PGIM REAL ESTATE

1Q23

INVESTMENT RESEARCH

QUARTERLY INSIGHTS

Amid a downturn we spend a lot of time figuring out what is going on across our regional markets and why, before we can turn to forecasting. This downturn is no different. But it is also no different because, as with other downturns, there is always a unique set of factors that make for submarket and subsector stories that are hidden from the wider analysis. Such stories help point to opportunities that would otherwise be missed.

This quarter the research team focuses on what opportunities there are given differences in relative value and resilience beneath the regional and sector headlines.

02 | ASIA PACIFIC

- What Will a China Reopening Mean for APAC's Real Estate Markets?
- Will Rent Reversion Help Support Logistics Values?

06 | EUROPE

- How is falling liquidity affecting pricing in European real estate markets?
- What should investors look for in these challenging conditions?

10 | UNITED STATES

- Shifting Apartment Winds – What's the Outlook for Relative Market Performance?
- What Industrial Markets Might See the Biggest Slowdown in an Economic Downturn?

For professional investors only. All investments involve risk, including the possible loss of capital.

REF: 007303

QUARTERLY INSIGHTS | INVESTMENT RESEARCH

ASIA PACIFIC

Key Themes

- What Will a China Reopening Mean for APAC's Real Estate Markets?
- Will Rent Reversion Help Support Logistics Values?

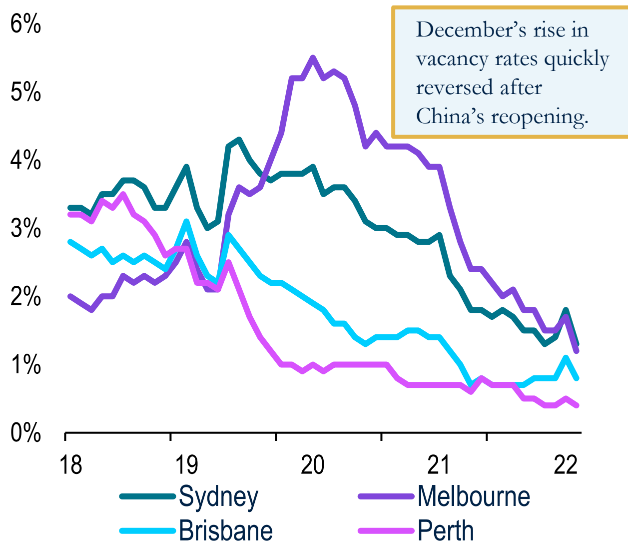
What Will a China Reopening Mean for APAC's Real Estate Markets?

China's reopening will be positive for APAC economies and real estate markets, although the impacts will be uneven across countries and sectors depending on levels of exposure to China. There are several markets that will particularly benefit from the border reopening.

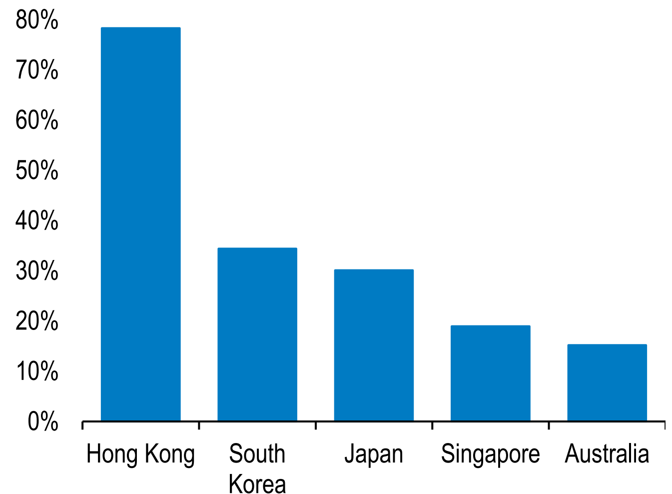
With nearly a third of enrolled students coming from overseas – of which Chinese students accounted for the largest proportion in 2019 – Australia's purpose-built student accommodation (PBSA) and the residential market will be among the top beneficiaries of returning Chinese students, with nearly 50,000 students expected to re-enter Australia in the coming months[1].

Exhibit 1: Australia and Hong Kong Set to Benefit from China's Reopening

Australia Residential Vacancy Rates (%)



Share of Mainland China Tourists (% of Total Tourist Arrivals) in 2019



Note: Hong Kong data is an average of 2018 and 2019 to balance the impact of social unrest in 2019.

Sources: SQM Research, CEIC, PGIM Real Estate. As of February 2023.

[1] PMA.

For professional investors only. All investments involve risk, including the possible loss of capital.

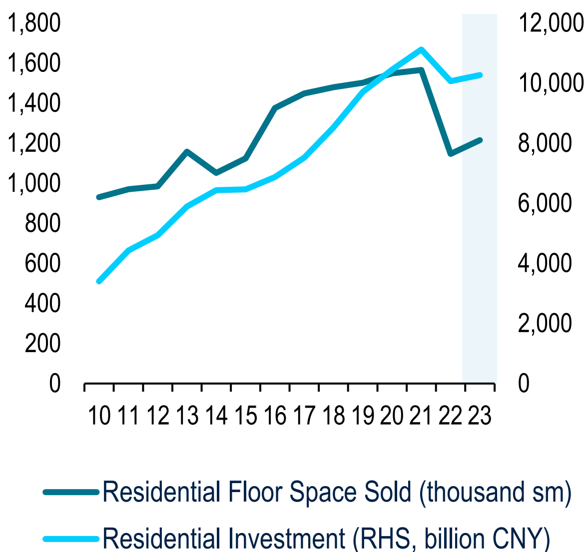
The return of Chinese international students will support the already tight PBSA sector. The Property Council of Australia revealed that PBSA facilities in many cities are at capacity, with almost no vacancy expected throughout 2023. Besides PBSA, the rental housing market will also benefit from the knock-on effects of the tight student accommodation market as students look for alternative accommodations. Statistics show that residential vacancy rates in Sydney declined 50 basis points to 1.3% in January this year, just shy of a record low of 1.0%, while it fell the same amount to a historically low level of 1.2% in Melbourne (**Exhibit 1**, left chart). Rental growth prospects for both sectors are clearly boosted by strong inflows of students from China after the reopening.

Another market that is expected to benefit from China's border reopening is Hong Kong. Having a tourism sector with large exposure to China (**Exhibit 1**, right chart), Hong Kong is set to benefit from a surge of travelers from mainland China. Sectors linked to tourist arrivals and spending, like hotels or high street retails, are expected to experience the most significant shift in near-term outlook, with real estate brokers such as JLL upgrading their forecasts expecting a more momentous recovery in the next 12 months.

But the market expecting the most fundamental shifts in investor sentiment and expectation is China itself. China's residential sector – which has been through a challenging time over the past two years – shows signs of stabilizing thanks to the combined impacts of reopening and easing of financial conditions. Several measures targeting to support the residential market, such as more favorable mortgage conditions for first-time buyers, lower interest rates and more flexible lending conditions for developers, have started to show their impacts. Monthly data in January report stabilized house prices in major cities and sales volumes beginning to pick up[2].

