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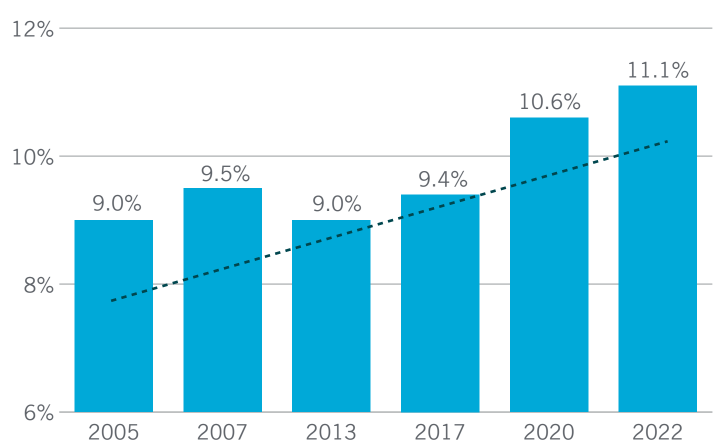
REAL ESTATE

Real estate alternatives: Preparing for the next decade of real estate investments

An introduction to self-storage

The U.S. self-storage sector has been a desirable property type throughout multiple real estate cycles given its inherent non-cyclical demand drivers (e.g. life changes), low cap-ex burden, and low obsolescence risk. A self-storage property contains individual units that can be rented to consumers for short or long-term storage. Storage units, on average, occupy a 10x10 space (100 sq.ft.) and rent for about $130.[1] There can be significant variation of rent depending on unit size, facility conditions, climate controls, and location. Self-storage has experienced steady demand growth over the past two decades. The percentage of U.S. households utilizing storage has grown from 9% in 2005 to 11.1% in 2022. Since COVID-19, the number of households that utilize self-storage has grown by nearly one million households to 14.5 million renter households, and durations of stays have remained 10% higher (Figure 1).[2]

Figure 1: Self-storage market penetration

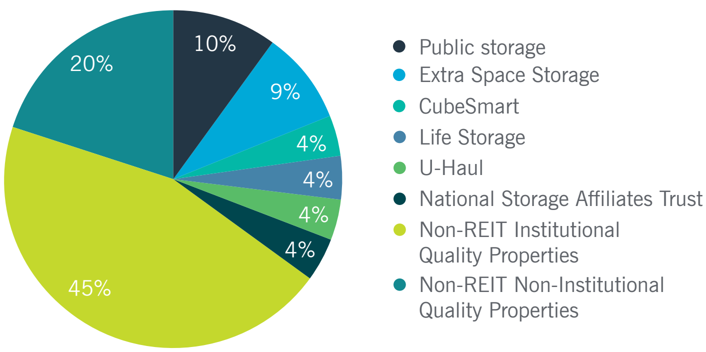


Source: Self-Storage Almanac 2023
Note: Percentage of U.S. households utilizing storage

OWNERSHIP

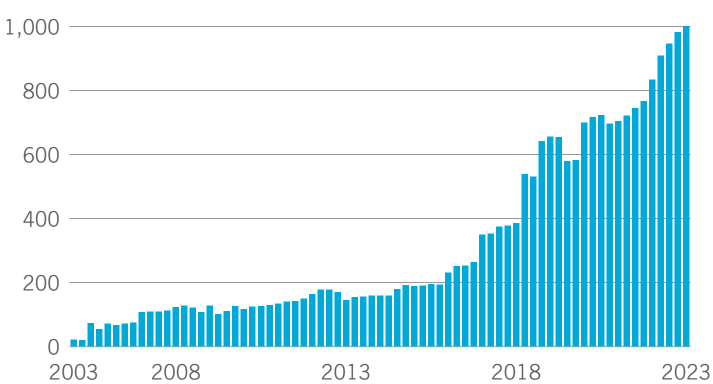
Public companies own and operate approximately 35% of the self-storage market (Figure 2). Five of the six largest self-storage operators are publicly traded REITs: Public Storage, Extra Space Storage, CubeSmart, Life Storage, and National Storage Affiliates Trust. The self-storage sector has garnered more institutional investor attention since the onset of the COVID-19 pandemic, due to its resiliency. Institutional investors have rapidly increased their exposure to self-storage, as indicated by the sharp increase of self-storage properties within the NCREIF database (Figure 3). While still under-allocated in our view, self-storage properties account for 8% of the NPI plus database properties, up from just 3% in 2016.

