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Opportunities in Private Real Estate

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Despite exceptional performance across the real estate sector in the past year, increasing inflation and continued interest rate hikes remain top concerns for investors in 2022. Supply chain disruptions, labor shortages, rent increases and a general surge in energy prices have all contributed to the high inflation rate. In a bid to tamp it down, the Federal Reserve has started to raise interest rates and is expected to continue to do so over the next 12 months. We believe that investors should have a well-balanced real estate investment strategy, with real estate serving a number of functions, including as a source of diversification, as an effective inflation hedge, as an attractive and consistent source of alternative income (for core/core-plus real estate) and potentially as a total return enhancer (for select "value-add" and opportunistic real estate investments). While strategies and allocations will vary according to investor risk appetite and investment objectives, attractive opportunities exist in the current market. However, given the current geopolitical and inflationary backdrop and complicated crosscurrents, selection of good active managers is crucial.

Economic and Real Estate Market Trends

As a result of COVID-19, economic activity plunged in spring 2020 before rebounding sharply as the economy reopened amid unprecedented policy support, making 2021 the most rapid recovery in the US since 1984. Meaningful increases in aggregate demand coupled with jammed supply chains have led to the highest inflation rate since the early 1980s. Given the strong economic recovery and inflationary pressure, the Fed lifted its benchmark interest rate by 25 basis points from near zero in March and signaled the likelihood of more hikes this year. Recent geopolitical tensions, notably the Russian invasion of Ukraine, introduced more structural risks for the US economy, prompting Morgan Stanley & Co.'s economists to revise their 2022 forecast for US GDP growth and inflation to 3.0% and 5.1%, respectively, on a fourth-quarter-over-fourth-quarter basis (see Exhibit 1). With the debate between growth and rising rates moving to center stage, the Morgan Stanley Wealth Management Global Investment Committee (GIC) recommends a relatively balanced strategic weight to real estate assets given their income diversification and potential inflation-hedging characteristics.

Exhibit 1: Morgan Stanley & Co. Research US Economics Forecasts

			New Forecast	
(4Q/4Q % Change)	2020	2021	2022	2023
Real GDP	-2.3	5.5	3.0	2.1
Final Sales	-2.6	4.6	2.3	2.3
Final Domestic Demand	-1.3	5.3	2.9	2.2
PCE	-2.4	6.9	2.2	2.0
Business Fixed Investment	-3.8	6.6	7.9	4.3
Residential Fixed Investment	15.7	-1.5	4.3	-0.3
Exports	-10.7	4.9	1.7	5.1
Imports	0.3	9.6	6.0	4.2
Government	1.2	0.1	1.3	2.1
CPI	1.2	6.7	5.1	2.0
Core PCEPI	1.2	5.5	4.4	2.1
Unemployment Rate*	6.8	4.2	3.5	3.5

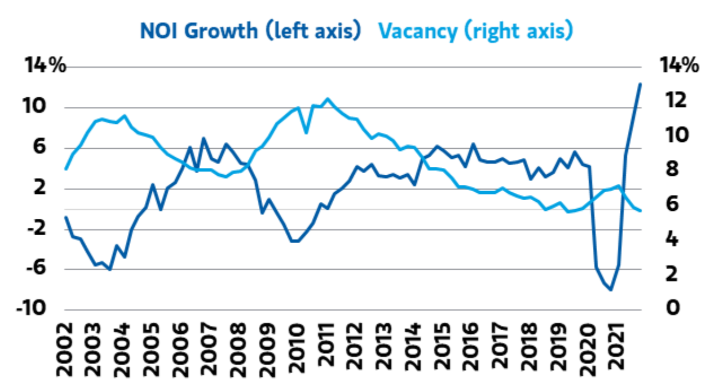
*Unemployment rate refers to fourth quarter average in the year indicated
Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Morgan Stanley & Co. Research as of April 8, 2022

Despite the challenges of COVID and its aftermath, commercial real estate had a strong 2021, bolstered by the rapid development and distribution of vaccines, the decline of the pandemic and robust economic growth. Strong demand from tenants contributed to declining vacancies and faster rent growth across most property types. Not only have fundamentals for many property sectors fully rebounded from pandemic lows, but some metrics are now stronger than they were before the pandemic. Property values rose 22.9%—the most since 2000—according to Real Capital Analytics (RCA). Price growth, which has been highly uneven since the start of the pandemic, has seen dispersion narrow somewhat, as the retail, office and hotel sectors have rebounded off lows. Commercial real estate investment volume has also fully recovered. Total deal volume in 2021 stood at $808.7 billion, an increase of 88% from the prior year, according to RCA. Some of the sales may have been catch-up from deals that were put on hold earlier in the pandemic. Even so, last year, sales were a third higher than 2019's pre-pandemic $600 billion, indicating strong underlying demand for commercial property. Deal volume was concentrated, with multifamily contributing 40%. The industrial sector grew 50% on a year-over-year basis and represented 21% of investment activity. Despite their challenges, office, retail and hotel 2021 transactional volumes exceeded pre-pandemic levels.

Not every property type adapted quickly enough during the pandemic, however. Office and hotel values declined during the lockdown and stumbled throughout 2021. Meanwhile, the pandemic reinforced e-commerce trends, further weakening mid-priced retailers and traditional malls.

