

KEY THEMES FOR 2025

Riding the real estate recovery

Riding the real estate recovery	3
Global opportunities	6
The next frontier: a global view on data centers	8
Alternatives in focus	10
The global need for housing	12
Where office markets are thriving	14
Retail real estate in the era of convenience culture	16
Will the global transition to net zero carbon buildings withstand	

18

Introduction

political headwinds?

The painful reset of private real estate seems to be in the rearview mirror, and we expect 2025 to be a good vintage for real estate investment. Values have stabilized, total returns are positive in most markets and the dearth of new construction activity bodes well for mediumterm fundamentals. The U.S. election outcome will create headwinds and tailwinds for various sectors and geographies, but the megatrends that underpin our investments will play out over decades. Our 2025 outlook includes snippets on our top investment ideas and insights on the global need for housing, the strength of alternative property types, the rebirth of retail and the shifting nature of environmental, social and governance (ESG) considerations.

Riding the real estate recovery



The last two years have challenged real estate. Rising interest rates put upward pressure on capitalization rates and discount rates, which in turn put downward pressure on values. Increased construction in markets with softening demand caused vacancies to rise and rent growth to slow. Investors headed for the exits, creating a market with more sellers than buyers. As we enter 2025, these headwinds have broadly abated and the painful reset seems to be at an end. After falling 16.2% from the peak¹, global real estate values are showing signs of stabilizing, and total returns have ticked positive (Figure 1). Investors considering allocations to the asset class in 2025 will find a number of opportunities as the rebound gains momentum. Rising values are welcomed by investors, but they are not necessary to experience positive total returns. Total returns are comprised of income and capital growth, with income being the far larger contributor over time. The U.S. ODCE Index has provided investors 7.7% annualized returns since 1978 and 91% of those returns were attributable to income. In the latest data available upon publication (Figure 2), across the 21 countries in the MSCI Global Property Index, values were up in about half (11 of 21) and down in about half (10 of 21). However, investors in all 21 countries experienced positive total returns for the quarter due to real estate's stable income return component, the first time in two years where returns were positive across all countries.

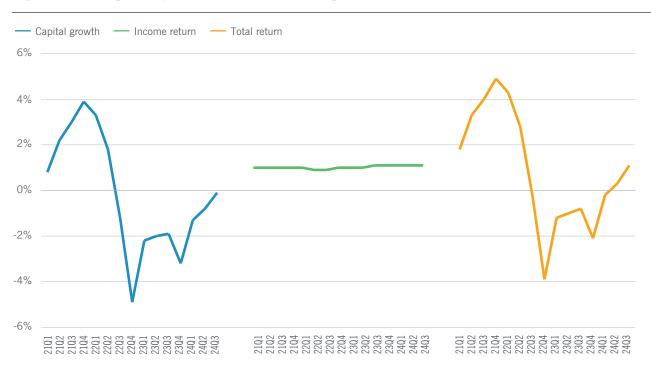


Figure 1: Global quarterly total returns have turned positive

Source: MSCI Global Quarterly Property Index (Q3 2024 data as of 5 Dec 2024 data release); Nuveen Real Estate Research.



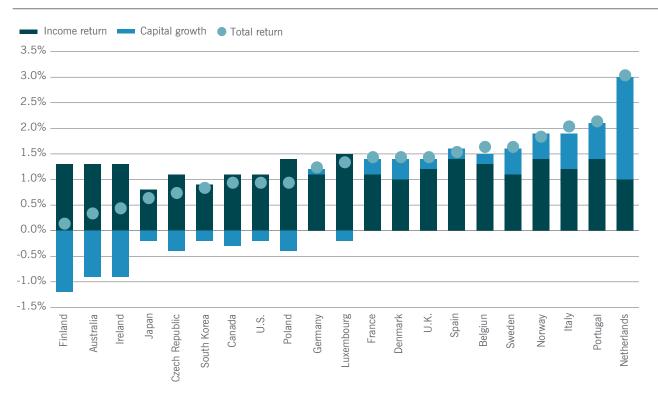


Figure 2: Total returns are positive across the globe

Source: MSCI Global Quarterly Property Index (Q3 2024 as of Dec data release).