Exhibit 2: China Residential Property Markets are Expecting a Nascent Recovery in 2023

China Residential Investment (Billion CNY) and Floor Space Sold (Thousand sm)



Performance of MSCI China Real Estate Equity ETF and Premia China Real Estate Offshore USD Bond ETF (April 2021 = 100)

Sources: CEIC, Real Estate Foresight, Bloomberg, PGIM Real Estate. As of February 2023.

[2] Real Estate Foresight.

For professional investors only. All investments involve risk, including the possible loss of capital.

REF: 007303

Forecasts for China's residential market have improved, with a recovery expected in 2023 compared to a forecast of prolonged L-shape before the reopening (**Exhibit 2**, left chart). Public markets have also showed an improved sentiment with both bond and equity real estate indexes rising c.190% and 65% from their November troughs, respectively (**Exhibit 2**, right chart).

In summary, China's decision to reopen its border and shifting financial policy to a more accommodative stand will have net positive impacts on China and several regional real estate market, particularly those expected to benefit from the return of Chinese tourists and travelers.

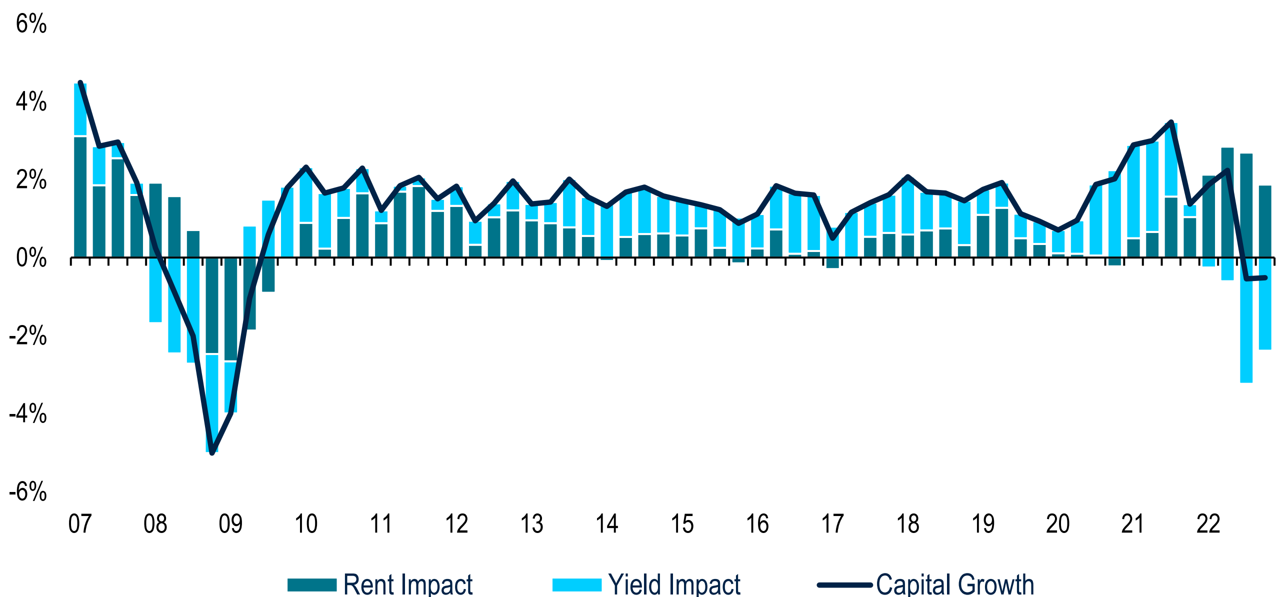
Will Rent Reversion Help Support Logistics Values?

After years of compression, logistics cap rates are under pressure to expand as central banks across the region continue to hike interest rates in the fight to control inflation. Pricing discovery started to take place in several markets, most notably in Australia and South Korea, with cap rates expanded in the past few quarters (**Exhibit 3**).

But capital values have been holding up relatively well thanks to stronger-than-expected rental growth (**Exhibit 3**). In 2022, Australian logistics markets in Sydney and Melbourne experienced record annual rental growth of over 20%. Similarly, Seoul saw nearly 10% rental growth. The overall logistics sector in Asia delivered over 5.2% real rental growth in 2022, despite the elevated inflation rates. Higher rents are helping logistics assets offset the negative impacts from yield expansion in these markets. As we expect pricing to continue recalibrating in the regional markets, with further expansion in logistics cap rates expected in 2023, rental growth remains critical to support asset values.

Exhibit 3: Rental Growth Has Been Crucial in Supporting Logistics Capital Values

APAC Logistics Sector Capital Growth (% p.a.)



Note: APAC logistics sector includes Australia, China, Hong Kong, Japan and South Korea.
Sources: JLL, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

However, with major economies in the region reopened fully and economic activities normalized, the pandemic-driven surge in logistics demand has slowed across key cities. Following aggressive expansion in the past 18 to 24 months fulfilling logistics demand of e-commerce players and related third-party logistics (3PLs), leasing activities moderated gradually. While high-quality logistics assets in desirable locations continue to record solid leasing performance, vacancy grew increasingly sticky in certain submarkets and the moderation of demand started to weigh on the rental growth outlook.

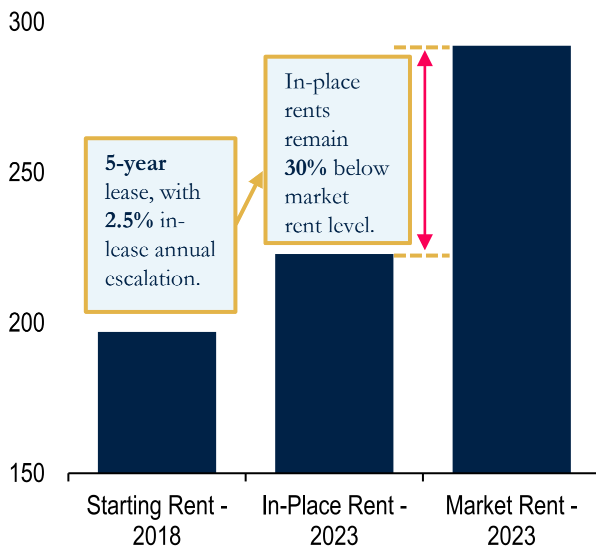
While headline rental growth is likely moderating, strong rental uplifts in the past two years have created a significant gap between in-place and market headline rents, implying rental reversions for assets having lease renewals coming. Taking the Sydney market as an example, in-place rents estimated for an asset with a 5-year lease started in 2018 and annual in-lease rental escalation of 2.5% would be approximately 30% below the nominal market rent level in 2023 (**Exhibit 4**, left chart).

Using the same methodology to assess potential rent reversions, we estimate that there is a broad-based presence of under-rented assets in several markets such as Sydney, Melbourne, Tokyo and Singapore (**Exhibit 4**, right chart). Estimated rental reversion averaging over 10% across the key cities in the next two years is well above the inflation rates forecast of 2.6% p.a.[3]. The rental reversion potentials, together with more modest but still solid rental growth prospects across major markets, are crucial cushions to support capital values against the risk of further cap rate expansion.