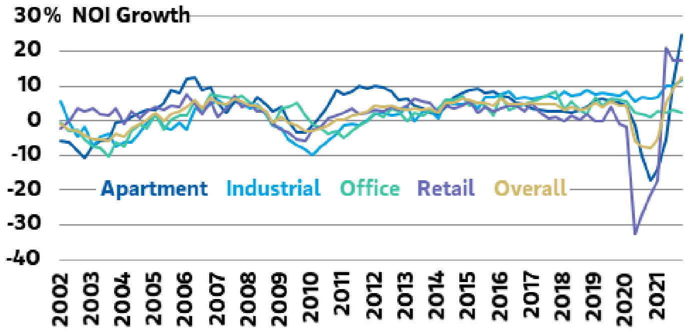
In 2020, due to COVID-driven lockdowns, work-from-home and social distancing protocols, vacancy rates increased and net operating income (NOI) growth declined dramatically for most property types, as some commercial and residential tenants missed or delayed rent payments. By the end of 2021, however, vacancy rates noticeably declined and cash flows sharply rebounded from their depressed levels as tenants resumed paying rent and occupancy levels generally recovered. All core property types experienced positive year-over-year NOI growth, with the biggest increase in apartment, at 24.8%, followed by retail, at 17.6%, industrial, at 11.5%, and office, at 2.3% (see Exhibits 2 and 3).

Exhibit 2: Real Estate Property Fundamentals Strengthened in 2021 ...



Source: NCREIF, Morgan Stanley & Co. Research as of Dec. 31, 2021

Exhibit 3: … Across Most Property Types



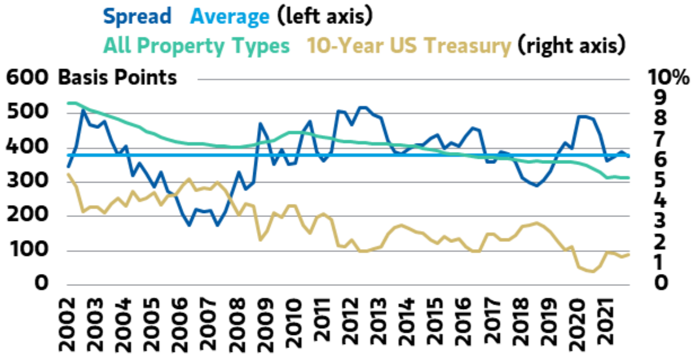
Source: RCA, Morgan Stanley & Co. Research as of Dec. 31, 2021

Capitalization Rates

The strong demand for commercial real estate has led to declining capitalization (cap) rates across most property sectors. Real estate investment managers pay close attention to the cap rate, which is a property-specific measure of NOI in a given year divided by the current market value of the property; a lower cap rate generally indicates a higher value. The apartment and industrial sectors registered the lowest cap rates at the end of 2021 as competition for assets applied upward pressure on sale prices. Cap rates for offices and retail assets also compressed but remained higher relative to those of the favored assets. Meanwhile, hotel cap rates expanded to 5.6%, up 347 basis points on a year-over-year basis, as market values declined.

The cap rate allows real estate investors to compare returns of various properties with different characteristics. Typically, the cap rate is also compared to the 10-year US Treasury yield as a measure of the credit risk premium associated with private real estate investments. By the end of 2021 the spread between the commercial property cap rate and the 10-year US Treasury yield narrowed closer to long-term trends (see Exhibit 4).

Exhibit 4: Cap Rate Spread Over the 10-Year US Treasury Yield



Source: RCA, Morgan Stanley & Co. Research as of Dec. 31, 2021

Compared to private real estate, public real estate investment trust (REIT) core property types were trading at implied cap rate discounts of approximately 2.3% at the end of 2021 (see Exhibit 5). An implied cap rate is the ratio of a public REIT's NOI to its equity market capitalization and outstanding debt combined.

Exhibit 5: Public REITs Trade at Lower Valuations Than Private Real Estate

Sector	REIT Implied Cap Rate	Private Market Cap Rate	REIT vs. Private Market Valuation Gap
Apartment	3.6%	3.6%	-2.1%
Industrial	3.0%	3.2%	7.0%
Office	5.6%	5.0%	-9.6%
Retail	5.6%	5.8%	3.4%
Hotel	5.6%	6.0%	7.5%
REIT ODCE Proxy*	4.5%	4.4%	-2.3%

*The REIT ODCE Proxy is a universe of REIT stocks built to resemble the NCREIF Fund Index–Open End Diversified Core Equity (ODCE Index). The REIT ODCE Proxy is proprietary to CenterSquare Investment Management and uses REIT names in apartments, retail, industrial and office, and then weights them according to the ODCE Index to create a proxy.
Source: CenterSquare Investment Management as of Dec. 31, 2021

Size and Structure of the Private Real Estate Market

After stocks and bonds, real estate is the world's third largest asset class. Investors have a broad array of choices as the investable real estate market, excluding single-family properties, represents $20.0 trillion, or 17% of US investable assets, according to AEW Research. In comparison, the US equity market represents $46.2 trillion, or 39% of investable assets, and the US bond market stands at $51.8 trillion, or 44%. In recognition of real estate's distinct characteristics, S&P Dow Jones Indices and MSCI decoupled real estate from the financial sector in 2016, giving real estate its own sector within the Global Industry Classification Standard structure.