While the returns thus far may not get investors excited, the turning point is noteworthy. In the past three cycles, investors who were able to time the bottom experienced strong returns over the subsequent five years. Analyzing the U.S. NCREIF ODCE Index, after the early 90s recession, investors experienced a 76% cumulative return over the next five years. Following the tech-wreck, the fiveyear cumulative total return was 98% and in the aftermath of the global financial crisis, 85%². On a compound annual growth basis, those returns range from a healthy 12.0% to 14.6% following a downturn.

Although higher interest rates have impacted real estate negatively over the last two years, they have set the asset class up well for a solid recovery. Construction financing has been particularly expensive, which caused development to slow considerably. It has been about a decade since starts were last at these lows for U.S. apartment and industrial (2011 and 2015, respectively), and both office and retail are seeing historically low construction levels (Figure 3). Because development timeframes are typically measured in years, muted new starts will translate into muted deliveries over the medium-term. This sets each sector up well for occupancy recovery and rent growth. The potential for interest rates to moderate over the hold period creates additional upside through capital appreciation, but the income potential alone makes for compelling investment opportunities in 2025.



Figure 3: U.S. construction activity by property type



Source: CoStar; Nuveen Real Estate Research.

66 The income potential alone makes for compelling investment opportunities in 2025.

Global opportunities



As 2024 came to a close, the global real estate market seemed to be turning a corner. In the third quarter, 45 of 51 markets produced a positive total return (Figure 4), up from just 14 markets in the fourth quarter of 2023³. Office markets remained the most challenged globally, but even within the sector we continue to see significant differentiation. Between Q3 2023 and Q3 2024, the total return for U.S. Office was negative (-12.4%), while the total return for South Korea office was positive (8.1%), a spread of 20 percentage points. South Korea's largest market, Seoul, had a vacancy rate of just 3.0% and rental growth at 6.7% year-over-year as of Q4⁴. This example demonstrates that real estate is not a monolith; in each region, country and property sector there are opportunities for savvy investors.

We believe that there are opportunities in every sector and region, but at a broad level, we see good potential in the following:

Real estate credit

Base rates and credit spreads remain elevated. Asset values have reset, so loan-to-value (LTV) ratios are likely to decrease over the length of the loan as values rebound. Loan covenants are strong. In short, real estate credit looks attractive, particularly on a risk-adjusted basis.

U.S. medical office

Occupancy levels are at all-time highs, new supply is muted and the country's aging demographics (and consumer preferences) are leading to increased demand for medical office space.

Senior housing in the U.S. and Japan

Strengthening fundamentals, aging populations and limited new supply should propel growth.

Necessity retail in Europe and the U.S.

Higher going-in yields, less competition from other investors, strong fundamentals with almost no supply risk and pandemic-tested demand are fueling resilience.

Student housing in Asia Pacific and Europe

Low levels of competitive institutional-quality stock, high levels of demand from international students and less regulation create an attractive entry point.

Self-storage in Europe and the U.S.

Existing stock is minimal in Europe and there are opportunities for consolidation and institutionalization. In the U.S., a softening in fundamentals and pricing is providing a compelling entry point for value-add investing.

Light industrial in the U.S.

There are fewer supply threats and stronger fundamentals compared to bulk logistics. Globally, the industrial sector continues to benefit from e-commerce tailwinds and supply chain reconfiguration.

U.S. affordable housing

Investment in the sector can help improve the quality of affordable housing and the lives of residents. Investors benefit from high occupancy and stable governmentsupported rent payments.



Figure 4: Quarterly total returns by country and sector (Q3 2024)

