




nuveen
REAL ESTATE

Outlook for real estate

FIVE THEMES FOR 2023



OPINION PIECE. PLEASE SEE IMPORTANT
DISCLOSURES IN THE ENDNOTES.

Five themes for 2023

1 Same global problems,
different market reactions

2 Is now a good time to invest
in Asia Pacific and Europe?

3 A bigger role for
alternative financing

4 ESG is here to stay

5 Sector winners, losers and
surprises for 2023

Introduction

Private real estate outperformed most sectors globally in 2022, rewarding investors who continued to increase their allocations to the sector over the last decade. However, we expect to see pockets of softness in 2023, including value losses in some markets and sectors. But even as the market slows, opportunities will remain in commercial real estate.

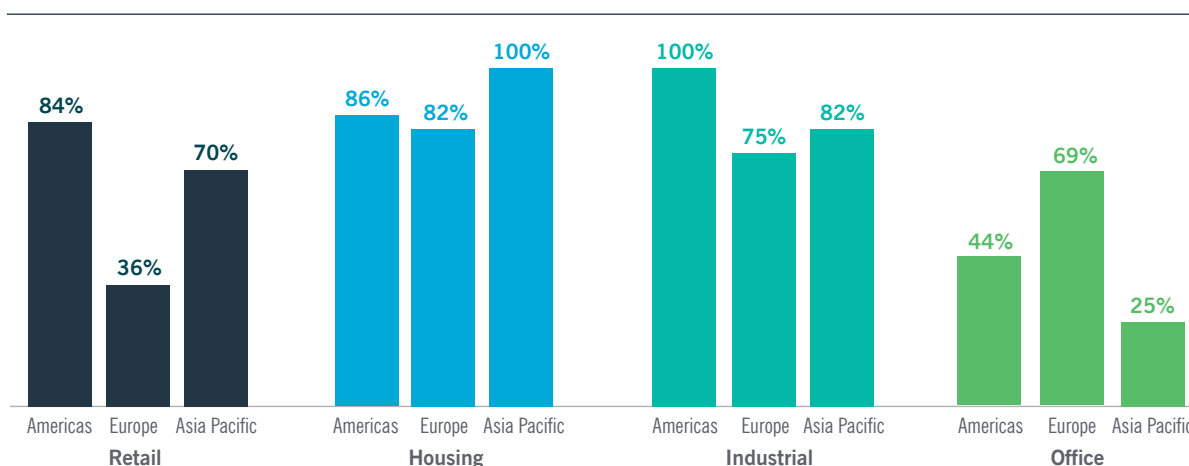
Slowing growth: Rising interest rates have put upward pressure on cap rates and corresponding downward pressure on values. While this is not the preferred dynamic, there are reasons for measured optimism. Significant capital appreciation has fuelled outsized returns over the last few years, but many investors allocate to private real estate for the consistent income yield, often borrowing allocation from their fixed income portfolios to increase their exposure to real estate. On this measure, real estate is well positioned, with healthy fundamentals to support stable income in 2023.

Strong demand: The supply chain woes that continue to fuel inflation also have an upside for owners of existing properties. It has

been challenging to construct new buildings, resulting in less development activity and a more measured pace of deliveries. As a result, many markets have vacancies below their long-term equilibrium, suggesting an environment that remains supportive of rent growth and resilient occupancy levels. Fundamentals are particularly healthy for industrial and housing markets globally. The health of the U.S. retail market (excluding enclosed shopping malls) is another bright spot, and European offices are holding up well in comparison to greater challenges in the U.S. and Asia Pacific.

In our 2023 outlook, we discuss our expectations for increasing divergence in world economies, the case for dollar-denominated investors to look toward Europe and Asia Pacific property markets, and why we believe ESG considerations are here to stay. Our focus on structural shifts, such as aging populations, rising e-commerce and migration patterns, informs our outlook for continued growth in the financing market of non-traditional property types and strategic sector opportunity for 2023.

