



savills.com.cn

China Macro 03 2 Regional reviews 80 3 16 Investment market Outlook 20

1



China Logistics 2



China Macro

Logistics values reach new heights

China's expanding national logistics network fuels demand for logistics real estate

China's logistics value grew 3.4% in 2022 to RMB347.6 trillion, while the total revenue of the logistics industry reached RMB 12.7 trillion, up 4.7% YoY.

Railway transport, cold chain facilities, and express delivery maintained higher growth rates. The national railway network transported 3.9 billion tons of goods, up 4.7% YoY, the highest in nearly three years. Cold-chain logistics market size is expected to exceed RMB 450-490 billion in 2022. Express delivery volumes totalled 110.6 billion parcels, a net increase of 2.3 billion over the previous year.

International logistics continue to unlock new routes and expand existing channels with 16,000 China-Europe freight trains operated and 1.6 million TEUs shipped in 2022, up 9% and 10% YoY respectively. Meanwhile, the New Land-Sea Corridor in western China maintained strong growth momentum, with 756,000 TEUs shipped in 2022, up 18.5% YoY.



China Logistics Value by product category

FDI increases despite headwinds

USD bn

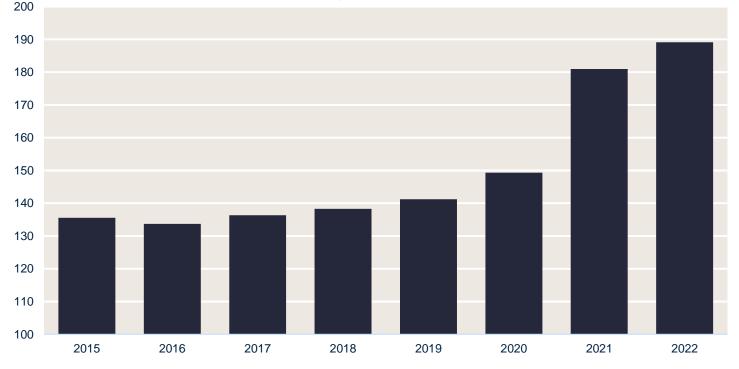
FDI drives industrial & logistics demand

Utilized foreign direct investment (FDI) totalled US\$189.1 bn (RMB1.23 trn). Despite the continuous business disruption and lockdowns throughout the year, investment grew 8% YoY and 6.8% 5YR CAGR. The Yangtze River Delta region is still the most attractive region for foreign capital.

Key sectors of growth have been high-tech manufacturing which grew by 28.3% YoY, and the automobile (including EVs) sector which recorded an increase of 264%, driving the demand for highstandard factory and warehouse space. China remains a critical component of the global supply chain.

Covid policies, trade tensions, rising costs and other considerations have encouraged international firms to consider augmenting or replacing part or all of their supply chain to markets such as Vietnam and India. Additionally, targeted export restrictions in sectors such as semiconductors will force companies to look for domestic substitutes. While these may not be on par with international peers, increased sales revenues will allow domestic manufacturers to invest more in R&D and begin narrowing the technological divide.





Cold chain catalyst

From fresh food e-commerce to ready-to-eat meals

Demand for fresh food and pharmaceutical products surged during covid with increased attention being paid to food safety and standards, boosting demand for the cold storage sector.

Societal changes present prior to covid were also accelerated. More and more families have both parents working while working hours are lengthening with work creeping into personal lives. Also, others are deciding to get married later on in life or choosing to live a more solitary lifestyle. While restaurant food delivery services have recovered many are choosing to continue to cook at home but do not have the time to prepare food or require smaller portions, driving demand for ready-to-cook or preprepared cooking ingredients. At the same time, some restaurants are also looking to reduce labour and real estate costs by having more of the food preparation happening off-site.

According to CITIC Securities, the market for pre-prepared dishes is expected to reach about RMB1 trillion in the next decade. More cold chain facilities are therefore incorporating production lines to clean, process and package food enabling consumers to receive Ready-To-Cook packages on their doorsteps.

"Quality Evaluation of Prepared Dishes" specifies that frozen prepared dishes should be stored at temperatures below -18°C while refrigerated prepared dishes should be stored at temperatures between 0°C and 4°C. As income levels rise, consumers' requirements for food diversity, nutrition, and taste are rising. The development of the cold chain market remains at a very nascent stage of development with structural changes likely to propel growth for decades to come.