					Europa Patail		nds Residential 3.9	
					2. Europe Retail	2.4%		
		U.K. Retail 2.2% Belgium-Lux. Industrial 2.2% Ireland Industrial 2.1% U.S. Retail 2.0% Netherlands Industrial 1.9% U.K. Industrial 1.9%						
		S. Europe Industrial 1.9% Germany Industrial 1.9%						
				Retail 1.8%	0			
				1	Industrial 1.8%	•		
				Nordic Off	ce 1.8%			
					ustrial 1.8%			
				S. Europe Res				
				Netherlands Of Australia Retail				
				Japan Resident				
				Canada Retail 1				
				Ireland Retail 1				
				Germany Resider				
				U.S. Residential				
				C. Europe Office Nordic Residenti				
			ordic Industrial 1					
			S.	Korea Office 1.3	3%			
				dic Retail 1.2%				
				an Industrial 1.2				
				um-Lux. Retail 1 lia Industrial 1.0				
				Office 1.0%	,0			
			Belgiu	m-Lux. Office 1.0)%			
				ndustrial 1.0%				
				inds Retail 0.9%				
				sidential 0.9% sidential 0.8%				
				esidential 0.8%				
			Canada Ir	ndustrial 0.8%				
			Canada Offi					
			France Retail					
			Germany Office	dustrial 0.6%				
			S. Europe Office					
			U.K. Office 0.4%	6				
	0.20/ Instand		S. Korea Industr	ial 0.4%				
	-0.2% Ireland O							
	% Germany Ret eland Residentia							
	Australia Office							
-0.	5% U.S. Office							
-1.3% Japan Offi	се							

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Key themes for 2025: Riding the real estate recovery

The next frontier: a global view on data centers



The rise of artificial intelligence (AI) and other data-reliant technology has kicked off an unprecedented rise in data usage. The global datasphere is projected to reach 181 zettabytes by 2025, nearly 12 times the size it was just 10 years earlier (Figure 5). The global data surge has spurred a near insatiable demand for data center space. Supply growth is increasing, but power constraints across regions are likely to prevent it from catching up to demand in the near future, making this an attractive investment option. The rapid evolution of the technology, physical plant design and the need for locations closer to end users will quickly reshape the landscape. As a result, we favor development in this sector versus a core strategy.

In Europe, supply growth has picked up notably in key markets like Frankfurt, London, Amsterdam and Paris.

However, rising construction costs have made preleasing common in the region, and vacancy rates have fallen by 2% over the past year as rents continue to climb. In the Asia Pacific region, vacancy rates climbed slightly over 2024 amid a wave of new capacity hitting markets such as Hong Kong and Tokyo. However, conditions in major markets like Singapore remained exceptionally tight, with vacancy of just 1.0%⁵.

In North America, vacancy rates hit a record low of 2.8% in 2024 as major tenants, including Apple, Microsoft and Amazon, continue to expand their footprint. Average rental rates have surged as a result, rising 44.6% in North America since 2021 after declining throughout the previous decade (Figure 6)⁶.

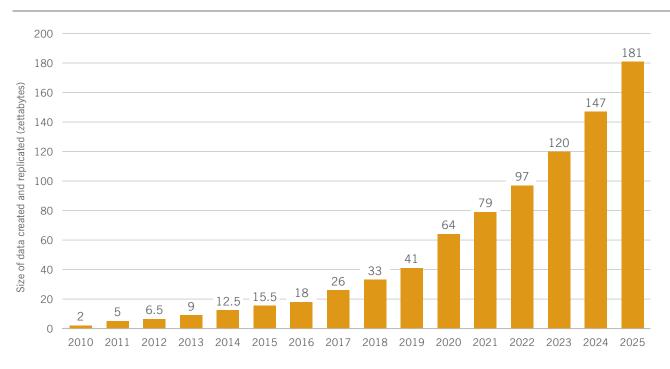


Figure 5: The projected colossal rise of the global datasphere

Source: IDC Global Forecast 2021-2025.



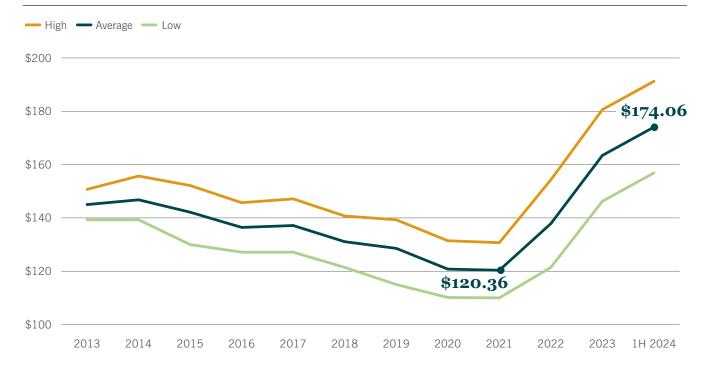


Figure 6: North American asking rental rate, primary markets (\$ kW/month)

Source: CBRE, data as of Q2 2024.