Figure 2: U.S. market share by square footage



Source: Self-Storage Almanac 2023; Extra Space Storage, Q1 2023
Note: Percentage of institutional and non-institutional quality properties estimated by Extra Space Storage

Figure 3: Institutional-quality self-storage property count in NCREIF database



Source: NCREIF, Q1 2023

Acquiring one-off assets owned by non-institutional players creates an opportunity to significantly improve operations overnight. It is not uncommon to acquire a facility that has never passed on rent increases to customers, as “mom & pop” owners typically sacrifice revenue to maintain occupancy. Changing the operational and revenue management typically moves rents ~20% over the subsequent year.[3] Further, acquiring first generation assets presents an opportunity to enhance a property’s competitive positioning within a micro-market (Figure 4).

Figure 4: Before and after renovation of first-generation property

Before *After*

Source: Nuveen Real Estate

Noticeable benefits exist to owning facilities backed by a strong institutional operator. Large institutional operators also have significant marketing budgets, CEO expertise, and utilize advanced revenue management systems. Self-storage has historically outperformed, particularly over the last ten years. The sector’s outperformance has been driven by outsized cap rate compression along with multiple advancements in the industry’s operations from search engine optimization, increased professionalization of a historically ‘mom & pop’ industry, and application of data science to optimize pricing strategies among other developments.

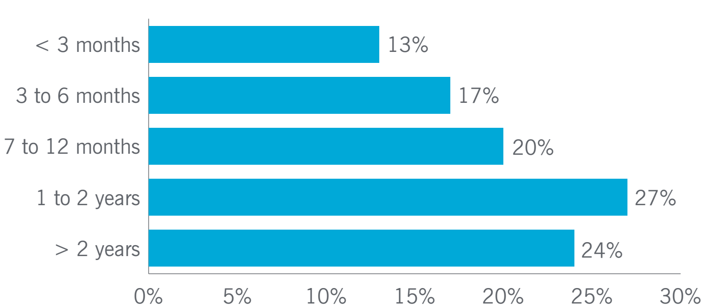
Self-storage is one of the few property types that truly benefits from real economies of scale, as institutional managers have a considerable edge over their smaller peers as they:

1. Operate sophisticated revenue management systems (driving revenue)
2. Market at scale (saving costs and increasing tenant traffic)
3. Have access to capital (maintaining a high-quality product offering)

RENTER PROFILE

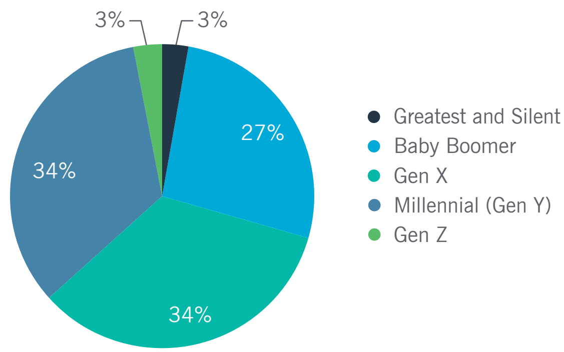
Self-storage has a "sticky" tenant base, as storage unit renters typically stay longer than they expect, renewing at least once before leaving (Figure 5). Consumers amid major life events, such as moving, enrolling in school/military, marrying/divorcing, or experiencing a death of a family member, drive the majority of demand for self-storage. Households constitute most demand (79%) with the remainder driven by commercial users such as retailers who need extra inventory room, or "gig" workers such as landscapers, who need to store equipment.[4] In the early part of the 2010s, there was speculation that millennials would be less keen on utilizing self-storage due to shifting preferences to owning electronic goods rather than physical goods. This has not materialized as millennials make up 34% of the self-storage consumer base, a greater level of utilization than baby boomers (Figure 6). The two main reasons customers need self-storage units are 1) to store items they do not have room for in their home and 2) to temporarily store items while changing residences (Figure 7). Top items stored in self-storage units include indoor furniture, photos & paintings, apparel, household supplies, and holiday seasonal items.[5]

Figure 5: In-place self-storage customer rental duration



Source: Self-Storage Almanac 2021

Figure 6: Self-storage renter: generational mix



Source: Green Street, January 2023

Figure 7: Top reasons for storing

	Percentage of respondents
No room at home/residence	31%
Changing residence	25%
Remodeling home/residence	8%
Storing relatives' items	6%
Items no longer needed/wanted	6%
Temporary storage while away from home/residence	5%
Items inherited due to death	5%
Natural disaster	4%
College student between semesters	3%
Items from vacation home	3%