Revenue per

Courier Express Growth

Livestreaming e-commerce cities climb up the rankings

Online and tech platforms have been a key 2 focus for regulators, sometimes to the detriment of a particular sector such as online education, but in other sectors to curb monopolistic behaviour creating new opportunities for entrants such as with the e-commerce sector which has seen the entry of byte-dance and little red book. Despite weaker consumer sentiment online sales continued to grow with new channels for consumer engagement emerging like live streaming and social commerce, with the total number of parcels delivered growing to 110.6 billion in 2022.

Out of the top 50 cities for parcel deliveries, Jieyang and Shantou in Guangdong province stand out for their phenomenal growth over the last four years driven by government-supported industry planning, infrastructure and adaptive manufacturing cluster. However most important was the entrepreneurial spirit of the smaller firms in these cities and the democratisation of sales channels that the growth of these new platforms allowed.

Top 20 cities by parcels delivered

2019	2020	2021	2022	Rank
				1
				2
				3
				4
		\rightarrow		5
				6
				7
\rightarrow		\rightarrow		8
				9
		X		10
				11
				12
				13
				14
	\backslash			15
				16
			$\overline{}$	17
				18
		<		19
				20

City	delivered (mn)	CAGR	parcel
Jinhua-Yiwu	11,805	34.0%	2.90
Guangzhou	10,131	18.9%	8.30
Shenzhen	5,800	16 .0%	10.38
Jieyang	3,729	40.4%	4.77
Hangzhou	3,485	7.7%	9.63
Dongguan	2,881	21.1%	10.03
Shanghai	2,858	-4.9%	64.58
Shantou	2,457	43.8%	5.03
Suzhou	2,435	18.2%	10.23
Quanzhou	2,108	21.3%	5.94
Beijing	1,956	-3.0%	14.90
Wuhan	1,846	18. <mark>8%</mark>	8.62
Chengdu	1,760	13.8%	9.28
Wenzhou	1,676	16.3%	6.15
Foshan	1,584	35.0%	11.01
Zhengzhou	1,485	21.5%	8.83
Shijiazhuang	1,462	29.3%	5.91
Ningbo	1,441	16.4%	9.05
Linyi	1,434	44.0%	4.61
Taizhou	1,398	18.7%	5.24