Figure 1: Percent of markets with vacancies below long-term average



Sources: CoStar, Greenstreet, PMA, JLL, CBRE et al (U.S. as of Q3 2022; EU as of Q3 2022; APAC as of Q2 2022)

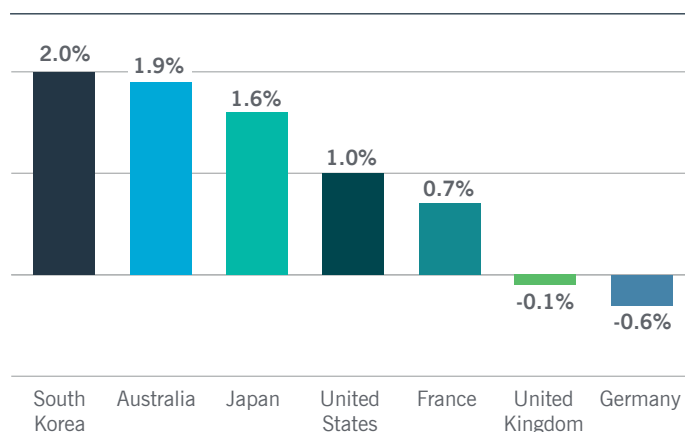
Note: US data for largest 50 markets by sector; long-term average is from 2000 for U.S. industrial, office, and housing, and 2007 for U.S. retail due to data availability. APAC data for 12 major gateway cities for office, retail and industrial and three Japanese cities for residential due to data availability; long-term average covers the period between 2008 and 2021.

1

Same global problems, different market reactions

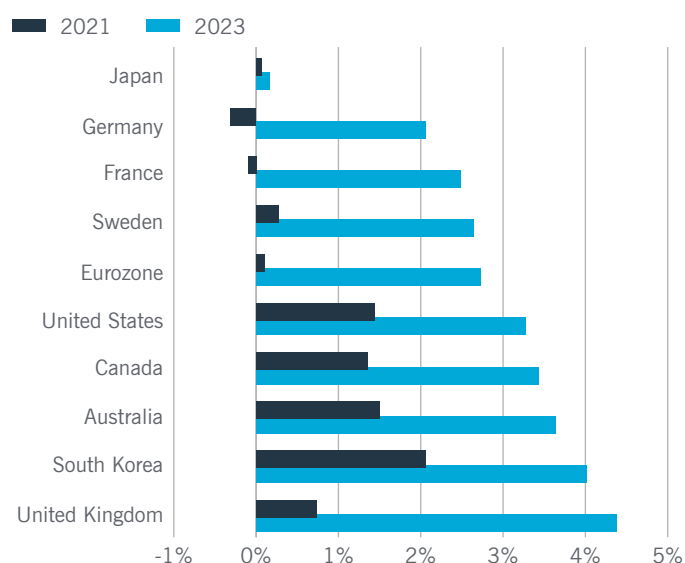
On the surface, the three global real estate investment regions of North America, Europe and Asia Pacific are grappling with the same challenges. The aftermath of the pandemic has upended supply chains and misaligned labour markets, leading

Figure 2: 2023 GDP growth forecast (%)



Source: IMF, Q3 2022

Figure 3: Cost of capital expected for 2023*



Source: Oxford Economics, Q3 2022 *10-year government bond yield

to a bout of inflation and forcing central banks to take action. Higher interest rates have emerged as the key driver of a real estate market reset after an unprecedented long period of ultra-loose monetary policy. More expensive financing will lead to upward pressure on cap rates across the globe, and the value correction in equity and most crucially bond markets will curtail the capital flow into real estate. At the same time, leasing markets are in a relatively strong position as supply discipline has been upheld better than in previous cycles.

That is where the common story ends. Digging deeper reveals that European markets will face a significant property market correction as a result of the energy price shock, labour and material shortages, interest rate hikes, currency weakness and a looming recession. The U.S. economy, on the other hand, is in the grips of demand-side inflation as a result of an overheating economy fuelled by government stimulus and energy independence. The U.S. economic slowdown will likely be down to a tighter monetary policy rather than the array of issues facing Europe. The economies in the APAC region are in a better position than the U.S. and Europe, as milder inflation and more robust GDP growth will support real estate markets.

The cost of capital will be markedly higher in 2023 than the average of recent years for all regions. The extent of change from previous levels is what will matter most for real estate markets. On that metric the U.K. looks most exposed, followed by the eurozone. The U.S. and APAC markets are expected to see a somewhat gentler increase with hardly any change in Japan (figure 3).

Combining financial and real economy data together, we expect the most pronounced market correction to take place in Europe, in particular in the U.K.

The U.S. is expected to sit in the middle with less pressure on markets compared to Europe, but not as stable as the key APAC markets.

Is now a good time to invest in Asia Pacific and Europe?