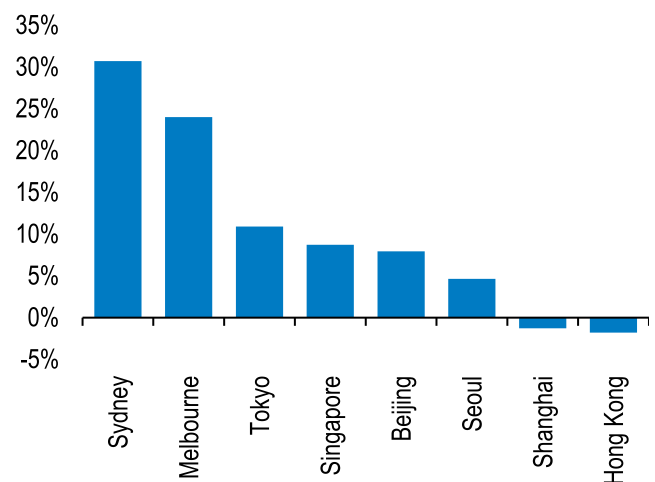
As such, while asset location remains critical for leasing performance as occupiers grow more selective, we expect that valuations of logistics assets in established submarkets with shorter weighted average lease expiry (WALE) – hence offering faster mark-to-market rental reversion – will be more resilient and present more attractive investment options to investors in the near term.

Exhibit 4: Logistics Rents Reached New Heights, Rental Reversion to Help Defend Capital Values

Sydney Mark-to-Market Rent Reversion (AUD psm p.a.)



Potential Logistics Rent Reversion by Market (2023-24 Average)



Note: Rent reversion calculated based on 5-year leases in single tenant assets, assuming annual rental escalations: 3% annual escalations in Beijing and Shanghai, 2.5% in Sydney and Melbourne, 2.0% in Hong Kong and Singapore, 1.5% in Seoul and 0% in Tokyo.

Sources: JLL, PGIM Real Estate. As of February 2023.

[3] Oxford Economics.

For professional investors only. All investments involve risk, including the possible loss of capital.

QUARTERLY INSIGHTS | INVESTMENT RESEARCH

EUROPE

Key Themes

- How is falling liquidity affecting pricing in European real estate markets?
- What should investors look for in these challenging conditions?

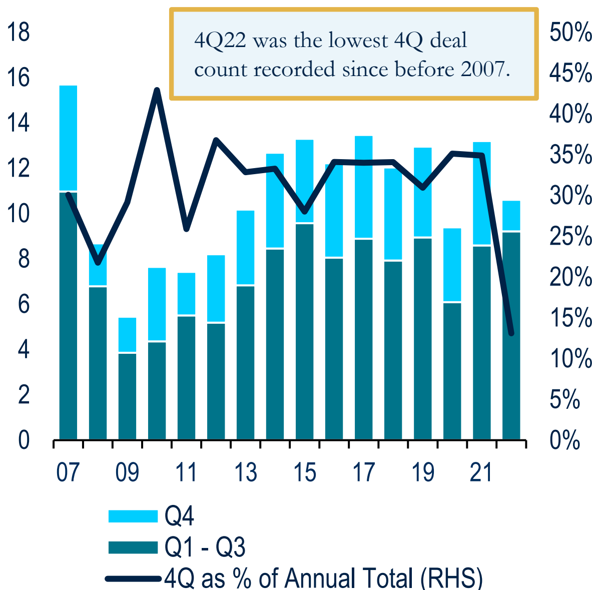
How is falling liquidity affecting pricing in European real estate markets?

While there are signs that the pace of interest rate increases is decelerating, uncertainty about the economic outlook remains elevated, which is resulting in falling liquidity across real estate markets that in turn has started to negatively affect real estate pricing.

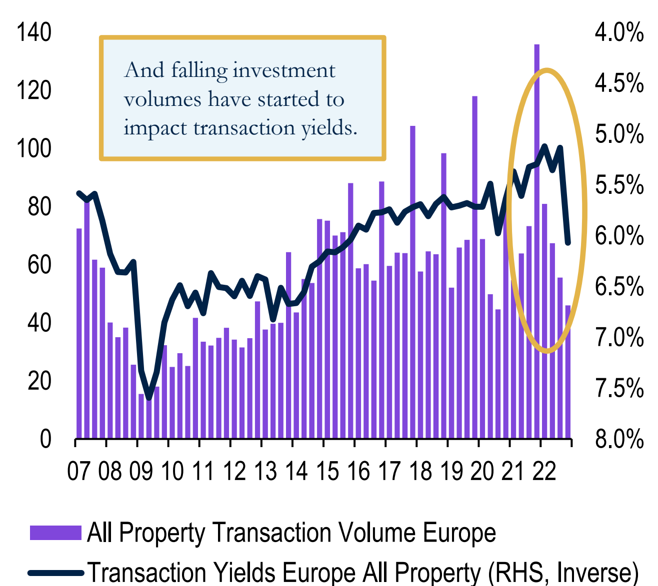
Investment volumes were weak in the fourth quarter of 2022. Usually investment activity picks up toward the end of the year as market participants are motivated to fulfill annual targets, and historically around a third of annual transactions by deal count are completed in the last quarter. However, in the fourth quarter of 2022 this number fell to 13%, marking the weakest 4Q recorded since 2007 (**Exhibit 1**).

Exhibit 1: Liquidity is Retrenching Quickly

Europe – Annual Deal Count (000)



Transaction Volume (€ Billion) and Transaction Yields



Sources: Real Capital Analytics, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

As uncertainty about the outlook remains high, there are signs that existing owners are pulling deals from the market fearing a need for further price cuts to complete transactions, while buyers are waiting for prices to fall further. This has significantly affected transaction yields in the fourth quarter of 2022 (**Exhibit 1**).

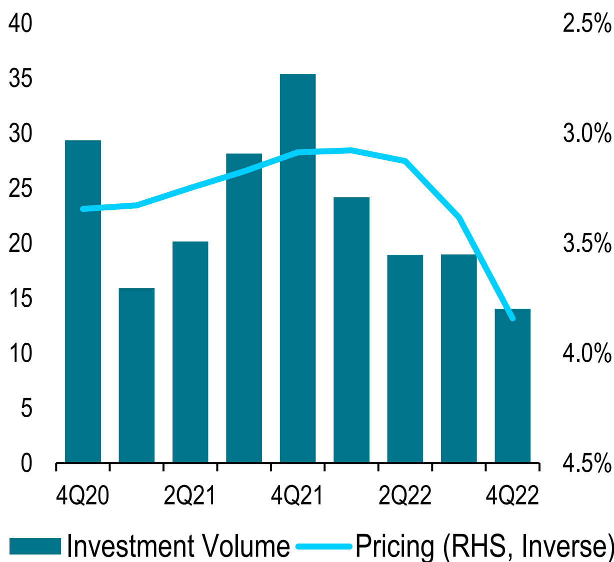
While transaction yields were still holding up in the third quarter, drying up investment volumes in 4Q in Europe have added to pressures on pricing linked to a sharp increase in the cost of capital over the past year. As transaction volumes declined for the fourth quarter in a row for the first time since 2007 (just prior to the global financial crisis), all property transaction yields moved out by nearly 100 basis point in the fourth quarter 2022 alone.