2018-2022

Parcels

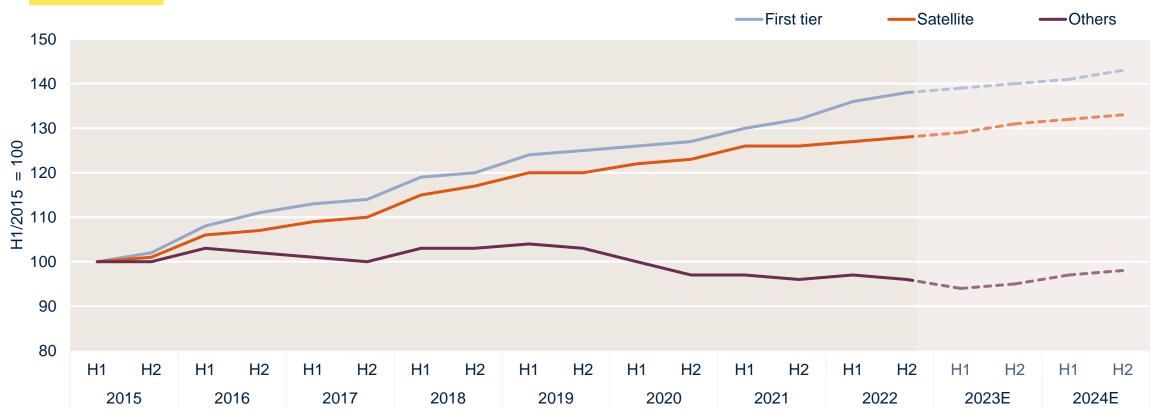
City

Regional reviews



Nation-wide rental index

Steady rental growth forecast as supply levels abate



Base period: 2015H1

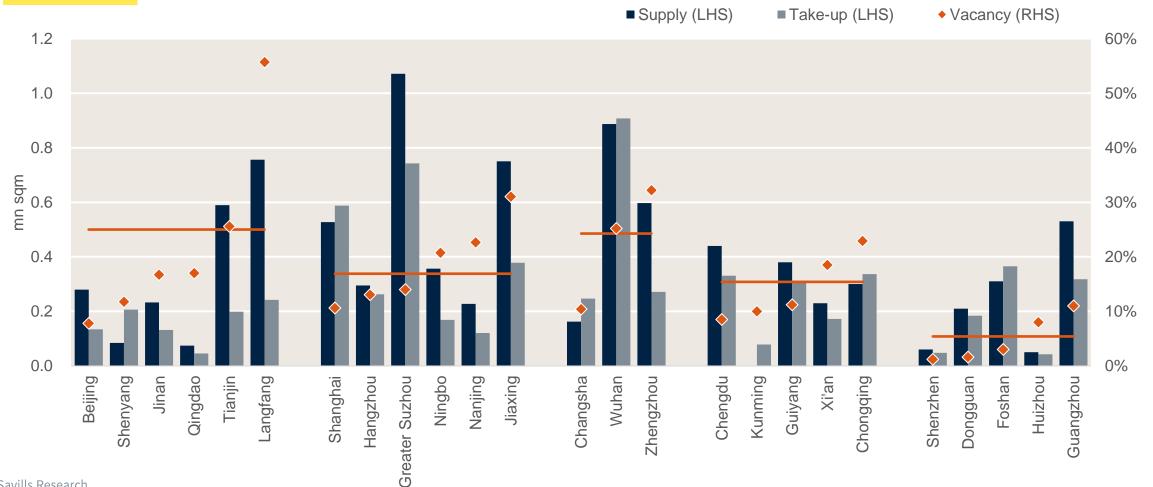
First-tier cities: Beijing, Shanghai, Guangzhou, Shenzhen

Satellite cities: Tianjin, Langfang, Jiaxing, Suzhou (incl. Kunshan, Taicang, Changshu, Zhangjiagang), Foshan, Dongguan, Huizhou

Other cities: Shenyang, Qingdao, Jinan, Wuxi, Nanjing, Ningbo, Hangzhou, Fuzhou, Xiamen, Xi'an, Chengdu, Chongqing, Kunming, Guiyang, Wuhan, Zhengzhou, Changsha

Key market comparison performance

Northern China struggles with oversupply



Northern China

	Stock Mn sqm	Rent RMB psm pmth	Vacancy Rate
Beijing	2.44	61.0	7.8%
Tianjin	5.36	30.9	25.6%
Langfang	2.94	33.4	55.7%
Shenyang	1.69	23.1	11.8%
Jinan	1.91	28.8	16.7%
Qingdao	1.29	25.8	8.4%
			~ 1 2

Source: Savills Research

NB: Langfang projects near BDIA (Beijing Daxing International Airport) are excluded from Langfang figures and included in Beijing figures. Projects in Qihe County, Dezhou are included in Jinan figures.

Langfang

- Langfang received record levels of supply in 2022 with 756,200 sqm added to the market, the largest volume in Northern China.
- Removal of cross-provincial border restrictions combined with a recovery in demand and lower rents could help entice tenants away from Beijing. Nevertheless, it is going to be another year or two before vacancy rates can fall to more sustainable levels.
- Traditionally Grade A projects focus on Guangyang and Anci districts near the Beijing–Tianjin expressway.

Jinan

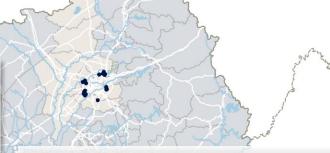
- Jinan received 232,800 sqm supply in 2022.
- Shandong's key inland city, Jinan's Grade A warehouse market predominately fulfils the needs of consumers from the surrounding region.
- Restrictive city planning has pushed new development to Qihe in the west where GLP, Prologis and other warehouse developers have established a presence.

Beijing

Beijing received 279,800 sqm supply in 2022.

. .

- Strict border control combined with a strong consumer market, has spurred the local demand for warehouse spaces.
- As newly planned logistics hubs, BDIA & Pinggu submarkets are anticipated to receive a surge of new supply in the coming years.



Shenyang

- Shenyang received 84,000 sqm of new supply in 2022.
- Shenyang is the regional centre of Northeastern China and key hub in China's belt and road initiative.

China Logistics

Demand is driven by the city's role as a key distribution hub as well as the needs of ecommerce, food processing and equipment manufacturing companies.