66 The global data surge has spurred a near insatiable demand for data center space.

Alternatives in focus

Amid the downturn in traditional commercial real estate sectors, investors have increasingly turned towards alternative property types to generate diversification and outperformance. While data centers have garnered the most attention globally, opportunities to enter the alternatives space are abundant in sectors across regions, driven by demographics.

U.S. medical office

The share of the U.S. population aged over 75 years is projected to increase from 8% today to 12% by 2040, according to data from the Organisation for Economic Cooperation and Development (OECD). Seniors spend three times more on healthcare than younger adults, setting up for an enormous increase in healthcare spending over the next two decades.

Combined with strong operating fundamentals, these secular tailwinds present an opportunity for robust demand. The sector has historically provided higher income returns and lower total return volatility than the average sector.

Modern facilities with credit-rated tenants focused primarily on high-acuity specialties located in dominant locations are poised to perform particularly well. Historically tight market occupancy (Figure 7) and limited new supply should aid in leasing and marking rents to current levels.

European self-storage

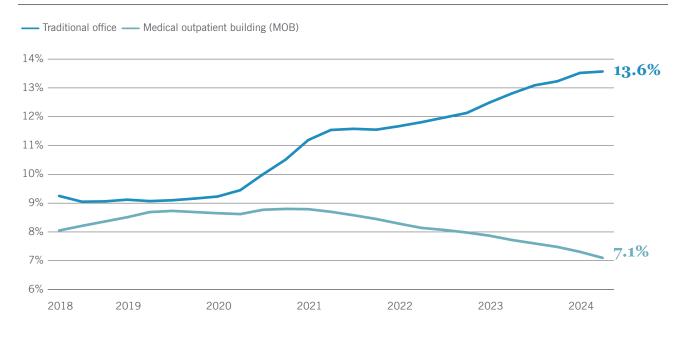
Among the most compelling alternative property investments in Europe is self-storage, which has benefited from both cyclical and structural drivers post-pandemic. The sector has continued to perform well with strong levels of revenue and earnings growth. The latest REIT trading updates provided upbeat results, pointing to incremental improvements across the continent. Operating revenue growth has accelerated, driven by improving occupancy among the domestic customers. Business demand is bottoming out with operating cost pressures easing. In the long term, the chronic lack of quality product means existing investors in European self-storage will continue to enjoy the demand and supply imbalance for a considerable period of time.

Asia Pacific senior living

Japan is at the forefront of an aging population and growth of elderly requiring care services at level 2 or above. By 2030, an estimated 32% of Japan's population will be 65 years and older⁷. Japan remains the leading market for a senior living strategy in the region. Tokyo and Osaka remain undersupplied, creating opportunities for private investment to meet rising demand. South Korea also presents a promising market, with the elderly population (aged 65+) expected to reach 37% by 2045. Unlike Japan, South Korea lacks a pension system that covers 90% of care expenses⁸. Therefore, investment should focus on high-end facilities to bolster higher risk-adjusted returns.



Figure 7: Traditional office and medical office vacancy rates are diverging



Source: Nuveen Real Estate; Revista, CoStar Group, Inc., Jun 2024. Note: CoStar data is used for traditional office vacancy and Revista data is used for medical outpatient buildings. Revista's Top 50 markets were used for both data sources.

66 Opportunities to enter the alternatives space are abundant in sectors across regions, driven by demographics.

The global need for housing



Demographic shifts and affordability headwinds will underpin rental housing demand across the globe in 2025 and beyond. In Europe and Australia, the growing youth population will drive student housing demand, while in the U.S., the accelerating silver tsunami will buoy senior housing demand. In Asia Pacific, affordability headwinds will sustain multifamily rental demand.

European student housing

From a demand perspective, Europe is entering a golden era of youth growth (Figure 8), driving domestic demand for purpose-built student accommodation (PBSA). The growth of international students is strong due to an increasing number of English-taught courses, strengthening rankings of continental universities, and more welcoming immigration policies than other regions.