Investors usually cite diversification as the main benefit from investing abroad, but there are moments when other factors prevail, and we seem to be in one of those moments now.

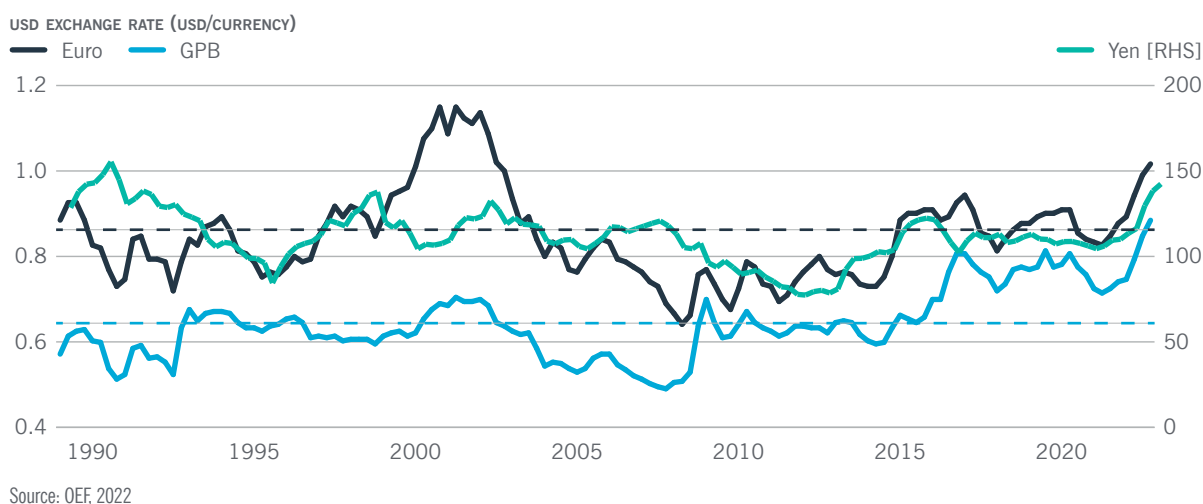
Since 2021, the U.S. dollar has been appreciating rapidly against other major currencies due to a combination of relatively high U.S. interest rates and the perceived resilience of the U.S. economy. This has taken the dollar exchange rate outside the normal trading ranges which have been fairly stable since the end of the 1980s when major economies stopped making concerted currency interventions. During October 2022, the euro traded at 20% below its long-run average for the first time since 1989.

But the deviations were even greater in Japan and the U.K. The yen averaged ¥142.4 to the dollar over October 2022, 27% below its long-run average. The pound was even cheaper, trading at an average \$1.13, which was 37% below its long-run average.

One-way bets are extremely rare in currency markets, but the scale of these deviations makes it extremely likely that these currencies will appreciate against the dollar over the medium term.

What does that mean for commercial real estate investment? For U.S. investors, certain global markets, particularly Europe, Japan and the U.K., are effectively on sale. Dollar returns are likely to

Figure 4: GBP, yen and euro are all significantly weaker than average against the U.S. dollar



“

For U.S. investors, certain global markets, particularly Europe, Japan and the U.K., are effectively on sale.

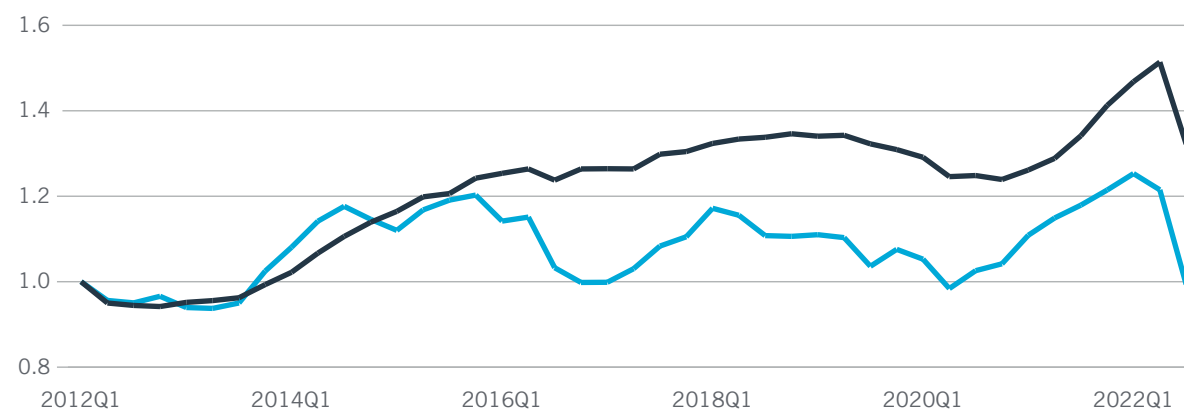
be 20 – 40% higher than local currency returns for a medium-term hold and could well be higher still because currency markets tend to overshoot when they correct. An overshoot during the correction phase would take these currencies above their long-run average exchange rates against the dollar. The