Tianjin

- As the largest warehouse market in Northern China, Tianjin received 589,400 sqm of new supply in 2022.
- Submarkets along the Beijing-Tianjin expressway are likely to be buoyed by the relaxation of covid-control and the expected rebound in intercity transportation related demand.
- Jizhou, an emerging submarket, will better serve demand in Northern Tianjin and develop stronger connection with Beijing.

Qingdao

- Major tenants are local retailers from home appliance and furniture manufacturing industries.
- Qingdao received a large amount of supply during 2020-2021 as the city's airport was relocated across the bay in Jiaozhou. Nevertheless, overall remained supply-demand balance.
- Qingdao's 2022 status as multimodal transportation hub of the China-Shanghai Cooperation Organization (SCO) Local Economic and Trade Cooperation Demonstration Area, is expected to boost logistics demand significantly.

Eastern China

Nanjing

- Nanjing received 227,000 sqm of new supply in 2022, with projects located in Jiangning & Liuhe.
- Strong consumer base in Nanjing.
- With supply levels having peaked in 2021 occupancy levels are anticipated to gradually improve in 2023.

Suzhou

- Suzhou proper, Kunshan, Taicang, Changshu and Zhangjiagang together form China's the biggest logistics market in China.
- Changshu doubled its stock with more than 800,000 sqm of new supply in 2022.
- Affordable rents and established industry clusters continue to attract manufacturing companies from other regions benefitting the local warehouse market.

Hangzhou

- Hangzhou received 295,200 sqm new supply in 2022 focusing on the city's major logistics submarket Xiaoshan.
- As the national base of livestream ecommerce, 3PLs and ecommerce remained as Hangzhou's major tenants.
- Invest heavily in building cross border ecommerce.

Jiaxing Jiaxing received 75,000 sqm supply in 2022 with projects in Pinghu & Jiashan. Demand came from strong local manufacturing and up/down stream industries, as well as spillover requirements from Shanghai. The market has attracted not only mature developers like ESR and Mapletree, but also newcomers like Hilltop to

invest in Jiaxing.

China Logistics 12

	Stock Mn sqm	Rent RMB psm pmth	Vacancy Rate
Shanghai	6.80	49.6	10.6%
Suzhou	8.19	36.1	14.0%
Jiaxing	4.08	32.4	31.0%
Ningbo	2.34	31.9	20.7%
Hangzhou	3.32	35.4	13.0%
Nanjing	2.32	31.5	22.6%

Source: Savills Research

NB: Hangzhou includes some Huzhou & Shaoxing projects

Shanghai

- Qingpu and Jinshan received new projects in 2022, attracting regional food manufacturers, express delivery firms, and petrochemical companies.
- Weaker consumer sentiment resulted in diminishing demand and withdrawals by some general retail tenants (fast fashion & cosmetics), while manufacturing tenants reassessed their warehousing needs with some choosing to seek more affordable premises closer to production centres.
- Despite headwinds, express delivery firms continued to drive growth throughout the year.

Ningbo

- Ningbo received 356,500 sqm of new supply in 2022, with projects located in Cixi & Yuyao submarkets.
- Reduced cargo shipping resulted in vacancy rates rising by 5.7 ppts in 2022.
- Key logistics bases are being developed for the airport courier centre, Beilun cross-border ecommerce centre, and Yuyao distribution centre.

Southern China

	Stock Mn sqm	Rent RMB psm pmth	Vacancy Rate
Guangzhou	2.55	42.9	11.0%
Shenzhen	0.50	60.8	1.2%
Dongguan	2.26	43.9	1.6%
Foshan	2.68	35.0	3.0%
Huizhou	1.06	35.6	8.0%

Source: Savills Research

Foshan

- Foshan received 310,000 sqm of new supply in 2022.
- Apart from local manufacturing firms (home appliance and auto parts), demand comes predominantly from cross border ecommerce firms.
- The eastern modern logistics clustered along Highway S55 is a key focus of future development and will see new supply handed over in the coming years.



Guangzhou

- Guangzhou received 530,000 sqm new supply in 2022.
- Unlike Shenzhen and Dongguan, Guangzhou possesses a large industrial land reserve from Zengcheng to Nansha, ensuring adequate supply in the coming years.
- Demand primarily comes from 3PLs and e-commerce firms.