Private real estate investments may be structured as open-end funds, closed-end funds, partnerships, private REITs or separately managed accounts. In addition, investors may make direct investments in properties or make debt-related investments. According to PitchBook, over the past decade private real estate assets under management have more than doubled, growing from $444 billion in 2010 to a record $1.2 trillion as of Dec. 31, 2021, reflecting resilient investor demand despite current market challenges.

Exhibit 6: Various Real Estate Property Segments Have Different Characteristics

Office

- Vacancies and rental rates generally follow the business cycle and regional economic conditions
- Lease terms are typically seven to ten years
- Property valuations generally linked to employment growth
- Considered more volatile than other property types
- 30% weighting in NPI

Multifamily Housing

- Vacancies, rental rates, and new construction follow demographic trends
- Lease terms are typically 12 months
- Considered more defensive than other property types
- 27% weighting in NPI

Retail

- Includes grocery-anchored shopping centers, retail condos, retail centers with large anchor stores
- Lease terms are typically five to ten years
- Highly correlated to changes in consumer spending and inflation
- 15% weighting in NPI

Industrial

- Includes warehouses and distribution centers; demand fueled by the growth in e-commerce and globalization
- Production facilities demand tied to manufacturing and import/export trends
- Lease terms are typically five to seven years
- Considered less volatile than the office sector
- 28% weighting in NPI

Source: AEW Research and NCREIF as of Dec. 31, 2021

Properties held by institutional investors account for nearly all of the property market value in the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI). The NPI is a broad benchmark that measures the performance of 9,919 privately held US properties. The market value of the underlying properties in the index totaled $834 billion on Dec. 31, 2021. The four primary (or core) property types—office, multifamily housing, retail and industrial—and their weightings in the NPI, are highlighted in Exhibit 6.

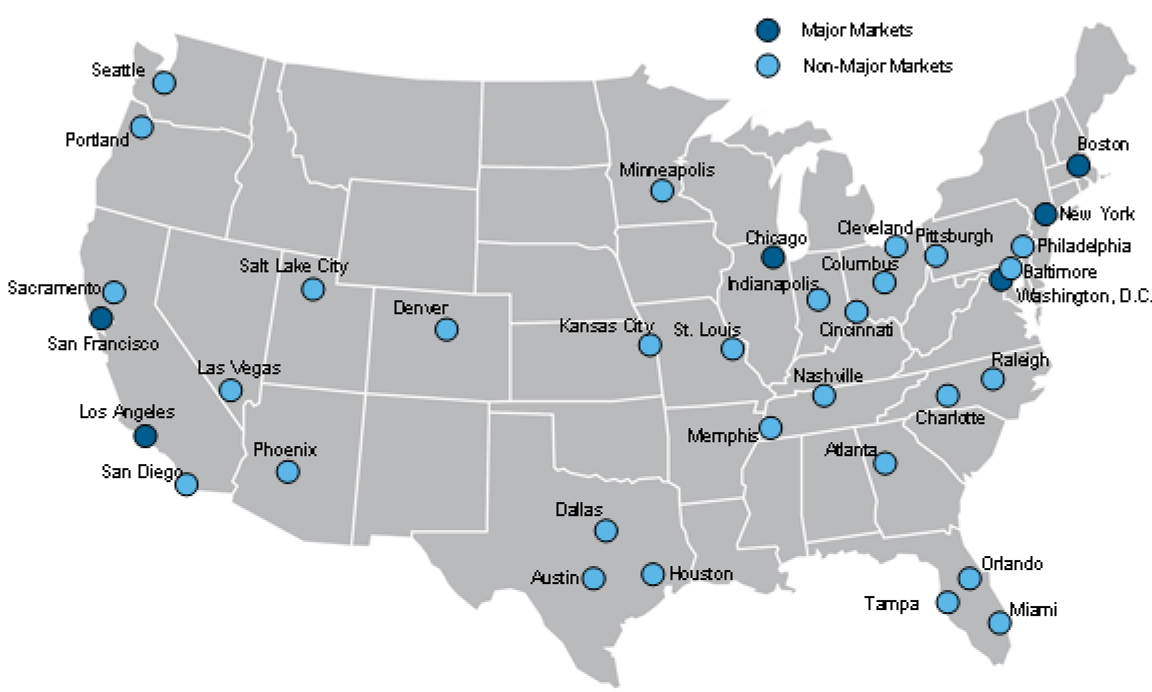
As interest in the real estate sector has increased, so has demand for niche property sub-segments such as health care-related areas like senior housing, medical offices and life science properties, as well as other areas like data centers, self storage and single-family rentals. These sub-segments have exhibited strong fundamentals and may provide resiliency in an economic downturn. Additional details for these niche property types are provided below.

