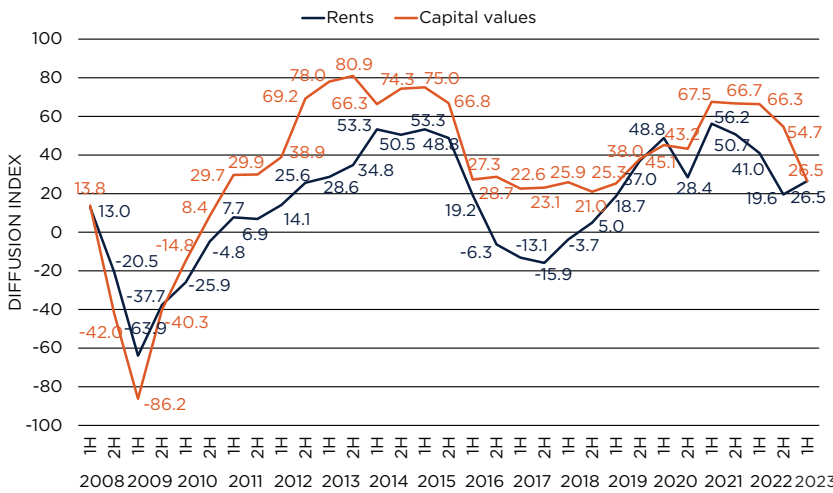
**Source** Ichigo Real Estate Service, Savills Research & Consultancy  
 \* Projects where GFA and/or completion date are unavailable are omitted from the dataset. New supply data is as of 1 February 2023.

**Graph 6: Share of Investment Volumes by Asset Class, 2007 to 2022**



Source RCA, Savills Research & Consultancy

**Graph 7: Six-month-ahead Expectations for Rent and Capital Appreciation, 2008 to 1H/2023**



Source Ichigo Real Estate Service, Savills Research & Consultancy

**Table 1: Selected Investments, Announced August 2022 to February 2023**

PROPERTY NAME	TRANSACTION VALUE (JPY BIL)	APPRAISAL DIRECT CAP RATE	BUYER	SELLER
Blackstone Portfolio (7 facilities)	80.0 - 90.0	-	Gaw Capital Partners	Blackstone Group
GLP REIT portfolio (6 facilities)	63.0	3.5% to 4.4%	GLP REIT	Reo GK, Suzuka Holdings GK
Mitsubishi Estate Logistics REIT portfolio (7 facilities and a leased site)	45.4	4.1% to 5.3%	Mitsubishi Estate Logistics REIT	Multiple
Nippon Prologis REIT portfolio (3 properties)	43.4	4.3% to 4.4%	Nippon Prologis REIT	Multiple
Daiwa House REIT portfolio (4 properties)	38.0	4.4% to 5.1%	Daiwa House REIT	Daiwa House Industry and subsidiaries
ESR Ichikawa Distribution Centre (additional 33.3% stake)	34.0	-	ESR	M&G Real Estate Asia
i Missions Park Ichikawa-Shiohama	21.8	3.6%	Advance Logistics Investment Corporation	Itochu, Itochu Property Developments

Source Company Disclosures, Nikkei RE, Savills Research & Consultancy

**INVESTMENT TRENDS**

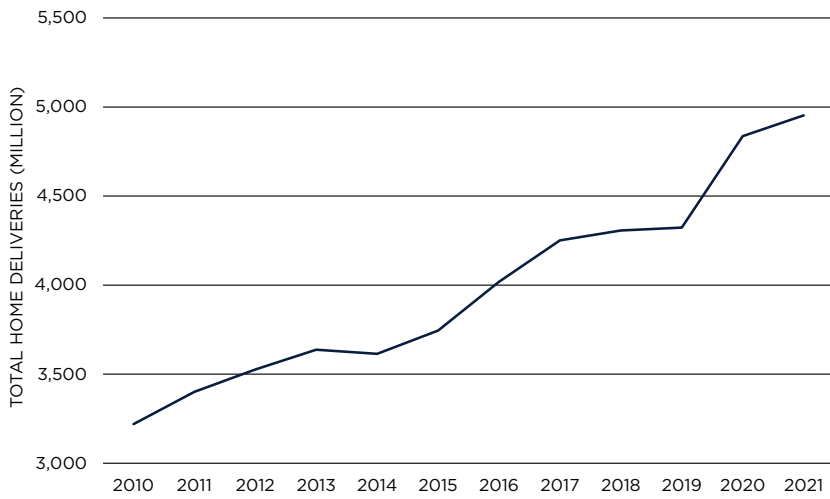
According to preliminary data aggregated by Real Capital Analytics (RCA), investment activity in Japan was relatively strong in the second half of 2022, with total investments just shy of 2021 levels at JPY5.3 trillion. However, despite the surge in popularity of the sector in the past few years, investment in logistics facilities fell by 24% compared to the previous year, standing at JPY580 billion. That said, it is important to remember that the data is still preliminary and that investment volumes will likely increase as more past transactions are announced in the coming year.