Judging from available evidence, the drop in liquidity has also started to negatively affect real estate valuation yields, adding to the effects of higher interest rates and falling debt availability that started to be felt mid-way through 2022. The weak activity in 4Q22 suggests that smooth market functioning is being affected and all property valuation yields moved out by 50 basis points in the fourth quarter of 2022 (**Exhibit 2**), representing a pace of adjustment that is faster than even during the global financial crisis.

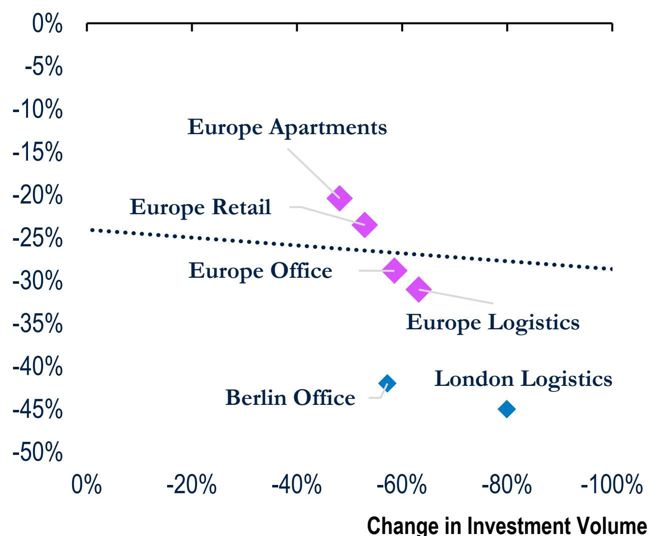
Falling liquidity is now clearly affecting pricing in European office markets (Exhibit 2), for example in Germany. In Berlin, transaction volumes fell by over 60% compared to their long-term average and capital values driven by yield shift fell by over 40% over the course of 2022, as rising interest rates quickly made debt financing of deals very challenging at previously very low yield levels of 2.5% and market participants pulled back as uncertainty spiked due to the Ukraine war.

Exhibit 2: Falling Investment Volume Weighing on Values

Prime Net Yields and Major Cities Transaction Volume (€ Billion)



4Q22 Transaction Volume Decline vs Peak to Current Value Falls



Note: Germany Apartment excludes 4Q21 Deutsche Wohnen Take-Over.
Sources: Real Capital Analytics, Cushman & Wakefield, PMA, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

Similarly in logistics, for example in the London metropolitan area, pricing has adjusted from levels that became unsustainable as interest rates moved up sharply in the second half of 2022 and which has been reinforced by falling transaction volume. The pricing move has come despite rental growth coming in stronger than had previously been expected, emphasizing that the repricing is very much a capital markets driven story and not much affected by fundamentals at this stage.

In short, in many parts of the market, falling liquidity is now exacerbating pricing movements, raising the risk of an overcorrection of pricing where volume declines most severely.

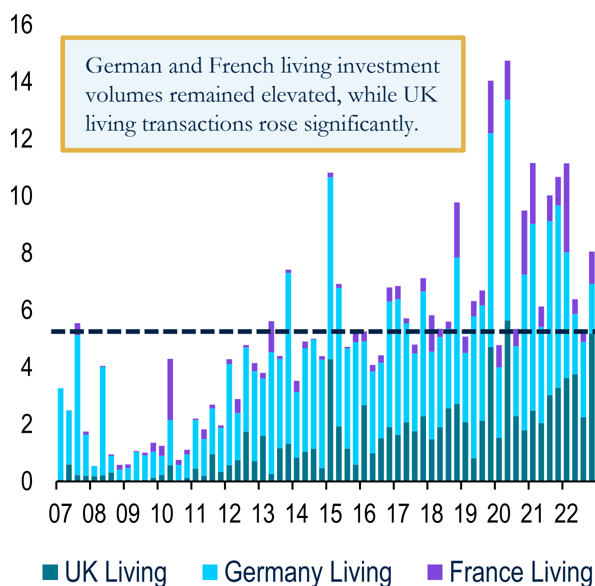
What should investors look for in these challenging conditions?

As repricing linked to higher interest rates is taking place across all sectors and markets, investors should focus on two areas of opportunity where liquidity is playing a role. The first is where investment volume is showing some resilience and therefore pricing is expected to hold up better, while the second opportunity is to look for markets where investment volume has fallen quickly and the price correction has gone far enough.

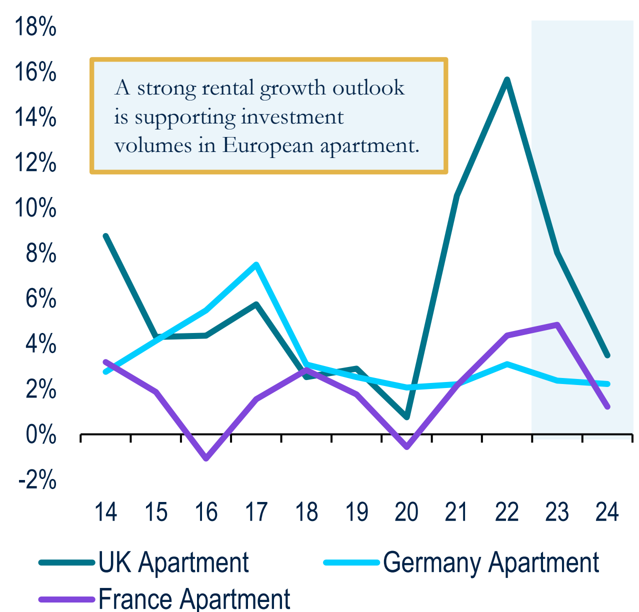
The former is the case in the European living sector (Exhibit 3), where in the fourth quarter transactions in Germany and France only fell by small amounts, while they rose strongly in the UK, boosted by some large M&A student housing activity. A driver for living real estate investment appetite – and limiting the fall in investment volumes and the adjustment in yields – was that investors are still seeing a resilient rental growth story for example in apartments as supply shortages interact with rising demand for rental stock given high mortgage rates, which is expected to continue especially in the UK (**Exhibit 3**).

Exhibit 3: Living Investment Volume a Bright Spot Across Europe

Big Three Living Sector Transaction Volume (€ Billion)



Big Three Apartment Rental Growth and Forecasts



Note: Germany Apartment excludes 4Q21 Deutsche Wohnen Take-Over.
Sources: Real Capital Analytics, Cushman & Wakefield, PMA, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

The second opportunity is to look for markets where falling investment volumes have sped up the correction and pricing is approaching long-term fair value. Using our internal pricing model that factors in interest rates, risk premiums and expected rental growth, we've identified a target yield range expressing fair value (**Exhibit 4**). When yields reach that range, we are looking at opportunities on a long-term buy-and-hold basis.