Source: Self-Storage Almanac 2021

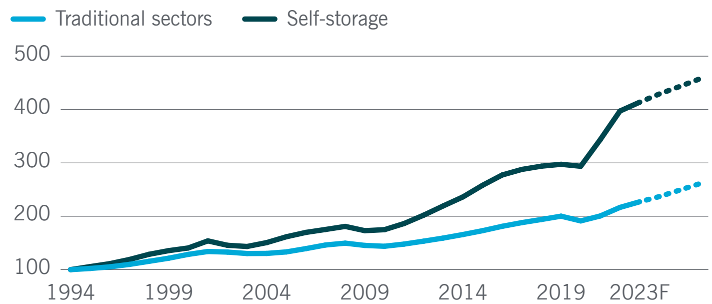
NON-CYCLICAL DEMAND DRIVERS AND LIMITED CAPITAL EXPENDITURES HAVE LED TO OUTPERFORMANCE

The self-storage sector is favorably positioned for resilience and out-performance throughout cycles as its fundamental demand drivers rely less on economic growth and more on demographics and life changes. Storage is unlike nearly every sector in that it fairs well in most environments as it thrives on "change" rather than economic growth. For example, when the economy is growing, the population trends toward more households and bigger homes. This causes users to purchase new furnishings while storing old furnishings. Conversely, in challenging times, the population may downsize or obtain roommates and store their belongings. This creates favorable momentum for rental growth despite the broader economic environment. Self-storage leases on a month-to-month basis, which uniquely allows sophisticated management groups to reset and raise rents on a more frequent basis without negatively impacting occupancy, hedging against inflation, and creating strong NOI growth. As a result, the sector's NOI growth profile is quite resilient relative to other sectors (Figure 8).

One of the biggest drags on real estate returns is the cost of maintaining a real estate asset. For storage, these costs are among the lowest of any real estate sector (Figure 9). This cap-ex utilization represents the long-term average investment an owner needs to spend to preserve competitive positioning. Further, while very limited, if the asset has deferred maintenance upon acquiring, returns on capital investment are roughly 15%+ as it will usually improve both rents and quality.[6]

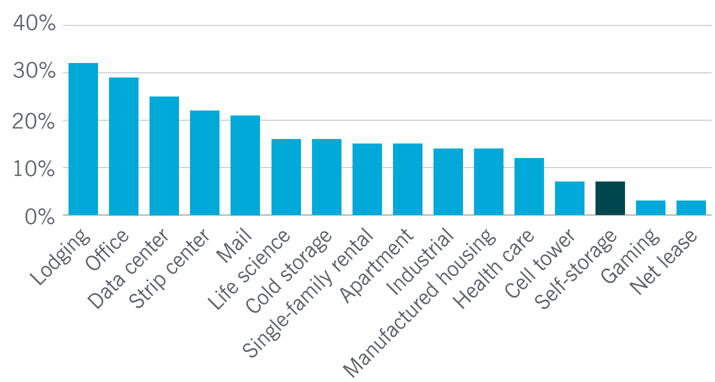
Given the sector's inherent non-cyclical demand drivers, self-storage is considered a defensive property type and has ultimately outperformed traditional sectors throughout multiple real estate cycles. Self-storage units have more of an inelastic demand relative to other real estate sectors, since they are a small dollar cost necessity during life events. Throughout the last decade, self-storage has out-performed overall real estate (Figure 10).

Figure 8: NOI growth index: self-storage vs. traditional sectors



Source: Green Street, May 2023
Note: 1994=100

Figure 9: Cap-ex % of NOI



Source: Green Street, May 2023

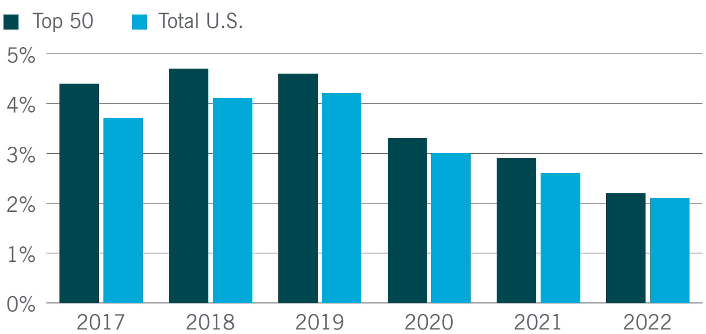
Figure 10: Self-storage annualized total returns