Dongguan

- Dongguan received 210,000 sqm supply in 2022.
- A recovery in the manufacturing sector and sizeable spillover demand from Shenzhen helped keep Dongguan vacancy rates at frictional levels. Average rents remain higher than Guangzhou, and only second to Shenzhen in the region.

Shenzhen

- Yantian Port GLP Park handed over its third phase in 2022, adding 60,000 sqm (partially bonded) supply to the Shenzhen market.
- Average rent in Shenzhen remain the highest in the country.
- Extremely limited land reserves, stubbornly low vacancy rates and record setting rents have meant that new developments now reach six floors high. Even lower quality development are almost fully pre-leased.

Huizhou

- Huizhou received 50,000 sqm supply in 2022.
- The smaller consumer base compared to Shenzhen and Dongguan mean that warehousing demand predominantly come from local manufacturers in electronic devices and automobile sectors.

Western China

Xi'an

- Xi'an received 230,000 sqm new supply in 2022, with a further 400,000 sqm expected to complete in 2023.
- Firms are fiercely competing for space in the vicinity of the city's airport.
- Demand from the new economy sectors like NEVs, buoyed leasing demand in the ETDZ submarket.

Chengdu	
---------	--

- Demand and rents remained stable throughout the year despite covid disruption and power outages.
- Rapid growth from the pharmaceutical and healthcare sectors drove demand for cold storage.
- Relaxed covid controls, coupled with its large and growing population, demand for quality warehouse space in Chengdu is expected to grow significantly in coming years.

Kunming

- Kunming's non-bonded warehouse market predominantly serves local consumers and retailers.
- Despite relatively stable occupancy rates, landlords have lowered their rental expectations given challenging economic conditions.
- Apart from large retailers like Yunnan Tobacco, leasing demand also comes from ecommerce platforms like JD.com.

Stock Mn sqm	Rent RMB psm pmth	Vacancy Rate	
3.23	26.0	18.5%	
5.58	24.5	8.5%	
5.30	20.4	22.9%	
1.12	26.3	10.0%	
1.25	27.0	11.2%	
	Mn sqm 3.23 5.58 5.30 1.12	Mn sqm RMB psm pmth 3.23 26.0 5.58 24.5 5.30 20.4 1.12 26.3	Mn sqmRMB psm pmthRate3.2326.018.5%5.5824.58.5%5.3020.422.9%1.1226.310.0%

Source: Savills Research

NB: Some Xianyang projects are included in Xi'an figures

Some Meishan & Deyang projects are included in Chengdu figures

Chongqing

- Chongqing has been significantly affected by covid disruption, extreme temperatures and deteriorating trade relations.
- ◆ The market has witnessed growing demand from consumer goods and pharmaceutical firms. As the key distribution hub of Chongqing, the Western Logistics Park (西部物流园) performed better than other submarkets.
- Submarkets like Chongqing Airport and Western Logistics Park witnessed several land transactions in 2022, pushing up supply levels in the coming years.

Guiyang

- Guiyang received 380,000 sqm of new supply in 2022.
- Non-bonded logistics market predominantly served local needs, similar to Kunming.
- Guiyang's future is tied to the big data industry. The improvement of technological innovation and integration of real and digital economies will help to stimulate related logistics development and enhance logistics infrastructure and services.

China Logistics 14



3	5	Stock Mn sqm	Rent RMB psm pmth	Vacancy Rate
	Zhengzhou	2.27	26.1	32.2%
	Wuhan	5.81	22.5	25.2%
	Changsha	1.68	30.1	10.4%
			2	2 6 2

Source: Savills Research NB: Some Kaifeng projects are included in Zhengzhou figures, Some Xiaogan & Ezhou projects are included in Wuhan figures, Some Xiangtan projects are included in Changsha figures

Changsha

- Changsha recorded very limited supply in the last two years.
- Changsha is a city of entertainment and a key consumption centre, this in addition to its central location connecting east and west, as well as north and south will continue to drive demand for Grade A warehouse space.
- Strong demand and limited supply have ensured steady rental growth.