Domestic investors have been the most active in the logistics market, and many notable J-REIT transactions were recorded in the second half of 2022. For instance, the largest J-REIT announcement involved GLP Investment Corporation, which acquired six logistics facilities in Greater Tokyo, Greater Osaka, and Mie for JPY63.0 billion. Elsewhere, Mitsubishi Estate Logistics REIT acquired seven logistics facilities and a leased industrial site in Greater Tokyo and Greater Osaka for JPY45.4 billion, while Nippon Prologis REIT acquired three facilities in Hyogo and Fukuoka for JPY43.4 billion from an SPC affiliated with its sponsor, Prologis. Furthermore, Daiwa House REIT acquired four properties, located in Okinawa, Hiroshima, Osaka, and Ibaraki from Daiwa House and its subsidiaries for JPY38.0 billion.

There has been a notable expansion in big-ticket investments by international investors over the past half-year. For instance, Gaw Capital Partners recently announced its first investment in the Japanese logistics sector. This involved the acquisition of a portfolio of seven logistics facilities for between JPY80 and 90 billion from Blackstone, and was the largest logistics transaction in 2022. All seven transacted properties are located in the Tokyo metropolitan area and have an aggregate GFA of 250,000 sq m. Meanwhile, M&G Real Estate Asia increased its ownership share in the 200,000 sq m ESR Ichikawa Distribution Centre in Chiba to 58.3% by purchasing an additional 33.3% stake for JPY34.0 billion in the Singapore entity that owns the facility from ESR.

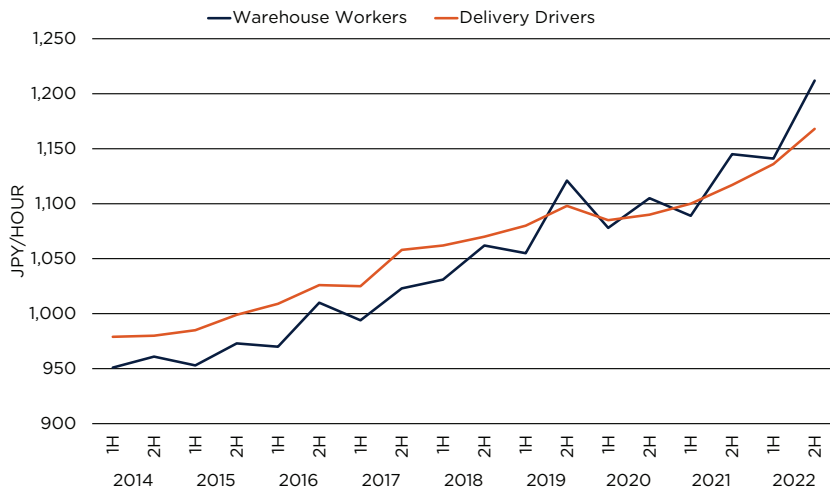
The appetite for logistics facilities has been robust over the past half-year, with several high-profile transactions taking place and sharp pricing frequently observed. However, interest rate increase may dampen transaction activity in the coming years. The fixed long-term contracts that are a common feature of the logistics industry threaten to diminish yields. Hence, many investors will approach future transactions with increased caution. The 31st bi-annual market sentiment survey conducted by Ichigo Real Estate