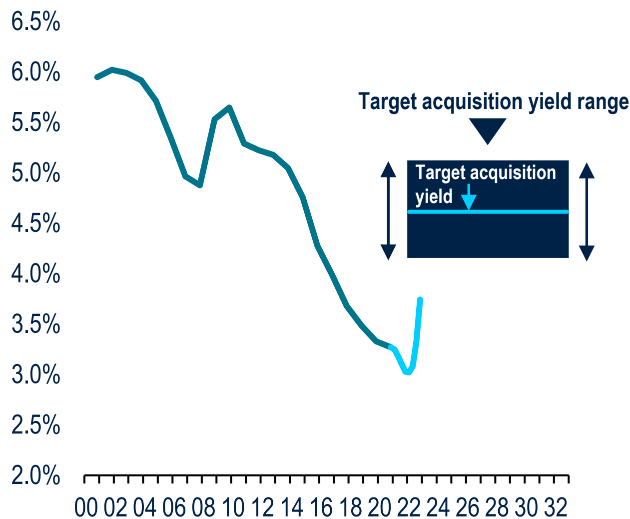
Based on an analysis of major European markets across different sectors, taking into account the target yield ranges, our estimate is that the correction in pricing is already halfway done (**Exhibit 4**).

In some sectors, the adjustment is playing out more quickly, with the sharp drop in liquidity being an important contributing factor. After a quick pricing adjustment over the last two quarters and taking into account a still largely positive occupier market, logistics is already two-thirds of the way to adjusting to long-term fair value. The sector could soon turn into an attractive proposition again, in particular as positive medium-term demand drivers linked to online spending and supply chain expansion remain in place.

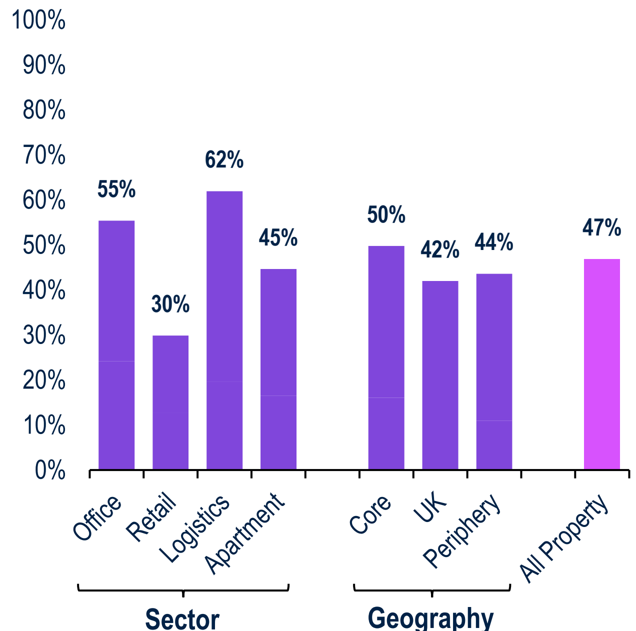
Our expectation is that investors with capital available to deploy will quickly see a window of opportunity opening up for new transactions at more attractive yield levels, either where resilient transaction volume is limiting the expected rise in yields or where drying up liquidity is leading to prices adjusting quickly toward long-term fair value. These target yield levels could be reached as early as in the middle part of this year.

Exhibit 4: Yield Shift Has Gone a Long Way in Logistics

Prime Net Initial Yield, Europe All Property (%)



Estimated Percentage of Required Yield Correction: Cyclical Low to Dec. 2022 (%)



Sources: CBRE, PMA, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

QUARTERLY INSIGHTS | INVESTMENT RESEARCH

UNITED STATES

Key Themes

- Shifting Apartment Winds – What's the Outlook for Relative Market Performance?
- What Industrial Markets Might See the Biggest Slowdown in an Economic Downturn?

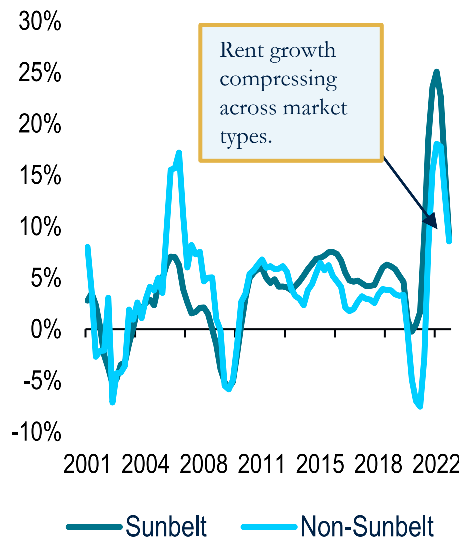
Shifting Apartment Winds – What's the Outlook for Relative Market Performance?

Rental housing faces headwinds this year and into 2024 both from outsized supply growth and weak demand drivers. Rental growth in metros located across the southern United States (Sunbelt[1]) has been higher than non-Sunbelt markets since 2013. However, we expect a temporary shift, with rents and occupancies softening the most in the Sunbelt.

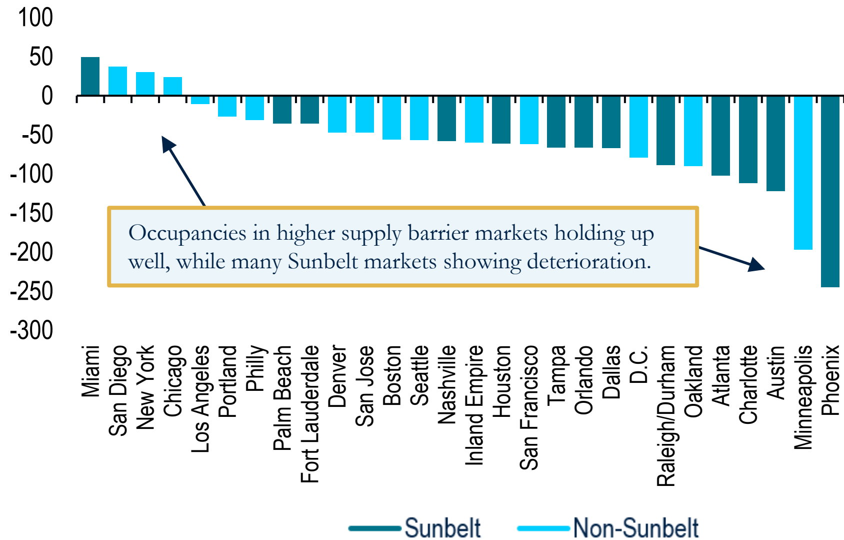
As shown in **Exhibit 1**, Sunbelt market occupancies are now farther below pre-pandemic levels than are occupancies elsewhere. Rental growth is converging across Sunbelt and non-Sunbelt markets.