Source: NCREIF, Q1 2023

OPPORTUNITIES TO ARISE IN SECONDARY AND TERTIARY MARKETS

The primary risk for the self-storage sector is in new supply, however managers can mitigate some of the risk by focusing on secondary and tertiary markets. These over-looked smaller cities in the Sun Belt and Midwest present opportunities to nimble institutional managers. These markets benefit from: higher yields, less competition from large national players, and more opportunities for significant operational improvements over less institutionalized sellers. Currently, the large public REITs are overwhelmingly concentrated in the top 25 markets, which have become increasingly competitive operating environments. The primary markets are also the target for many new developments nationally (Figure 11). According to real-time data from Radius+, 60% of self-storage that is currently under construction is concentrated in the top 50 markets.

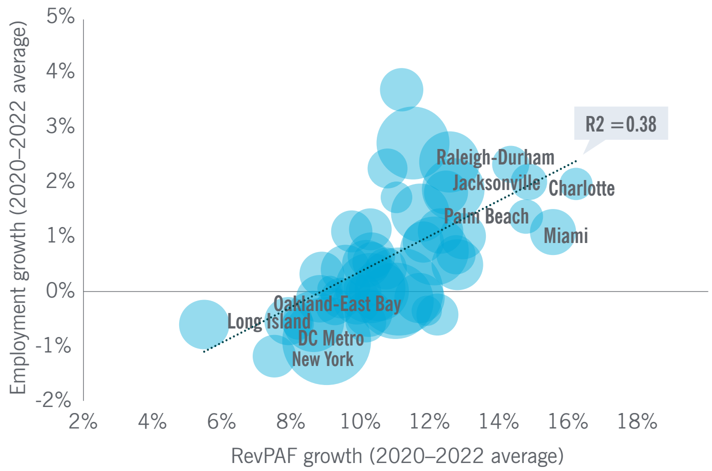
Figure 11: Self-storage supply growth



Source: Radius+, May 2023

The apartment and self-storage sectors share many of the same demand drivers including job growth, household formation, population growth, and domestic migration patterns. Within a market, self-storage facilities located near residential areas have the biggest competitive advantage, as most consumers focus their search for storage facilities within a 15-minute drive of their home. In recent years, self-storage RevPAF growth (rent growth + occupancy growth) has been strongest in markets that have experienced the strongest employment growth (Figure 12).

Figure 12: Self-storage RevPAF growth vs. employment growth (3-year historical average)

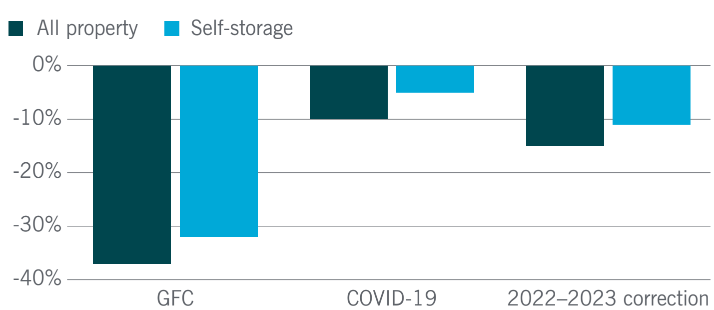


Source: Green Street, May 2023
Note: Bubble size represents market population size

ACTIONABLE INVESTMENT WINDOW

The U.S. self-storage sector has proven its resiliency relative to other sectors. Throughout previous market downturns, self-storage experienced less value loss and a faster recovery than other sectors. For example, in the global financial crisis, self-storage values fell 32% vs. 37% for overall commercial real estate (CRE). During that time, self-storage values recovered within 57 months vs. 67 months for overall CRE. In the COVID-19 recession, values fell a marginal 5% vs. 10% for overall CRE and took 13-months to recover vs. 17-months for overall CRE (Figure 13). According to Green Street, self-storage values are expected to rebound and rise again in H2 2024, presenting an attractive near-term investment opportunity to capitalize on a repriced environment (Figure 14).