**Graph 8: Number of Home Deliveries, 2010 to 2021**



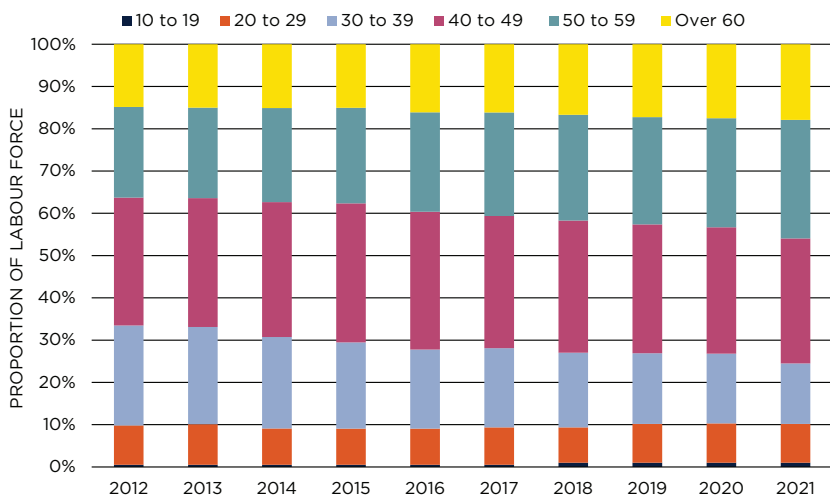
Source Ministry of Land, Infrastructure, Transport and Tourism, Savills Research & Consultancy

**Graph 9: Average Hourly Wages for Warehouse Workers and Delivery Drivers, 1H/2014 to 2H/2022**



Source Jobs Research Center, Savills Research & Consultancy

**Graph 10: Proportion of Delivery Driver Workforce by Age, 2012 to 2021**



Source Japan Trucking Association, Savills Research & Consultancy

Service appears to reflect this sentiment. Over 60% of respondents do not anticipate any further capital appreciation, while a similar proportion expect rents to remain flat. Indeed, many logistics tenants, who are frequently struggling due to the inflationary environment and labour shortages, would likely be unable to bear any further increases in rent.

**THE SHORTAGE OF LABOUR**

The shortage of labour is a chronic issue facing the logistics industry, stemming from several endemic factors such as Japan’s ageing demography and often tough working conditions, among others. This trend places heightened cost pressures on tenants, many of whom already operate on thin profit margins, and threatens to constrain further growth in the sector.

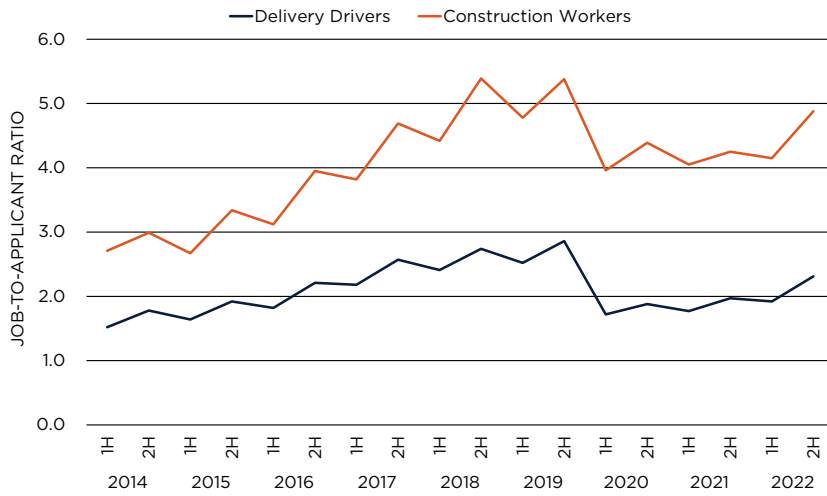
Japan’s e-commerce industry experienced a belated period of growth during the pandemic, and the demand for B-to-C home deliveries expanded rapidly (graph 8). Hiring more workers was essential in keeping up with online consumption, and wages for warehouse workers and delivery drivers grew significantly from 1H/2020 onwards (graph 9).