Exhibit 1: Relative Market Performance Shifting

Annual Rent Growth



Multifamily Occupancy Change, 4Q22-4Q19 (Basis Points)



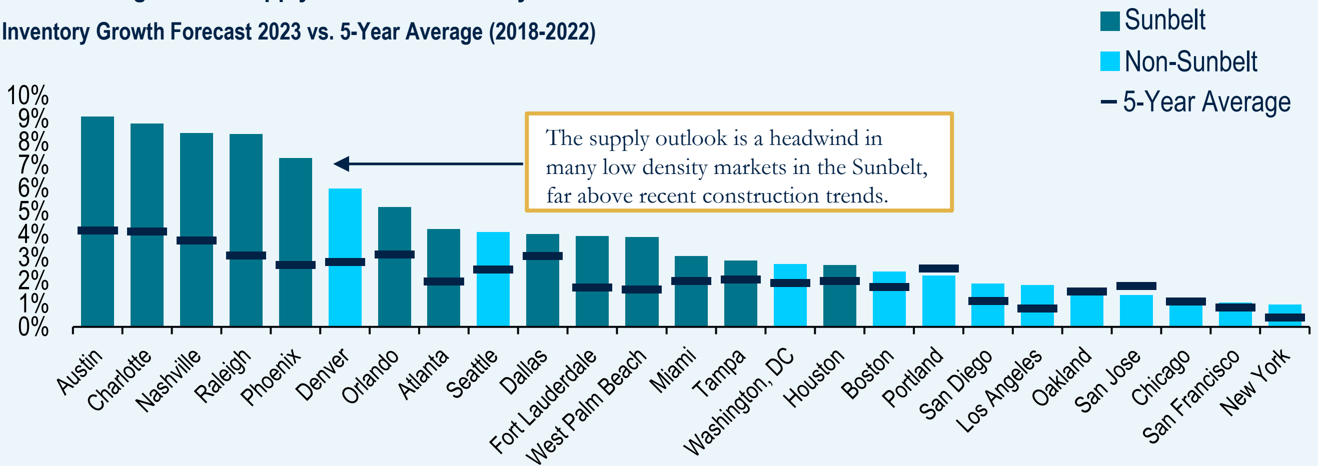
Sources: RealPage, PGIM Real Estate. As of February 2023.

[1] For the following analysis, Sunbelt markets considered include Atlanta, Austin, Charlotte, Dallas, Fort Lauderdale, Houston, Miami, Nashville, Orlando, Raleigh, Tampa and West Palm Beach.

For professional investors only. All investments involve risk, including the possible loss of capital.

At the same time, developers have responded to the double-digit rent growth in the last couple of years. Construction activity is much higher in many Sunbelt markets and set to outpace new demand to a greater degree than elsewhere. Prime examples of this include Austin, Charlotte, Nashville, Phoenix and Raleigh, which face potential supply growth this year of more than double the average of the past five years, as shown in **Exhibit 2**.

Exhibit 2: Significant Supply Headwinds in Many Sunbelt Markets

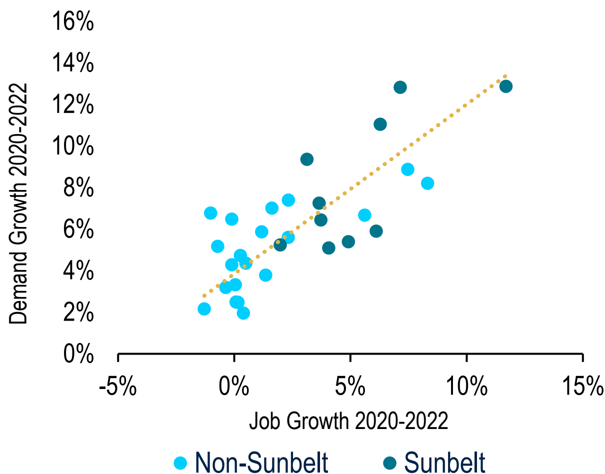


Sources: RealPage, PGIM Real Estate. As of February 2023.

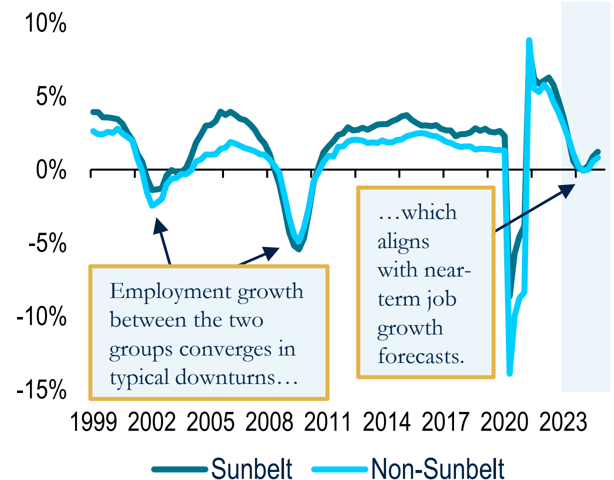
Supply growth is typically higher in these metros since demand growth, driven by employment, is also stronger. Despite significant volatility in both apartment demand and employment growth over the last few years, the link between the two across markets remains strong, as shown in **Exhibit 3**. However, near-term employment forecasts suggest that construction at its current scale is excessive because job growth in the Sunbelt markets will decelerate over the next year and match that of non-Sunbelt markets, as shown in **Exhibit 3**.

Exhibit 3: Job Growth Set to Slow Across Metros

Job Growth vs. Apartment Demand Growth (2020-2022)



Total Employment Growth, Annual



Sources: Oxford Economics, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

Despite this short-term, cyclical mismatch between supply and demand, the sharp pullback in debt availability will curtail multifamily supply deliveries beyond 2024, as developers find it more costly to finance projects. At that point, apartment leasing will benefit from an improved economy at the same time supply recedes. In this environment, Sunbelt apartment market performance will once again benefit from continued strong job growth.