impact on returns of this sort of correction over a five-year hold could be as high as 4%–10%, turning even mediocre investments in Europe, Japan and the U.K. into star performers for U.S. investors.

Figure 5: The U.S. dollar value of U.K. commercial real estate has fallen to its lowest level since the Global Financial Crisis recovery

Price per square meter in USD (index, 2012 Q1=1)

— GBP — USD



Source: MSCI, Nuveen 2022

3

A bigger role for alternative financing

Commercial mortgage spreads in 2022 widened noticeably for all forms of commercial real estate credit, core loans, bridge loans and construction loans, due to interest rate volatility and liquidity constraints as the market repriced for a higher cost of capital. However, underwriting standards strengthened. Rising credit spreads and rates are impacting coverage ratios for fixed and floating-rate loans, putting upward pressure on cap rates, and forcing lenders to use lower leverage.

For this reason, lending has become more concentrated into higher-quality assets such as loans backed by multifamily, industrial and alternative sector properties with strong cash flows. Lenders are now less keen to finance business plans that rely on adding significant value to existing assets through large capital expenditures, given that real estate fundamentals have softened.

With limited opportunities to finance light value-add business plans in the traditional multifamily and industrial sectors, financing aggregation strategies, particularly within alternative real estate sectors, may be an attractive opportunity for lenders. Common examples of such a strategy would be

to finance a smaller real estate manager aiming to expand its platform or a public REIT. Recent examples of such arrangements include a \$500 million land banking facility agreement between Varde Partners and American Homes 4 Rent to build single-family rental properties and multiple financing agreements, including a recent \$114 million portfolio refinance of Parakeet Communities manufactured home platform by Madison Realty Partners.

These financing arrangements can be particularly beneficial for lenders for several reasons. First, these arrangements provide scale, which is difficult to achieve in many alternative real estate sectors, as assets tend to be either small (e.g. single-family homes, manufactured homes) or sparsely traded (e.g. data centres, cell towers). Second, many alternative sectors have secular tailwinds and non-cyclical drivers, which many lenders find attractive during a volatile market. Third, lenders can frequently get recourse to the sponsor's platform or fund in case of default, given that there is more risk associated with financing smaller sponsors. For these reasons, we expect the alternative financing market to grow significantly within the coming years.



Lending has become more concentrated into higher-quality assets, such as loans backed by multifamily, industrial and alternative sector properties with strong cash flows.

4

ESG is here to stay

Conventional wisdom suggests that sustainability is ripe for cuts when businesses reduce costs. The Global Financial Crisis of 2008 saw momentum slow for ESG innovation in real estate and there are signs that we may see similar ahead. A recent study conducted by KPMG found that about half of CEOs surveyed “are pausing or reconsidering their existing or planned ESG efforts in the next six months.”

This comes at a time of emerging scepticism toward ESG from some investor groups; notably from U.S. states with a higher dependence on the traditional oil and gas industry. This is a limitation on the ability of the finance industry to take ESG factors into account.