Despite the exceptionally favorable demand fundamentals, European PBSA stocks remain highly restricted. The provision rate averages 14% in Europe, meaning only 1 in 7 students has access to student housing⁹. This severe supply-demand imbalance suggests that existing players will continue to enjoy outperformance for a considerable period of time while substantial room remains for new entrants. We envisage the sheer weight of capital, coupled with the maturity of the sector will provide upside potential for the pricing of European PBSA.

Asia Pacific multifamily and student housing

The strong appeal of the living sector remains wellunderpinned by the region's favorable demographics and rising renter demand driven by affordability challenges. Japan's multifamily market stands out for its defensive characteristics, including high rent collection rates and insurance-backed protection in case of rent defaults. Major Japanese cities such as Tokyo and Osaka are experiencing net population inflows, boosting demand. With future supply staying limited due to rising construction costs, a supply-demand imbalance will continue to support rent increases. Multifamily assets with good transport access and nearby amenities are likely to outperform as young professionals increasingly prioritize location to live close to their workplace.

While Japan is the primary focus, Australia and South Korea are emerging as promising markets. Australia's multifamily sector will benefit from tight future supply and strong demand, fuelled in large part by overseas migration. The student housing sector in Australia has proven resilient, with average annual rental growth exceeding 6% over the past five years¹⁰, driven by favorable supply/demand dynamics. Course commencements by Chinese students this year have returned to pre-pandemic levels. In cities like Sydney and Melbourne, where supply is expected to remain below 50%, steady rental growth will continue. South Korea, where over 40% of households are single-person households, is also seeing growth in the multifamily market, with a shift toward monthly rentals over the traditional Jeonse system.

66

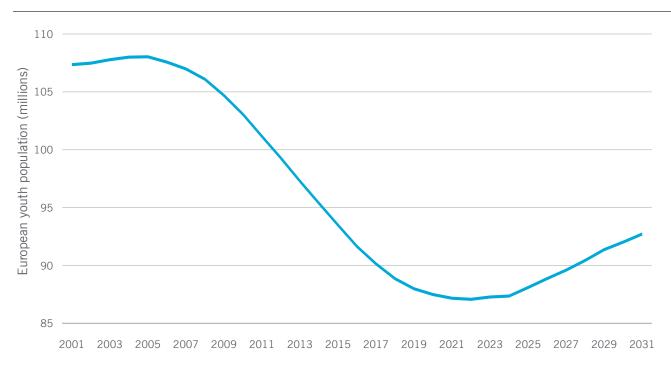
Demographic shifts and affordability headwinds will underpin rental housing demand across the globe in 2025 and beyond.



U.S. senior housing

In our view, senior housing is an attractive near-term investment opportunity as the population growth of 75+ year olds is expected to accelerate. With the outsized cost of in-home healthcare, the senior housing sector serves as a favorable, and economic, housing option for seniors to age with support and care. Currently, roundthe-clock, in-home healthcare costs \$211,260 more per year than renting in an assisted living facility, according to Genworth. We believe this premium will continue to increase as the ratio of caregivers to seniors will drop from 3.2 in 2024 to 2.1 by 2040, increasing in-home healthcare costs with more competition for less available healthcare workers.

Figure 8: Europe's golden era of youth growth



Source: Oxford Economics, data as of Jan 2024.

Where office markets are thriving



The divergence in global office sector performance persisted in 2024, with valuations in the U.S. still searching for a bottom but select European and Asia Pacific markets starting to sprout green shoots.

While risks have not totally abated, office fundamentals are likely to strengthen in 2025. Supply risk has withered significantly. Total office stock in some markets is likely to recede with redevelopment. Business conditions look brighter; steady hiring and rising return-to-office mandates should drive occupier demand higher (Figure 9). The dynamic leading the sector's evolution remains a flight to quality. The focus on Grade A+ offices in prime locations with strong transportation and amenities will be the key to driving tenant demand and income growth. The future of the office is alive within well-connected neighborhoods in vibrant global cities.

Over the past two years, the dispersion in office values has been most notable between Australia and Greater China versus the rest of Asia Pacific. The Australian office sector has been weighed down by declining take-up, a rise in subleases and the sharp increase in borrowing costs driving write-downs by Australian superannuation and institutional funds. Excess supply and poor economic and business sentiment have also driven down office values in Tier-1 Chinese cities and Hong Kong.