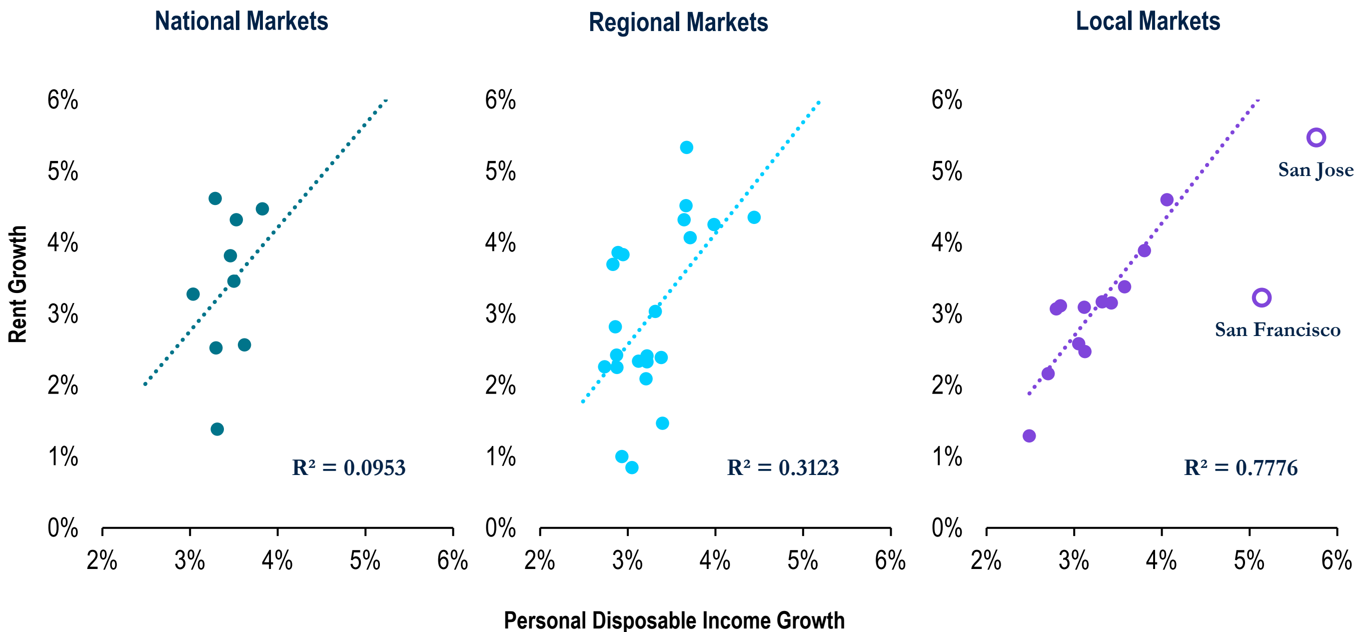
What Industrial Markets Might See the Biggest Slowdown in an Economic Downturn?

Economic headwinds have mounted over the past year, and while we believe the Industrial sector will remain resilient, it will not be immune. Should the U.S. enter a recession, markets that are not solely reliant on local economic activity will prove more resilient.

Knowing an industrial market's scope of distribution, where inventory is shipped to and from, can provide insight into the strengths and vulnerabilities of a market. Based on this, markets can be grouped into three categories: national, regional and local[2]. National markets, such as Los Angeles, New York and Chicago, have the widest scope, distributing goods to all corners of the country. On the opposite side of the spectrum are local markets, such as Austin, Boston and San Francisco, which serve the immediate metro area. In the middle are regional markets, like Baltimore, Miami and Philadelphia, serving various metropolitan areas in their respective regions.

Exhibit 4: Influence of Local Economy Differs by Market Type

Industrial Rent Growth Versus Disposable Income Per Capita Growth (2006-2021)



National Markets: Atlanta, Chicago, Columbus, OH, Dallas, Indianapolis, Inland Empire, LA/Orange County, New York, St. Louis.

Regional Markets: Washington/Baltimore, Charlotte, Cincinnati, Cleveland, Denver, Detroit, Harrisburg, Houston, Jacksonville, Kansas City, Lehigh Valley, Miami, Ft Lauderdale, Milwaukee, Minneapolis, Nashville, NNJ, Oakland, Philadelphia, Phoenix, Portland, Seattle.

Local Markets: Austin, Boston, Las Vegas, Norfolk, Oklahoma City, Orlando, West Palm Beach, Raleigh-Durham, Richmond, Sacramento, Salt Lake City, San Antonio, San Francisco, San Jose.

Sources: CoStar, PGIM Real Estate. As of February 2023.

[2] CoStar, "Industrial Big Book," September 2018: Page 62.

For professional investors only. All investments involve risk, including the possible loss of capital.

REF: 007303

As show in **Exhibit 4**, the correlation between growth in local personal income and industrial rent growth in a market increases from national, to regional and then local. As expected, the more local a market's scope of distribution, the more a market is tied to the local economy. That makes local industrial rent growth highly sensitive to changes in local economic growth.

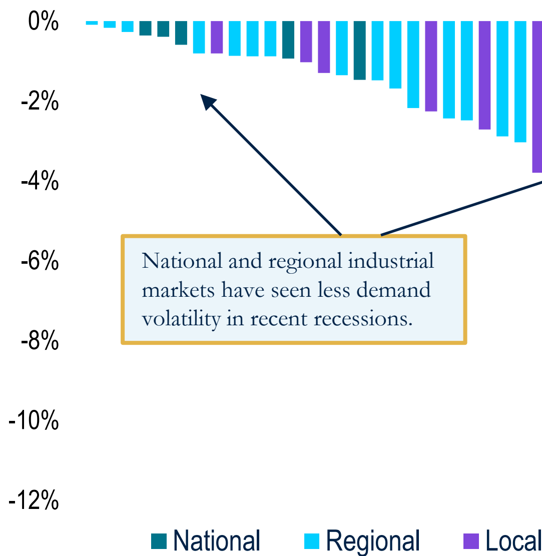
National and regional markets benefit from serving a wide geographic area and generally play a critical role in many companies' supply chains. By contrast, as shown in **Exhibit 5**, over the past two decades local markets were typically the hardest hit during recessions as measured by declines in occupied space. Similarly, cap rates in local industrial markets historically move up more than the average metro during recessions.

In a downturn, national and regional industrial markets are usually more resilient than local markets, benefiting from diversification of demand sources and preventing sharp declines. Furthermore, it is possible facilities in these metros can be used as storage for excess inventory, ready to be shipped whenever and wherever consumer spending picks back up.

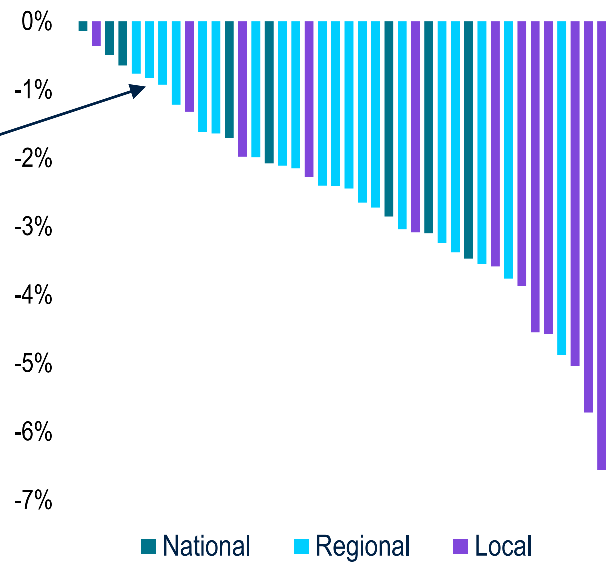
As a result, as we head into a likely U.S. recession, we continue to favor some of the largest regional and national markets, particularly those with high supply barriers such as Los Angeles, New York and Miami. The combination of limited supply pressures and a cushion provided by their importance to supply chains will drive strong relative performance.

Exhibit 5: Local Industrial Demand More at Risk in a Downturn

Dot-Com Recession, Decline in Occupied Space



Global Financial Crisis, Decline in Occupied Space



Sources: CoStar, PGIM Real Estate. As of February 2023.

For professional investors only. All investments involve risk, including the possible loss of capital.

Important information

This material is intended for Institutional and Professional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not a guarantee or a reliable indicator of future results. This presentation is for informational or educational purposes. The information is not intended as investment advice and is not a recommendation about managing or investing assets. In providing these materials, PGIM Real Estate is not acting as your fiduciary.