- **Medical offices** are generally regarded as the lowest risk sub-segment within the office sector. This niche sub-segment has shown rapid growth since the passage of the Affordable Care Act (ACA) in 2010, as ACA increased demand for health care services, including outpatient services in clinics and other medical facilities that are located closer to patients. Further, the underlying properties have been more recession-resistant due to longer lease duration and relatively high tenant retention rates.
- **Life science properties** include highly specialized real estate for companies involved in biopharmaceutical, medical technology, genomics, diagnostics and digital health industries, which focus on products that use the latest technology to improve the efficiency of health care delivery. An aging global population, COVID-19 and the continued convergence of scientific breakthroughs are among just a few of the key factors that continue to fuel investment in the research and development space that serves the life sciences industry.
- **Senior housing** has underlying fundamentals and drivers that remain in place as the sub-segment is a direct beneficiary of strong demographic tailwinds associated with the increased demand from an aging US population. Due to its needs-based demand, senior housing has historically provided attractive risk-adjusted returns and is generally less correlated to the real estate cycle; however, senior housing did experience greater challenges during the pandemic. While the short-term outlook for senior housing is tied to the path of COVID-19 variants, their infection and penetration rate within properties, as well as the impact of the pandemic on broad economic growth, the demographic trends still remain positive over the longer term.

- **Data centers** look like typical industrial or office buildings but house computer servers that store data. These assets are crucial for increased connectivity, conducting business and storing information. Due to work-from-home protocols, COVID-19 has underscored society's dependence on technology and driven a greater need for bandwidth and connectivity. While relatively unknown among most private-market investors, public market investors have bid up the prices of data center REIT stocks for years, driving data center outperformance versus both the S&P 500 Index and the MSCI U.S. REIT Index over the trailing 1-, 5- and 10-year periods as of Dec. 31, 2020. Further, favorable demand tailwinds, largely driven by cloud computing and mobile data use, suggest that the data center sector has significant growth potential going forward.
- **Self storage** has experienced increased investor demand recently due to the property type's durability and counter-cyclical drivers, including household consolidation and a rising number of relocations. During the pandemic, self-storage properties maintained favorable operations and rent collections, underscoring the sector's reputation as a recession-resistant property type. The reopening economy could reignite a broad range of self-storage demand drivers that further build on the segment's historically tight supply. Favorable investment drivers and abating supply risk are expected to provide long-term momentum for self storage.
- **Single-family rentals** first emerged as an institutional investment opportunity in the US following the housing bust when investors acquired large portfolios of foreclosed homes at sharp discounts. The pandemic facilitated millennials' gradual transition to the suburbs in search of more living space. With rising housing prices and a supply shortage, the sector delivered outstanding performance in 2021. With the operations and cash flow durability of this sector tested, investors have been flocking to it. Limited overall housing supply, prohibitively high home prices and healthy demand are expected to continue to drive increasing demand to rent single-family houses.

As for regional location, private real estate tends to be clustered in major and non-major markets (see Exhibit 7). Major or gateway markets include Boston, New York, Washington DC, Chicago, San Francisco and Los Angeles, which are large, liquid and have high barriers to entry. Non-major or non-gateway markets such as Philadelphia, Austin, Phoenix and Portland are smaller, less liquid (historically relative to gateway markets) and have lower barriers to entry. With the onset of COVID-19, gateway markets lost their appeal in 2020 as the pandemic-forced lockdowns triggered an exodus of residents from major cities to non-major cities. Secondary markets continued to see robust growth in 2021. While the lower cost of living in non-major markets may appeal to a swaying number of potential residents, this migration presents a short-term solution at least for the duration of remote employment.

Exhibit 7: US Major and Non-Major Markets for Private Real Estate



Source: IPD and AEW Research as of October 2018

Potential Benefits of Private Real Estate

Institutional investors began investing in private real estate following the 1974 passage of the Employee Retirement Income Security Act, which required pension plans to diversify their assets. The benefits of private real estate in a multi-asset portfolio include diversification with a low correlation to stocks and bonds; the potential for a reliable current income stream; and a potential inflation hedge as rents typically increase with inflation. The low correlation to stocks and bonds is also evident with regard to private real estate's correlation to public REITs. Private real estate is differentiated from public REITs because private investments reflect underlying property characteristics that determine cash flow and, ultimately, investor returns. In contrast, public REITs trade like stocks and reflect the pricing volatility and risks associated with public equity markets. As a result of public REITs' high correlation to equities and thus higher volatility, investment in private real estate is an effective tool for investors seeking improved portfolio diversification and optimization of their portfolios' overall risk-adjusted return profile.

We believe the potential benefits of private real estate, along with investors' ability to diversify real estate exposure across various vintage years, property types and investment strategies, support our thesis that both high-net-worth and institutional investors should consider a strategic allocation to private real estate.

Potential Risks of Private Real Estate

Private real estate investors face numerous risks including, but not limited to, macroeconomic, geographic, property type, leverage, liquidity and valuation lag.

- Macroeconomic risk is a product of real estate's cyclicality, and returns may be negatively affected by a US recession or sustained global macroeconomic shocks.
- Specific geographic markets may have varying economic conditions that affect property values in those markets. In addition, specific property type risks vary among office, multifamily housing, industrial and retail assets (as well as the aforementioned niche sub-segments). For example, the multifamily housing sector is considered more defensive because it is driven by demographic trends, while the office sector depends on the business cycle and the retail sector relies on discretionary consumer spending.
- Varying levels of leverage are typically utilized for individual real estate investment strategies to enhance property returns. When interest rates are high, high debt levels may hurt performance and returns may be negatively impacted. Likewise, highly leveraged property assets in geographic markets that are experiencing declining property values are vulnerable to reduced cash flows and lower returns.
- The liquidity risk associated with private real estate results from the typical seven-to-ten-year life of most closed-end funds; however, the illiquid nature of private real estate allows fund managers to be patient and focus on creating long-term value. For open-end private real estate vehicles, investors should be aware of the potential liquidity mismatch of investing in hard assets that are illiquid in nature and may experience lower (or a lack of) transactional activity in challenging markets.
- While property appraisals have generally become more frequent and involve the use of independent third-party appraisers, private real estate investments likely will still experience a lag to the public markets in terms of valuation impact (and net asset value, or NAV, pricing for evergreen vehicles like non-traded REITs). Investors should consider the lag effect that comes with valuing private investments (and the potential impact the investor may experience relative to the NAV price at transaction), particularly during times of heightened volatility (e.g., COVID-19).