Conversely, fundamentals are a lot healthier in other regional cities such as Singapore, Tokyo, Osaka and Seoul, reinforced by low vacancy and robust business expansion. Employees in these cities are returning to the office at least four to five times a week, backed by strong cultural leanings and small living spaces at home. The outlook in the current cycle looks most promising in office markets where repricing has over-corrected and outpaced the steady improvement in fundamentals, such as the east coast of Australia or where longer-term resilience in demand will continue to mitigate cyclical volatility in supply in areas of Singapore, Seoul and Tokyo.

European office markets are seeing a bifurcation of fortunes between amenity-laden city centers with strong transport links and secondary markets. While prime space with high green standards is what all occupiers are preferring, the strong rental growth over the inflationary period has put these buildings out of reach for many. Fringe locations with high-quality product are also seeing strong demand, which has pushed up prime, but also average, rents. Truly soft conditions in European office occupier markets are limited to Paris La Défense and London Docklands as well as outdated buildings in hardto-access neighborhoods.

European investors tend to be overallocated to offices and forward-looking surveys indicate that most are on a path to reduce their exposure. Dampened investor appetite will hamper a swift value recovery for offices, but healthy occupier market conditions soften the ongoing realignment. We see opportunities in London City, Hamburg CBD, Central Paris and Stockholm, which combine deep investment markets with healthy demand and strong or improving supply-side conditions.

66 The future of the office is alive within well-connected neighborhoods in

vibrant global cities.



The U.S. remains an outlier as hybrid work schedules are entrenched, resulting in vacancies that have risen by 500 basis points (bps) since 2020. However, there are signs that the market is finding its bottom. The return to office during the middle of the week is back to 70% of 2019 levels, which is up from just 52% two years ago, according to Placer.ai. Leasing activity has increased to 75% of typical levels nationally and is above normal levels in Miami, Nashville and Tampa. New starts are at their lowest level ever recorded.

Trends are also diverging by market and quality. Newer properties built since 2015 have a 13% vacancy rate, falling by 130 bps over the past three years. Older properties built prior to 2000 have a 19.6% vacancy rate, rising 370 bps over the same period¹¹. Regionally, the return to office varies with some markets close to pre-2020 levels, including New York, Miami and Nashville. There will be select opportunities for assets to outperform moving forward. Active 18-hour submarkets have held up better and we expect this outperformance to accelerate in the years ahead. At a market level, cities adding more office jobs should see more demand. Sun belt markets are forecast to add 30% more office jobs than their previous cycle peak over the next 10 years. This contrasts sharply to the meager 1.4% cumulative expansion forecast for gateway markets¹².



Figure 9: Office fundamentals should improve in 2025 and beyond

Source: PMA, data as of Q3 2024

Key themes for 2025: Riding the real estate recovery

Retail real estate in the era of convenience culture



Necessity retail comprising grocery, discount and services have performed well in the face of shifting consumer behavior as shoppers seek convenient retail offerings close to where they live and work. Strong fundamentals, limited supply, solid tenant demand and reset pricing are setting the stage for strong future performance. The retail real estate sector may offer the resilient income and growth investors are seeking. Investors can take advantage of disruption in the capital markets, less competition for new acquisitions and seek discounted asset opportunities.

In the U.S., grocery-anchored retail is set up for solid performance. Renewed retailer demand and lack of new

construction have combined to produce historically low vacancy rates. Meanwhile, tight vacancy (at 5.9%) supports growing rents at grocery-anchored centers, resulting in income for real estate investors (Figure 10).

Across Europe, retail property performance has started to emerge and MSCI recorded a 12-month total return outperformance for U.K. shopping centers and retail warehouses (c.300 bps ahead of All Property, Figure 11). Retail parks provide omnichannel retail opportunities, allowing assets to form hybrid retail and logistics components driving growth.