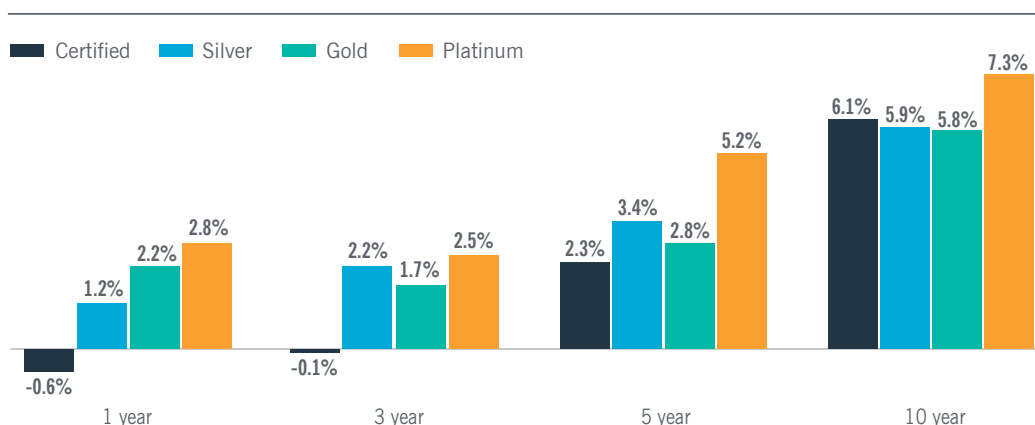
However, there are good reasons why ESG is likely to remain a priority — particularly for real estate investors:



1: “Climate risk is investment risk”: the mainstreaming of ESG

It is hard to compare the ESG world now to that of 2008. ESG roles have been integrated into governance structures and there has been a leap forward in the understanding of the link between climate risk and investment risk. Now that the costs of transforming buildings to be net zero carbon (NZC) have started to be incorporated into underwriting, they cannot be ignored. There is also a greater body of data to show that ‘greener’ buildings tend to outperform. NCREIF office returns data shows outperformance for LEED Platinum buildings over 1, 3, 5 and 10 years. Both JLL and Knight Frank have identified a rental premium of 10% – 12% for London office buildings rated as “Outstanding” by BREEAM. A 2021 JLL survey found that climate risk poses a financial risk and that 79% of occupiers are prioritizing location searches for buildings that will help reduce their emissions.

Figure 6: NCREIF office returns (%) by LEED certification



Source: NCREIF, Q3 2022, Knight Frank, 2022



2: Repricing is an opportunity to accelerate NZC transformation

Assets that do not meet current ESG standards are likely to be repriced given the level of investment that refurbishment to a NZC standard requires. We expect to see a bifurcation in the coming price correction, with higher-quality, sustainable buildings holding their value better, with this trend being strongest in Europe. The transformation of well-selected buildings into NZC assets, particularly in locations where demand outstrips supply, represents a strong opportunity to add value.

Looking to the social element of ESG, a recession also favours assets classes that specifically cater to those in financial need, such as affordable housing.



3: Regulation will drive the ESG agenda forward

A wave of recent and forthcoming regulation makes it virtually impossible for businesses to walk away from their ESG agendas. The Sustainable Finance Disclosure Regulations (SFDR) in the EU, the Monetary Authority of Singapore (MAS) Guidelines on Environmental Risk Management (EnRM) for Asset Managers, the Securities and Exchange Commission's proposed climate disclosure requirements in the U.S. and the forthcoming Sustainable Disclosure Regulations in the U.K. all set out stringent transparency requirements. This combines with a raft of building regulations across the United States, Europe and Asia Pacific that ramp up the energy efficiency requirements for buildings in the coming decade.

These factors, combined with the reputational damage that would undoubtedly accompany a step down on ESG commitments, mean that ESG is likely to remain a significant focus area for real estate investment.

5

Sector winners, losers and surprises for 2023

As the market faces a protracted slowdown in 2023, a thoughtful selection of the most resilient sectors is critical to constructing a portfolio. Structural tailwinds are important to picking the long-term winners and losers, but fundamentals are also key to deriving strong risk-adjusted outcomes.



Industrial: tailwinds prevailing?

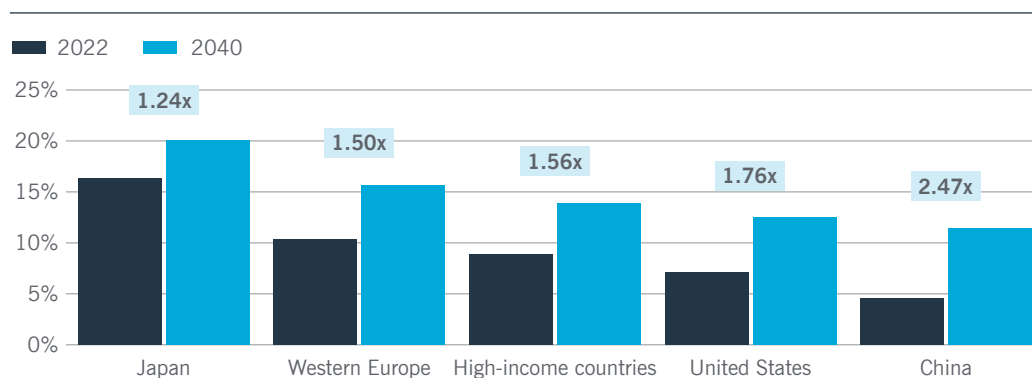
Industrial fundamentals in the U.S. are healthy heading into 2023, highlighted by near-record low vacancy rates, double-digit rent growth and solid demand for warehousing space. That picture is mirrored in all key markets in Asia Pacific and Europe. The sector will face some challenges driven by macroeconomic headwinds and upcoming new supply. However, secular tailwinds from elevated e-commerce penetration and supply chain diversification will sustain demand and provide resilience for the sector.