Private real estate investment risks may be mitigated by diversifying exposure across the risk spectrum to include open-end funds or interval funds with quarterly liquidity as well as non-traded REITs, which generally offer monthly liquidity. These offerings are considered to be low-to-moderate risk investment strategies that provide both current income and the opportunity for capital appreciation. In addition, private real estate investment risk may be mitigated by investing across vintage years, diversified property types, geographic submarkets and investment strategies.

Real Estate Investing Implementations

Investors have a variety of options for making real estate investments including, but not limited to, private equity investments in the ownership of real estate properties, private debt ownership of real estate-backed loans, publicly traded equity and publicly traded debt in areas such as commercial mortgage-backed securities (CMBS) (see Exhibit 8). Private equity investments in real estate are commonly referred to as direct ownership, while indirect ownership can be held through publicly traded equity securities. Private market lending of loans backed by real estate collateral is referred to as direct lending, in contrast to publicly traded real estate debt, which is sometimes referred to as indirect lending or structured credit. Each of these forms of real estate investing has unique characteristics and differentiated return and risk profiles as well as vehicle structures.

Exhibit 8: Private Real Estate Is Just One Approach to the Investment Class

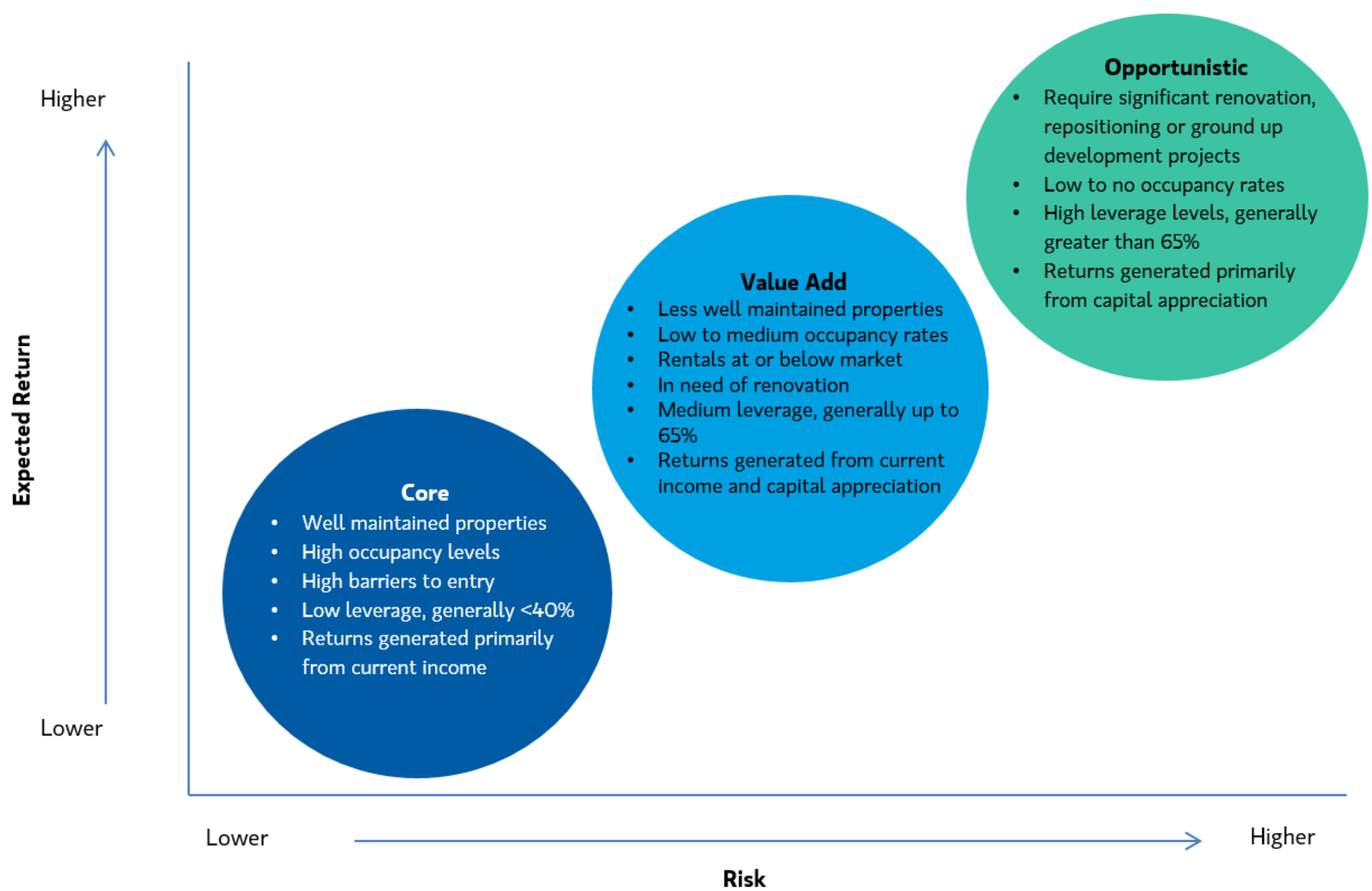
	Private	Publicly Registered
Equity	• Private REITs • Limited Partnerships • Closed-End Funds • Open-End Funds • Separate Accounts • Direct Investment	• Publicly Traded REITs • Publicly Traded Real Estate Operating Companies • Non-Traded REITs • Interval Funds
Debt	• First Mortgage Loans • Mezzanine Loans • Bridge Loans • Construction Loans	• Commercial Mortgage-Backed Securities • Collateralized Debt Obligations