Figure 13: Impact to property during downturn

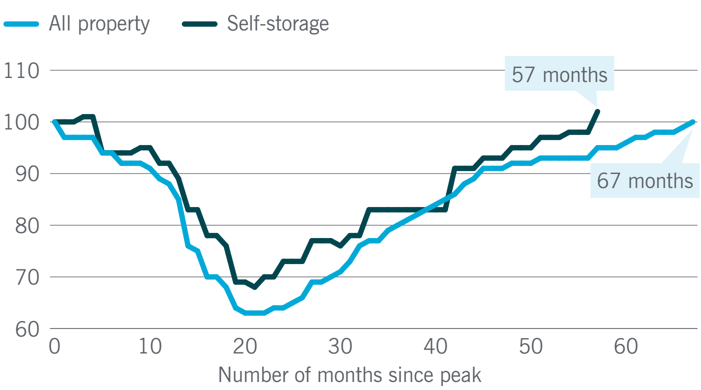


Source: Green Street, April 2023

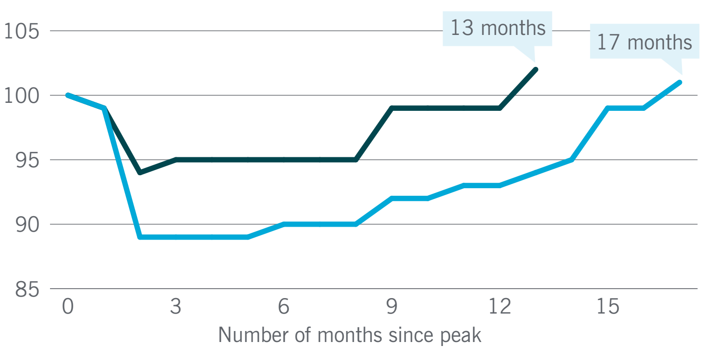
Nimble institutional managers will additionally recognize value creation through aggregation. The average individual self-storage transaction size is about $10 million. Given the amount of work it takes to acquire assets on a one-off basis, larger portfolios (+/- $200 million) tend to transact with portfolio premiums that pay sellers for their work. Per CoStar data (Figure 15), portfolios can trade at cap rates that are significantly lower than individual deals. With a 10-year historical average premium of 100 bps, larger portfolios can trade at values that are 20–25% higher than if assets were transacted at on an individual basis.

Figure 14: Months until full value recovery in downturn

Global Financial Crisis

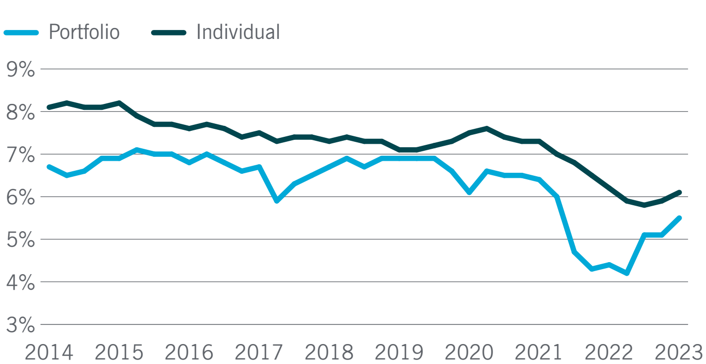


COVID-19



Source: Green Street, April 2023
Note: 100=Pre-downturn peak)

Figure 15: U.S. self-storage transaction cap rates

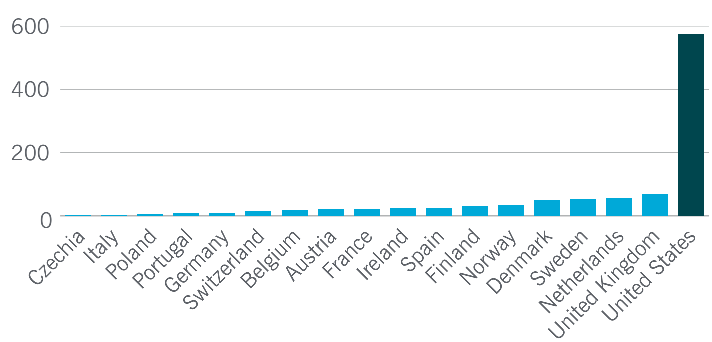


Source: CoStar, April 2023

EUROPEAN PERSPECTIVE ON SELF-STORAGE

The European market for self-storage is very immature compared to the U.S. Even in the more developed markets like Sweden and the U.K. provision rates are only a small fraction of the U.S (Figure 16).