A place for workplaces

Working remotely and rising recession risks have softened demand for traditional office. A tenant “flight-to-quality” will drive outperformance of new, sustainable properties. Alternative workplaces offer even greater potential. For example, the rapidly increasing senior population in high-income countries will require more medical offices. These countries expect a more than 50% rise in their 75+ age cohort by 2040. The need for new therapeutics will lead to increased funding for medical research, underpinning R&D/laboratory demand.

Figure 7: Population aged 75 and older



Source: United Nations, World Population Prospects 2022



Surprising retail

We believe that necessity, discount and convenience-based retail will positively surprise us in a fragile market. As consumers trade down, stay local and continue to require essential items such as groceries, the focus will be on occupiers and retail formats that benefit from these spending trends. Investors can take advantage of the stable income returns neighbourhood grocery-anchored retail can provide during an economic downturn. Traffic at these types of retail assets have proven resilient and defensive against e-commerce trends, reinforcing our view that not all retail is the same.



A home for everyone: Senior, single-family rental, multifamily and affordable housing

The structural drivers behind single-family housing in Europe remain strong, supported by the lack of established product, compelling demographics and shifting mindsets on renting versus ownership. With growing turmoil and tightening mortgage conditions, affordability will be more challenging, which further enhances the demand for the sector. In the U.S., it is more expensive to own than rent a home, which will propel future demand for rental housing sectors.

CONCLUSION

While market turbulence will likely continue in 2023, we believe that real estate presents continued opportunity for investors. With compelling drivers of value in economic divergence, currency valuations, ESG investment, alternative lending and in select sector opportunities.

Nuveen Real Estate

Nuveen Real Estate is one of the largest investment managers in the world with \$154 billion of assets under management.

Managing a suite of funds and mandates, across both public and private investments, and spanning both debt and equity across diverse geographies and investment styles, we provide access to every aspect of real estate investing.

With over 85 years of real estate investing experience and more than 765 employees¹ located across 30+ cities throughout the United States, Europe and Asia Pacific, the platform offers unparalleled geographic reach, which is married with deep sector expertise.

For more information, please visit nuveen.com/realestate

Endnotes

¹ Includes 385+ real estate investment professionals, supported by a further 380 Nuveen employees. Source: Nuveen, 30 Sep 2022.

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her advisors.

The views and opinions expressed are for informational and educational purposes only as of the date of production/writing and may change without notice at any time based on numerous factors, such as market or other conditions, legal and regulatory developments, additional risks and uncertainties and may not come to pass. This material may contain "forward-looking" information that is not purely historical in nature.

Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. **Past performance is no guarantee of future results.** Investing involves risk; principal loss is possible.

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

A word on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to market risk, credit risk, interest rate risk, call risk, derivatives risk, dollar roll transaction risk and income risk. As interest rates rise, bond prices fall. Below investment grade or high yield debt securities are subject to liquidity risk and heightened credit risk. Foreign investments involve additional risks, including currency fluctuation, political and economic instability, lack of liquidity and differing legal and accounting standards. Please note investments in private debt, including leveraged loans, middle market loans, and mezzanine debt, are subject to various risk factors, including credit risk, liquidity risk and interest rate risk.

This information represents the opinion of Nuveen, LLC and its investment specialists and is not intended to be a forecast of future events and or guarantee of any future result. Information was obtained from third party sources which we believe to be reliable but are not guaranteed as to their accuracy or completeness. There is no assurance that an investment will provide positive performance over any period of time.

Nuveen, LLC provides investment advisory services through its investment specialists.

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

nuveen
REAL ESTATE