Source: REIT.com, Morgan Stanley Wealth Management GIMA

Further, as the CFA Institute notes, private real estate investments are often utilized for investors who have long-term investment horizons and relatively low liquidity needs, while publicly traded real estate investments, such as REITs, may be appropriate for investors with shorter investment horizons and higher liquidity needs. Additionally, since private real estate is not publicly traded, property values are established through an appraisal process. This process leads to a valuation lag effect relative to publicly traded, transactions-based real estate indices, as well as an investment profile that tends to have lower volatility and lower correlation with other asset classes.

Private real estate funds typically employ distinct investment strategies that are generally classified into three categories that reflect varying risk/return profiles—core, value-add and opportunistic. These investment strategies are primarily differentiated by their preference for income generation or long-term capital appreciation, property type selection (well-maintained, cash flowing properties versus properties with varying levels of renovation/repositioning), occupancy levels and use of leverage (see Exhibit 9).

Exhibit 9: Return/Risk Profile of Major Private Real Estate Investment Strategies



Source: Morgan Stanley Wealth Management GIMA

Core Strategies (Least Risk)

Core real estate investments are considered low-risk assets. They typically produce stable, predictable cash flow from top-tier creditworthy tenants that have committed to long-term leases. The property is usually at least 90% leased at the time of sale. The buildings and/or systems are relatively new or well maintained, so they do not require significant near-term improvements or expenditures and are generally among the most liquid in the market. They may not realize substantial appreciation, but there is minimal downside risk. This type of investment may be appropriate for investors who seek capital preservation and long holding periods; it often warrants low-leverage acquisitions. While core investments may seem less attractive than higher-yielding commercial real estate, many investors view them as attractive relative to their level of risk. They also favor their predictable cash flows and ability to hedge against volatility and inflation.

Value-Add Strategies (Mid-Level Risk)

Value-add real estate investments generally focus on properties that have some in-place cash flow but are operating below their potential. These buildings often have occupancy issues, management problems and deferred maintenance and may need significant repairs. The business plan is to make improvements to the building in order to increase NOI by increasing rental income, reducing operating expenses or both. Because adding value often requires significant cash up front, investors employ medium to high amounts of leverage to finance such projects. This increases the risk profile significantly. If the business plan fails to produce results, the property could fall well short of expectations. Successful value-add projects typically generate higher returns for investors than core investments due to appreciation in value. However, because the property is not operating at its full potential at the time of acquisition, these projects entail more risk. For many investors, however, value-add projects provide a fair balance of risk versus return. In other words, they offer in-place cash flow at the time of acquisition with significant upside potential in the form of value appreciation.

Opportunistic Strategies (Most Risk)

Opportunistic real estate investing follows the value-add approach but takes it a step further on the risk spectrum. It targets nearly empty buildings or raw land that is purchased for repositioning or building from the ground up. Opportunistic property can be acquired at prices well below those of core asset counterparts but requires significantly more capital and leverage and can take years to realize full potential. Since these are projects with greater variability and little to no in-place cash flow, opportunistic investments carry the highest risk of total loss. However, if the business plan is successful it generally achieves a higher return than core or value-add strategies through substantial appreciation—requiring investors to have greater risk tolerance and more patience.

Real Estate Performance

Publicly traded REITs, as represented by the MSCI US REIT Index, rose 43.1% in 2021—outperforming the S&P 500 Index by more than 14%—and reset from trading at significant discounts to NAV to trading at premiums. Despite positive performance across all sectors, however, meaningful return dispersion persisted. The hard-hit social distancing-sensitive sectors that partially recovered from 2020—including hotel, office, diversified and health care REITs—remain below pre-pandemic levels. Underperformance was driven by a combination of factors, including concerns around the economic impact of the Omicron variant of COVID-19, slower-than-expected return-to-office trends and associated ramp-up of business travel. Sectors that delivered exceptional returns in 2021 included industrial, self storage, apartment and malls. The performance differences were the result of secular changes in tenant preferences and behavior that accelerated during the pandemic, such as work-from-home and shopping habits, which affected every market and asset to some degree. The industrial, residential and alternative property types benefited most from these shifts, while office, retail and hotel returns fell short.