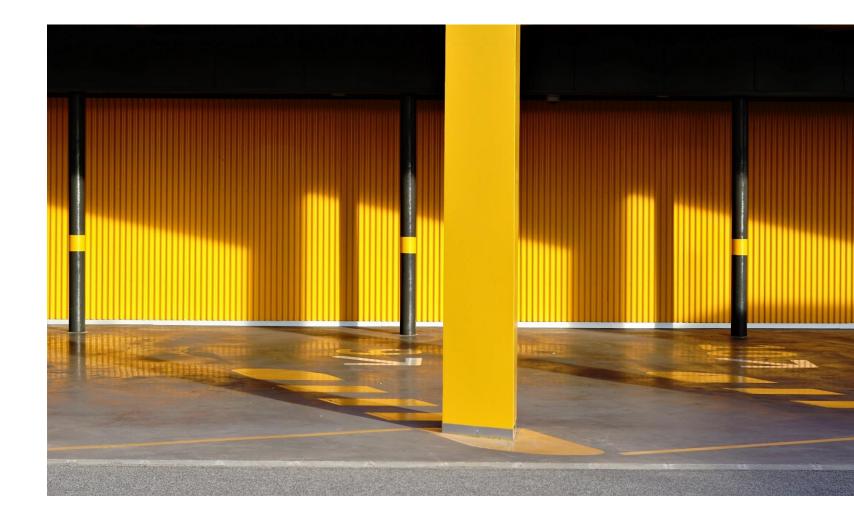
Zhengzhou

- Zhengzhou's non-bonded Grade A warehouse stock is mainly located in the Economic Technology & Development Zone and near Xinzheng Airport.
- Zhengzhou received nearly 600,000 sqm of supply in 2022, pushing the vacancy rate to 32.2%.
- Industrial upgrading is generating new demand for smarter logistics facilities, as well as more cold chain and central kitchen facilities.

Wuhan

- Wuhan received 887,000 sqm of new supply in 2022.
- The market will take time to absorb this new supply, with vacancy rates already elevated and rents already the lowest out of the three central cities.
- Growing demand from cold chain operators and 3PLs will help boost demand and help rents stabilize in the coming years.

Investment Market



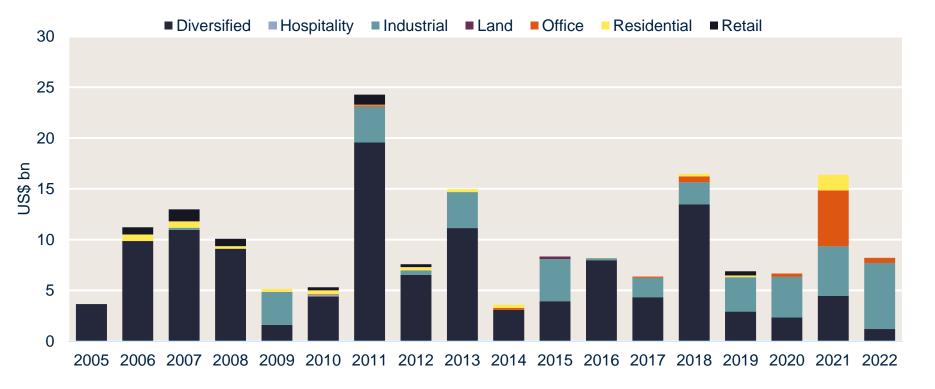
China Logistics 16

Industrial sector still highly sought after

Industrial-targeted funds account for almost 80% of fundraising in 2022

The industrial & logistics sectors are highly sought-after asset classes and have been singled out in recent fundraising activities for special attention. Industrial & logistics funds have accounted for more than half of fundraising in three out of the last four years (the exception being 2021 when Sino-Ocean raised two significant office funds). In 2022, the figure reached close to 80%.

New investors have also entered the market, with domestic investors and developers dominating the logistics market in the past two years.



Fundraising by target sectors

Continued expansion or change in strategy?

Top 10 market share shrinks as more investors enter the market

The top 10 developers' market share of China's Grade A warehouse stock fell from 80.5% in 2017 to 69.3% in 2022.

While GLP remains first in terms of area under management, several small and midscale developers have expanded aggressively over the past five years.

VX grew its area under management to more than 10 million sqm (7.5% of the market and second by scale). Nevertheless, their pace of expansion has slowed in recent years as land acquisition becomes more challenging and it takes longer to lease up newly constructed developments. Most of VX's expansion happened before 2020 with the firm increasingly focusing on cold chain, automation and asset-light operations.

More and more developers are similarly looking to focus on the operational efficiency of existing developments while working with equity partners to develop asset-light models.