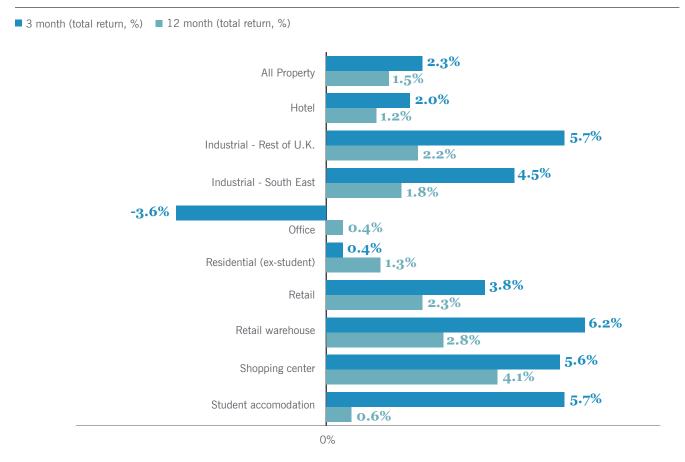
Figure 10: U.S. neighborhood centers - Supply and demand trends

Source: CoStar, data as of Q3 2024.



Value in retail is slowly emerging across selective Asia Pacific markets. Necessity retail, especially groceryanchored shopping centers, is starting to benefit from increased consumer spending on non-discretionary items, as evidenced by supermarket retail sales outpacing overall retail sales growth. In general, we favor relevant assets in Australia, where future supply is expected to remain below the long-term average due to high construction costs. The potential for strengthening economic drivers, fundamentals and favorable yield spreads against borrowing rates will likely provide investors with stable and diversified income. Global retail markets differ due to local market drivers and cultural influences driving consumer behavior. However, the trends supporting convenience-oriented retail investments transcend continental divides. We believe grocery-anchored and necessity retail offer the strongest opportunities, providing investors access to improving fundamentals in smaller and more liquid lots sizes with strong, stable and diversified income. Retail sales and traffic at these types of assets has proven resilient and defensive against evolving e-commerce trends, reinforcing our view that not all retail is created equal.





Source: MSCI Quarterly Index, Sep 2024.

Key themes for 2025: Riding the real estate recovery

Will the global transition to net zero carbon buildings withstand political headwinds?

The march towards a low carbon future for the built environment is underpinned by three factors which combine to deliver green premiums or brown discounts: regulation, occupier demand and investor preferences. Considering which global markets are more susceptible to a green premium or brown discount is a crucial part of our investment insight (Figure 12). Ultimately, investors want to maximize returns and do not want exposure to stranded assets, so we expect the decarbonization trend to continue largely uninterrupted.

However, sentiment on sustainability has undoubtedly changed with the second Trump presidency and with a shift to the right across continental Europe. It is too early to say whether this will undermine the decarbonization trajectory, but these are the areas we are monitoring for signs of change:

Legal challenges to building performance standards at city or state level: While the SEC has drawn back from sustainability reporting requirements and the U.S. is expected to withdraw once again from the Paris Climate Accord, energy building performance regulations at the state and city level are among the most ambitious in the world and are resistant to federal political change. However, if legal challenges mean that we start to see these standards being watered down, that could undermine U.S. progress.

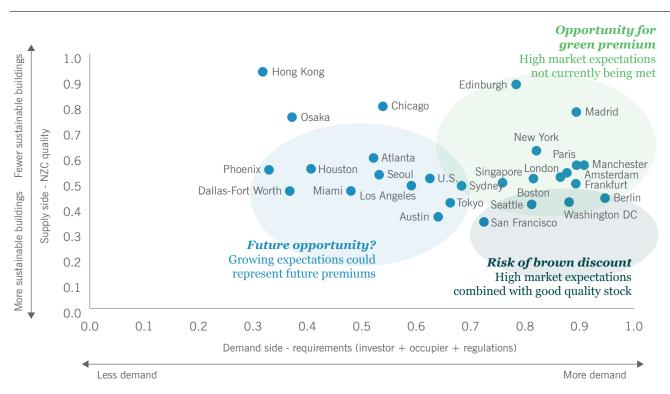


Figure 12: Identifying the green premium opportunity

Source: PMA 2024.



Corporations rolling back on their net zero goals:

The global market cap committed to a science-based net zero carbon target is at 40%, driving demand for green buildings across all regions (Figure 13). Reducing the carbon emissions associated with real estate occupation is crucial to achieving these goals. As the challenge of meeting carbon reduction goals starts to bite and the political environment shifts, will we see some companies decide that now is the time to step back on their net zero ambition? Some of the biggest proponents of the energy transition have been the big tech firms who are now grappling with the huge rise in energy needs that advances in generative AI bring.