The core private real estate market, as represented by the NCREIF Open-End Diversified Core Equity (ODCE) Index, registered a 22.2% gain in 2021—the highest annual return in its history. The ODCE Index exhibited meaningful return dispersion as well. In the continuation of the 2020 trend, industrial and apartment properties led the way, supported by strong supply/demand fundamentals. Meanwhile, office and retail values stagnated due to flat or declining fundamentals.

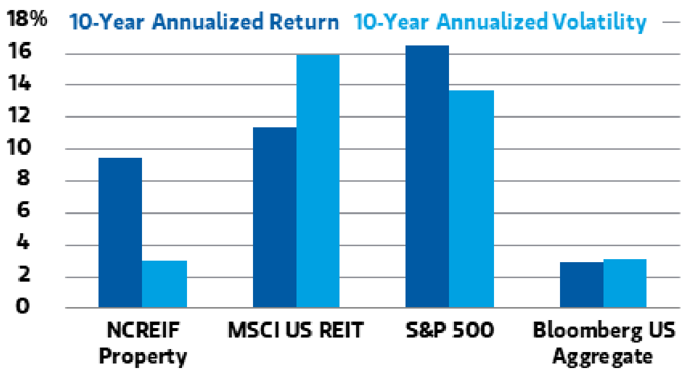
Non-traded REIT managers covered by Morgan Stanley Wealth Management Global Investment Manager Analysis (GIMA) continued to deliver positive returns in 2021, posting record full-year results. Non-traded REIT strategies generally ranged from mid-to-high double-digit net returns, as managers largely avoided the most problematic property types (office and hotels). Non-traded REIT managers produced above-market operating results and continued to record an increase in capital flows and transactional activity throughout the year.

Over the 10-year period through Dec. 31, 2021, private real estate, as represented by the NCREIF Property Index, slightly underperformed the MSCI US REIT Index (see Exhibit 10). Additionally, the reported 10-year annualized volatility of private real estate is 3.0%, significantly below the 10-year annualized volatility of 16.6% for US stocks and 15.9% for public REITs. We note that there is a measurement bias in the reported data series of property values in the NCREIF

Property Index that underestimates the volatility of underlying property asset values.

The correlation matrix in Exhibit 11 shows that private real estate returns have been negatively correlated to US stocks and bonds but slightly positively correlated to public REITs over the trailing 10-year period, as of Dec. 31, 2021.

Exhibit 10: How Private Real Estate Compares with Stocks and Bonds



Note: Reported returns and volatility are based on data from the above-mentioned indexes. The MSCI US REIT and S&P 500 Indexes reflect total returns.
Source: FactSet as of Dec. 31, 2021

Exhibit 11: Private Real Estate Has a Low Correlation to Other Assets

	NCREIF Property	MSCI US REIT	S&P 500	Bloomberg US Aggregate
NCREIF Property	1	0.12	-0.07	-0.31
MSCI US REIT	0.12	1	0.69	0.14
S&P 500	-0.07	0.69	1	-0.11
Bloomberg US Aggregate	-0.31	0.14	-0.11	1

Note: Based on performance data for the 10 years ending Dec. 31, 2021.
Source: FactSet

Current Opportunities in Private Real Estate

Amid the global uncertainty characterized by higher interest rates, elevated inflation and Russia-Ukraine volatility, commercial real estate appears to be a stable destination for core, value-add and opportunistic investors seeking yield, relative value and diversification. Recently, such investors have also looked to commercial real estate as a potential inflation hedge.

We expect demand for commercial real estate to build amid the economic recovery given the strong underlying fundamentals in the core property markets. A recovering economy and strong job market should support occupancy and higher rents. However, we note that cap rate compression for apartment and industrial assets may continue, given strong investor interest and positive supply/demand fundamentals. We would also highlight nontraditional or alternative sectors, such as student housing, single-family rental, self storage, life science and medical office, which may offer higher cap rates. Lately, these alternative sectors have been capturing a higher share of capital from a wide range of investors. Tenant demand in many of these sectors is driven more by demographics than economic growth, making them less volatile over the business cycle. Several of these property types have been resilient, exceeding their pre-pandemic growth expectations by a wide margin.

That said, given expectations for rising interest rates and implications for potential future yield requirements, it is important to select property sectors and markets that will provide sufficient NOI growth to offset an increase in cap rates or to generate property valuation appreciation. Additionally, a shift in risk perceptions and realities could lead to interesting investment opportunities and perhaps mispricing (or repricing) in private real estate in the years ahead. The key to understanding the progression of property markets is to distinguish between short-term pandemic-induced effects and long-term secular shifts in commercial real estate that may also have been accelerated by COVID.

The pandemic forced lifestyle and behavioral changes that impacted the real estate sector, with trends playing out differently for each property type in various locations. Housing markets experienced surging purchase prices and large rent increases as people turned to secondary and smaller destination markets in search of more space and better affordability, as construction of new homes and apartments remains well below the level needed to keep up with population growth. Technological innovations continue to underpin unabated demand for industrial assets amid tight supply. Retail recovered substantially in 2021, benefitting from economic growth and declining restrictions. COVID variants and competition from e-commerce remain the biggest risks to retail recovery in 2022. Offices in central business districts experienced greater hits to demand than their suburban counterparts; the longer-term outlook for the office sector depends on the pace of return-to-work and the impact of new work patterns on demand.