Yields bottom out

Investors take the temperature of the markets in first and leading second-tier cities

Beijing Shanghai Guangzhou Shenzhen Hangzhou Nanjing Ningbo 7% 6% 5% 4% Suzhou Wuxi Dalian Shenyang Tianjin Fuzhou Xiamen 7% 6% 5% 4% Xi'an Wuhan Chengdu Chongqing Kunming Changsha Zhuhai 7% 6% 5% 4%

Logistics asset cap rates of major cities, H1/2021-H2/2022

Investment facts

- NOI yields are softening, as more supply, including portfolios, enters the market.
- Strict covid controls and global political and trade tensions have deterred new international investors however those with a sizeable presence in the market remain active.
- China's stable interest rate environment and low input costs continue to support market expansion and an active investment market.



Outlook

Trends for 2023

1

Post-Covid Era

With goods once more flowing freely across provincial and municipal boundaries, markets like Langfang and Wuqing, where projects service Beijing's needs, will see a swift rebound in demand. The flip side is that landlords in major consumption hubs with higher rents could see tenants look for more affordable premises further from the city. 2

First-tier cities supply

Unlike Shanghai and Guangzhou, Beijing and Shenzhen which have been starved of new supply for many years now, both witnessed new projects being handed over in 2022. As city planning looks to better meet market demands, emerging submarkets like PKX and Pinggu, as well as mature submarkets like Shunyi Airport are expected to see more projects come to market in the coming years.

Diversified investment

3

Institutional investors looking for investment-grade assets rarely invest in factories and workshops. However, as investors search for higher-yielding assets, more are considering the manufacturing sector. This is often actively supported by both the central and local government levels as China looks to upgrade its manufacturing and enter new economy sectors.

Consumer changes

The economic slowdown and covid lockdowns have rocked consumer markets in recent years. The more affluent first and second-tier cities seem to rebound faster than some lower-tier cities where households and businesses have been more affected. At the same time, consumption patterns have shifted with increasing awareness of food safety and product freshness. In addition, increasing acceptance of pre-cooked / pre-prepared meals and demand for pharmaceuticals & supplements are driving demand for the cold storage market.

5

6

C-REITs

Logistics + workshop

Industrial land acquisition tends to have specific tax contributions and investment threshold requirements. In recent years these have become more onerous as local authorities come under increasing financial strain. In order to meet responsibilities, developments will have to be redesigned to incorporate a mix of use types - often manufacturing on the first floor and warehouses on the upper floors, or include more built-to-suit elements. The details of the project will often be determined through negotiations with local authorities.

JD.com C-REIT (508098.SS) was listed on the Shanghai Stock Exchange in early 2023 representing the first private enterprise warehouse C-REIT product. Meanwhile, GLP C-REIT (508056.SS) was the first REIT to acquire additional assets in September. More investors will likely see REIT listing as a possible exit for their portfolios as the appetite for stable rental income and quality products remains strong.





China Research

James Macdonald Senior Director China James.Macdonald@Savills.com.cn

Lucas Zhang Manager China Lucas.Zhang@savills.com.cn

Industrial & Logistics

Louisa Luo China Head of Industrial & Logistics China Louisa.Luo@Savills.com.cn

Bowen Miao Head of ILS Central China Bowen.Miao@Savills.com.cn Andrew Zhou Director Wuhan Andrew.Zhou@Savills.com.cn

Susan Chen Associate Director Western China SusanWQ.Chen@Savills.com.cn Charlie Cai Associate Director Shenzhen Charlie.Cai@Savills.com.cn

Coco Yu Manager China Coco.Yu@Savills.com.cn



Savills is a leading global real estate service provider listed on the London Stock Exchange. The company was established in 1855, has a rich heritage with unrivalled growth. It is a company that leads rather than follows, and now has over 600 offices and associates throughout the Americas, Europe, Asia Pacific, Africa and the Middle East. This report is for general informative purposes only. It may not be published, reproduced or quoted in part or in whole, nor may it be used as a basis for any contract, prospectus, agreement or other document without prior consent. Whilst every effort has been made to ensure its accuracy, Savills accepts no liability whatsoever for any direct or consequential loss arising from its use. The content is strictly copyright and reproduction of the whole or part of it in any form is prohibited without written permission from Savills Research.

23