A watering down of regulation in Europe: Political change and a recognition of the burden of sustainability regulations means calls for regulatory reform. This could result in more streamlined requirements and could also open the door for a weakening of reporting and investment integration standards.

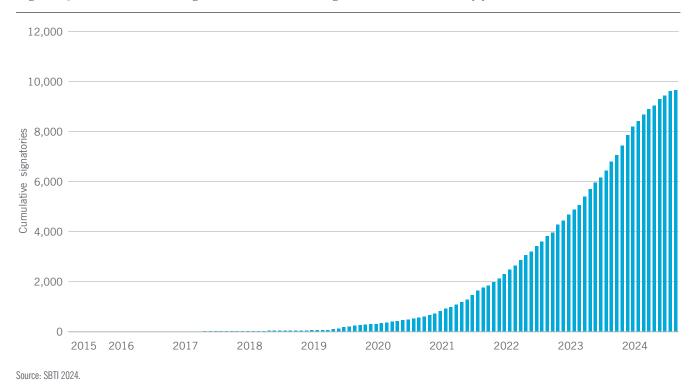


Figure 13: Science Based Targets initiative (SBTi) signatories doubles every year

Conclusion

Following a two-year reset in property values, we believe real estate has broadly stabilized and that 2025 will be a good vintage for the asset class. As in recent years, geopolitics is likely to create volatility in financial markets. Real estate is not immune, but our preferred investment themes capitalize on long-term megatrends, providing a degree of resilience. As laid out within this publication, investors considering an allocation to the asset class in 2025 have a number of compelling opportunities to consider.

For more insights into real estate visit nuveen.com/realestate

Endnotes

- 1 MSCI Global Data, Q2 2022 Q3 2024.
- 2 NCREIF ODCE Index (as of 2024); Nuveen Real Estate Research.
- 3 MSCI Global Quarterly Property Index. Q3 2024 most recent data as of publication.
- 4 JLL REIS, October 2024.
- 5, 6 CBRE, Global Data Center Trends 2024.
- 7 Statistics Bureau of Japan.
- 8 Statistics Korea.
- 9 JLL UK.
- 10 CBRF
- 11 CoStar.
- 12 Moody's Analytics.

Disclosures

This material is provided for informational or educational purposes only and does not constitute a solicitation of any securities in any jurisdiction in which such solicitation is unlawful or to any person to whom it is unlawful. Moreover, it neither constitutes an offer to enter into an investment agreement with the recipient of this document nor an invitation to respond to it by making an offer to enter into an investment agreement.

This material may contain "forward-looking" information that is not purely historical in nature. Such information may include projections, forecasts, estimates of yields or returns, and proposed or expected portfolio composition. Moreover, certain historical performance information of other investment vehicles or composite accounts managed by Nuveen may be included in this material and such performance information is presented by way of example only. No representation is made that the performance presented will be achieved, or that every assumption made in achieving, calculating or presenting either the forward-looking information or the historical performance information herein has been considered or stated in preparing this material. Any changes to assumptions that may have been made in preparing this material could have a material impact on the investment returns that are presented herein by way of example.

This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The information and opinions contained in this material are derived from proprietary and non-proprietary sources deemed by Nuveen to be reliable, and not necessarily all-inclusive and are not guaranteed as to accuracy. There is no guarantee that any forecasts made will come to pass. Company name is only for explanatory purposes and does not constitute as investment advice and is subject to change. Any investments named within this material may not necessarily be held in any funds/accounts managed by Nuveen. Reliance upon information in this material is at the sole discretion of the reader. Views of the author may not necessarily reflect the view s of Nuveen as a whole or any part thereof.

Past performance is not a guide to future performance. Investment involves risk, including loss of principal. The value of investments and the income from them can fall as well as rise and is not guaranteed. Changes in the rates of exchange between currencies may cause the value of investments to fluctuate.

This information does not constitute investment research as defined under MiFID.

Nuveen, LLC provides investment solutions through its investment specialists.