Figure 16: Market penetration – floorspace in sq. m per 1,000 population



Source: JLL, FEDESSA, Marcus & Millichap, 2022

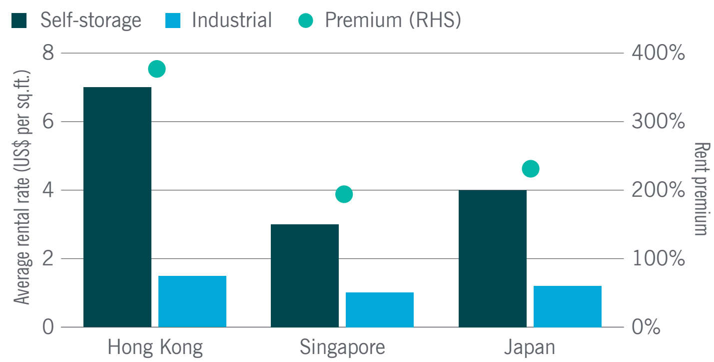
This gap may never fully close partly because land and therefore rental values make self-storage a much cheaper option in the U.S. (average U.S. rent of U.S. $14 per sq. m vs. U.S. $25 in Europe) and due to the number of possessions a U.S. household owns, which is estimated to be 300,000 in comparison to below 100,000 in Europe. Accounting for these differences there remains a sizeable supply gap across Europe, with some countries providing barely any self-storage offering to date. All markets are also very fragmented with operators, who run at least 10 facilities only capturing about half the market share in each country. Fragmentation, and low penetration both suggest an aggregation and growth opportunity for investors across the region.

It therefore is not surprising that self-storage REITs have outperformed their peers in other sectors over the course of the wider property market re-set since early 2022. In addition to the structural advantages the sector offers, which are broadly the same in Europe and the U.S., European investors also appreciate the low risk from net zero carbon legislation for the sector. The assets don't require heating and with LEDs installed are generally the lowest energy users in real estate portfolios. Investors can access the entire range between higher risk strategies in markets like Italy or Poland, where self-storage isn't well known yet with consumers and lower risk consolidation plays in more established markets in Northern Europe.

APAC SELF-STORAGE PROMISES ATTRACTIVE FUTURE DIVIDENDS

The Asia Pacific self-storage sector is growing but remains relatively nascent compared to the U.S. and with bifurcated rental performance across different regional markets. The demographic thrust of this sector is overwhelmingly positive, premised on rising urbanization, growing middle classes and disposable income driving consumerism. At the same time, while household numbers are rising in the key regional cities, living spaces are shrinking, underscoring an inherent need for extra storage space. In affluent Hong Kong for instance, household (living) space per person stands at less than 200 sq. ft., a fraction of the nearly 1,000 sq. ft. in Australia and slightly more than 800 sq. ft. in the U.S. Yet, supply in this nascent sector is limited across many regional markets: an estimate of self-storage space per capita averaged only around 0.4 sq.ft. gross floor area in Hong Kong and Singapore and even less in cities across Japan, Taiwan and Malaysia. Backed by steady demand, historical occupancy hovered around 80% regionally. Other considerations such as population density, culture and weather have also dictated demand for facilities. That said, it must be noted that despite being in industrial buildings, rents are 1.5-3.5x higher for self-storage versus traditional warehouse space — the premium reflects the operational specialty and value-add services provided, which include climate-controlled storage containers to preserve expensive goods such as wine and paintings, etc. (Figure 17).

Figure 17: Average self-storage rent vs industrial (2020)



Source: SSAA Annual Survey 2021, CBRE, 2020.

It is challenging to penetrate this sector: the historically low levels of direct investment transaction reflect not just illiquidity, but the small size of most facilities means that the most appropriate route to gain exposure is through either a joint venture with or outright purchase of existing operational platforms (mostly in single markets). That also comes with a price premium. APAC self-storage promises attractive future dividends; if an opportunity arises, catch it.

INVESTING IN SELF-STORAGE REAL ESTATE REMAINS DESIRABLE

Nuveen Real Estate has been one of the world's largest private owners of self-storage over the last two decades. Since its first investment in the sector in 2003, Nuveen Real Estate has acquired $2.5 billion of self-storage, $1 billion since the beginning of COVID-19. Nuveen Real Estate remains focused on accessing the sector with best-in-class operating partners.

For more information, please visit our website, nuveen.com/realestate

Endnotes

Sources

1 Yardi Matrix, March 2023
2 Green Street, March 2023
3 Nuveen Self-Storage Team estimates
4 Self-Storage Almanac, 2022
5 Self-Storage Almanac, 2022
6 Nuveen Self-Storage Team estimates

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