Although average wages have risen over the past few years, the industry requires long hours, and working conditions remain notoriously poor for delivery drivers. Furthermore, a significant proportion of drivers are contracted through external agencies, and therefore lack the same benefits afforded to regular full-time staff. Indeed, some drivers even have to bear the costs of transport and vehicle maintenance themselves.

Unsurprisingly, the logistics industry still experiences an acute shortage of delivery drivers, which will worsen as the average worker age increases. As Graph 10 demonstrates, the proportion of delivery drivers over 50 years old grew from around 36% in 2012 to 45% in 2021, with over a third of those over 60 years old. As such, the proportion of workers moving into retirement will grow every year, while people in their 20’s and 30’s become increasingly unwilling to join the industry. As a result, the job-to-applicant ratio for delivery drivers has increased to 2.3x in 2H/2022 (graph 11). Additionally, despite the additional costs incurred from having to source sufficient additional drivers, logistics companies are reluctant to pass on these costs to consumers, given the high customer-service expectations among consumers in Japan. Hence, this further diminishes the profit margins among operators.

Existing manpower shortages will likely be exacerbated by government overtime regulations on delivery drivers slated for April 2024, which will limit drivers to 960 hours of overtime work in a year. With the e-commerce market forecast to expand even further, the Nomura Research Institute predicts that

**Graph 11: Job-to-applicant Ratio for Delivery Drivers and Construction Workers, 1H/2014 to 2H/2022**



Source Ministry of Health, Labour and Welfare, Savills Research & Consultancy

around 35% of packages in Japan will be undeliverable by 2030 due to insufficient staff, with regional areas set to be the most severely affected.

Overall, the labour shortage presents a significant hurdle for the logistics industry. Despite the sharp pricing of logistics facilities and interest rate increases, logistics facility owners are constrained in increasing rents in tandem, due to long-term leasing contracts. Meanwhile, tenants don't have much capacity for higher rents on top of the higher energy and labour costs.

Many developers and operators appear to be taking it upon themselves to develop solutions, and innovations in the space of automation are progressing rapidly. For instance, Mitsui & Co. is looking to launch a logistics business utilizing driverless trucks from 2026, while Japan's largest truck maker, Hino Motors announced its plans to help inexperienced drivers by developing a new truck equipped

with driving assistance functions in 2022. Additionally, Japanese IT corporation NEC has been developing a remote management system using digital twin technology to manage automated logistics tasks.

For the meantime, improving worker satisfaction and attracting workers organically has been the priority among developers. These initiatives often include on-site children's day care facilities and services, as well as amenities such as cafeterias, shops, gyms, and gardens, among others. For instance, GLP ALFALINK Samigahara I in Kanagawa was developed over a large area with an open-concept town design. The on-site amenities are intended to address the labour crunch by improving the quality of life of workers and their families living and working in the area. Going forward, these integrated developments may become the norm, especially for larger scale new logistics developments that require more workers.

**OUTLOOK**

The fundamentals of the logistics sector are strong, and confidence appears to be high. The demand for logistics facilities will likely continue to expand as the e-commerce market grows, and vacancy rates remain moderate overall, even after increments in both Greater Tokyo and Greater Osaka over the past half-year. Although investment activity in the logistics sector was somewhat limited in 2022, many significant transactions were observed, and international investors have been active over the past half-year.

However, there are some dark clouds on the horizon, and future growth in the sector will likely be constrained by structural factors. In particular, logistics operators face elevated operating costs due to chronic labour shortages on top of high energy prices. Landlords will have a difficult time implementing rent increases, given the thin margins that many tenants are operating on. Moreover, with a new wave of upcoming supply in 2023 and 2024, competition for tenants will likely intensify, and the negotiating power of owners may weaken further. Logistics facility owners face the added pressure of increasing interest rates. Transaction activity may slow down as the stable long-term lease model prevalent in the logistics sector becomes unappealing to investors in an inflationary environment.

Overall, we predict that the sector will continue its strong performance; the growth of e-commerce will require the development of modern logistics facilities which will attract further investment. That said, the rate of growth in the future may be limited, and tenants will likely be drawn to new developments with good accessibility, modern facilities, and reasonable rental levels, while other older facilities may struggle with vacancies and be forced to revise rents going forward.



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