These materials represent the views, opinions and recommendations of the Author as of January 2023 regarding the economic conditions, asset classes, securities issuers or financial instruments referenced herein. These are subject to change at any time and may differ from the views of other Portfolio Managers of PGIM Real Estate as whole.

Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM Real Estate is prohibited.

The views and opinions expressed herein are as of the date given, may change as market or other conditions change and may differ from the views and opinions expressed by PGIM Real Estate associates or affiliates.

PGIM Real Estate accepts no liability whatsoever for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this commentary. PGIM Real Estate and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Real Estate or its affiliates.

All charts, graphs and images shown are for illustrative purposes only.

PGIM is the primary asset management business of Prudential Financial, Inc. (PFI). PGIM Real Estate is PGIM's real estate investment advisory business and operates through PGIM, Inc., a registered investment advisor. Registration as a registered investment adviser does not imply a certain level or skill or training. Prudential, PGIM, PGIM Real Estate, their respective logos and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide. **PFI of the United States is not affiliated in any manner with Prudential plc, incorporated in the United Kingdom or with Prudential Assurance Company, a subsidiary of M&G plc, incorporated in the United Kingdom.** In the United Kingdom, information is issued by PGIM Limited with registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority ("FCA") of the United Kingdom (Firm Reference Number 193418). In the European Economic Area ("EEA"), information is issued by PGIM Real Estate Luxembourg S.A. with registered office: 2, boulevard de la Foire, L1528 Luxembourg. PGIM Real Estate Luxembourg S.A. is authorised and regulated by the Commission de Surveillance du Secteur Financier (the "CSSF") in Luxembourg (registration number A00001218) and operating on the basis of a European passport. In certain EEA countries, information is, where permitted, presented by PGIM Limited in reliance of provisions, exemptions or licenses available to PGIM Limited under temporary permission arrangements following the exit of the United Kingdom from the European Union. These materials are issued by PGIM Limited and/or PGIM Real Estate Luxembourg S.A. to persons who are professional clients as defined under the rules of the FCA and/or to persons who are professional clients as defined in the relevant local implementation of Directive 2014/65/EU (MiFID II).

Important information *(continued)*

PGIM Real Estate Germany AG is a German Capital Management Company with a respective license pursuant to sec. 20, 22 of the German Capital Investment Act (Kapitalanlagegesetzbuch–KAGB). In case PGIM Real Estate Germany AG markets or distributes units or shares in external investment funds, i.e. investment funds for which PGIM Real Estate Germany AG does not provide the collective portfolio management within the meaning of Directive 2011/61/EU or, respectively, the KAGB, such marketing or distribution is performed in accordance with sec. 20 para. 3 no.6 KAGB. PGIM Real Estate Germany AG is not responsible for the collective portfolio management (including portfolio and risk management) within the meaning of Directive 2011/61/EU or, respectively, the KAGB, with regard to the respective investment funds in this case. It is also not responsible for the content of any marketing material (including prospectus, Offering Memoranda etc.) provided by the fund manager or other third parties. PGIM Real Estate Germany AG will not examine or assess the individual situation of any prospective investor and does not provide any personal recommendations, including recommendations related to tax issues, to prospective investors relating to transactions in the respective investment funds. Where relevant, prospective investors should seek advice from qualified third parties before they take an investment decision.

In Singapore, information is provided by PGIM (Singapore) Pte. Ltd., a regulated entity with the Monetary Authority of Singapore under a Capital Markets License to conduct fund management and an exempt financial adviser. In Hong Kong, information is provided by PGIM (Hong Kong) Limited, a regulated entity with the Securities & Futures Commission in Hong Kong to professional investors as defined in Section 1 of Part 1 of Schedule 1 of the Securities and Futures Ordinance (Cap. 571). In Australia, information is issued by PGIM (Australia) Pty Ltd ("PGIM Australia") for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). PGIM Australia is a representative of PGIM Limited, which is exempt from the requirement to hold an Australian Financial Services License under the Australian Corporations Act 2001 in respect of financial services. PGIM Limited is exempt by virtue of its regulation by the FCA under the laws of the United Kingdom and the application of ASIC Class Order 03/1099. The laws of the United Kingdom differ from Australian laws. In Japan, information is provided by PGIM Real Estate (Japan) Ltd., a Japanese asset manager that is registered with the Kanto Local Finance Bureau of Japan. These materials represent the views, opinions and recommendations of the authors regarding the economic conditions, asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials in whole or in part or the divulgence of any of the contents hereof without prior consent of PGIM Real Estate is prohibited. Certain information contained herein has been obtained from sources that PGIM Real Estate believes to be reliable as of the date presented; however, PGIM Real Estate cannot guarantee the accuracy of such information, ensure its completeness or warrant such information will not be changed. The information contained herein is current as of the date of issuance or such earlier date as referenced herein and is subject to change without notice. PGIM Real Estate has no obligation to update any or all of such information, nor do we make any express or implied warranties or representations as to its completeness or accuracy or accept responsibility for errors. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. Past performance is no guarantee or reliable indicator of future results. No liability whatsoever is accepted for any loss whether direct, indirect or consequential that may arise from any use of the information contained in or derived from this report. PGIM Real Estate and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Real Estate or its affiliates.

The opinions and recommendations herein do not take into account individual client circumstances, objectives or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients or prospects. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. For any securities or financial instruments mentioned herein, recipients of this report must make their own independent decisions.

Conflicts of Interest: Key research team staff may be participating voting members of certain PGIM Real Estate fund and/or product investment committees with respect to decisions made on underlying investments or transactions. In addition, research personnel may receive incentive compensation based on the overall performance of the organization itself and certain investment funds or products. At the date of issue, PGIM Real Estate and/or affiliates may be buying, selling or holding significant positions in real estate, including publicly traded real estate securities. PGIM Real Estate affiliates may develop and publish research that is independent of and different from the recommendations contained herein. PGIM Real Estate personnel other than the authors, such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas for PGIM Real Estate's clients or prospects or proprietary investment ideas that differ from the views expressed herein. Additional information regarding actual and potential conflicts of interest is available in Part II of PGIM's Form ADV.

COVID-19: Occurrences of epidemics, depending on their scale, may cause different degrees of damage to national and local economies that could affect the value of the Fund and the Fund's underlying investments. Economic conditions may be disrupted by widespread outbreaks of infectious or contagious diseases, and such disruption may adversely affect real estate valuations, the Fund's investments, and the Fund and its potential returns. For example, the continuing spread of COVID-19 (also known as novel coronavirus) may have an adverse effect on the value, operating results and financial condition of some or all of the Fund's investments, as well as the ability of the Fund to source and execute target investments. The progress and outcome of the current COVID-19 outbreak remains uncertain.

These materials are for informational or educational purposes. In providing these materials, PGIM (i) is not acting as your fiduciary and is not giving advice in a fiduciary capacity and (ii) is not undertaking to provide impartial investment advice as PGIM will receive compensation for its investment management services.

For professional investors only. All investments involve risk, including the possible loss of capital.