We see a number of interesting ways for investors to enhance portfolios via real estate strategies. In the new era of living with COVID, risks now may be elevated due to the potential failure of stock/bond diversification, rising inflation and interest rates and a falling US dollar. As such, we recommend the use of real assets, including real estate, to enhance diversification, achieve attractive alternative income and hedge inflation. For this purpose, we recommend private core real estate strategies (e.g., non-traded REITs) that have largely avoided the most problematic areas like shopping malls and hotels. We would also target the strategies that have preserved capital on a relative basis during the pandemic, maintained a strong liquidity position and continued to distribute attractive income. We also highlight public real estate strategies, which are at attractive discounts to broad equities and private real estate and have experienced notable property type dispersion.

GIMA also believes that private real estate debt strategies present a compelling opportunity. Real estate lending continues to offer above-market yields and hard asset coverage. These strategies represent attractive alternative income solutions relative to traditional asset classes. We believe that a supportive backdrop exists for managers with dry powder, strong capabilities and prudent risk management to increase their competitive advantage by deploying into a very attractive spread environment with less competition. Traditional lenders are focused on managing their existing portfolios, and many private lenders have exited due to issues associated with leverage and margin calls. We recommend implementing this theme through experienced private real estate debt managers that employ all-weather, income-focused strategies, have robust capabilities across property types and have prudently used leverage and liquidity.

Lastly, we expect an uneven recovery within opportunistic and value-add private real estate. We believe the opportunity set across property types will shift toward secondary and tertiary markets in the South and West, as well as toward suburbs and lower-tax states with better weather and lower costs of living. With the pandemic in its third year, the market environment continues to provide a once-in-a-cycle opportunity for skilled real estate managers to expand into resilient markets or growth areas and identify attractively priced, distressed and mismanaged properties. As trends intensify or change, the real estate recovery may be uneven, with notable regional and property type differences. On the opportunistic side, development projects of property types with powerful demand drivers in select markets are expected to provide superior risk-adjusted returns. GIMA believes that local market presence, expertise and relationships, as well as the ability to actively drive NOI growth, will be critical to deliver attractive risk-adjusted returns.

Within value-add real estate, we maintain a preference for residential and industrial properties—areas that have remained highly resilient and have strong secular tailwinds to help mitigate downside in a more volatile market. GIMA also believes that tailwinds continue to accelerate needs-based tenant demand for senior housing and health care facilities that support safe social engagement, deliver outpatient settings for better outcomes and advance research and development and medical technologies. Further, we are encouraged by the opportunity to take on slightly greater operating complexity to achieve exposure to niche or alternative sectors, including senior housing, self storage, life science and medical office, all of which have appealing features.

We maintain the belief that investors' private real estate exposure should be diversified across vintage years, property types, geographic submarkets and investment strategies along the risk/return spectrum in order to better optimize portfolio diversification and reduce aggregate portfolio volatility. We also believe that manager skill in underwriting investment opportunities across property types and geographic submarkets and at the individual asset level is a critical factor to achieving attractive risk-adjusted returns. GIMA continues to seek private real estate managers that have robust research capabilities and successful long-term track records. Regardless of potential interest rate changes and continued uncertainty associated with the markets, economy or pandemic, GIMA believes that investors may find attractive investment opportunities in the current environment that are aligned with individual investment objectives and risk tolerances.

Disclosure Section

Disclosures

The sole purpose of this material is to inform, and it in no way is intended to be an offer or solicitation to purchase or sell any security, other investment or service, or to attract any funds or deposits. Investments mentioned may not be appropriate for all clients. Investments in Alternative funds may be made only after a client has carefully reviewed the offering memorandum and executed the subscription documents (as applicable). Morgan Stanley Wealth Management has not considered the actual or desired investment objectives, goals, strategies, guidelines, or factual circumstances of any investor in any fund(s). Before making any investment, each investor should carefully consider the risks associated with the investment, as discussed in the applicable offering memorandum, and make a determination based upon their own particular circumstances, that the investment is consistent with their investment objectives and risk tolerance.

Investments in Alternative funds often are speculative and include a high degree of risk. Investors could lose all or a substantial amount of their investment. These investments are appropriate only for eligible, long-term investors who are willing to forgo liquidity and put capital at risk for an indefinite period of time. They may engage in speculative practices that may increase the volatility and risk of loss. Investments in Alternative funds typically have higher fees than traditional investments. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing. Certain of these risks may include but are not limited to:

• Lack of liquidity in that there may be no secondary market for a particular fund;

• Volatility of returns;

• Restrictions on transferring interests in a fund;

• Absence of information regarding valuations and pricing;

• Complex tax structures and delays in tax reporting;

• Less regulation and higher fees than other investment vehicles; and

• Risks associated with the operations, personnel, and processes of the manager.

As a diversified global financial services firm, Morgan Stanley Wealth Management engages in a broad spectrum of activities including financial advisory services, investment management activities, sponsoring and managing private investment funds, engaging in broker-dealer transactions and principal securities, commodities and foreign exchange transactions, research publication, and other activities. In the ordinary course of its business, Morgan Stanley Wealth Management therefore engages in activities where Morgan Stanley Wealth Management's interests may conflict with the interests of its clients, including the private investment funds it manages. Morgan Stanley Wealth Management can give no assurance that conflicts of interest will be resolved in favor of its clients or any such fund.

All expressions of opinion are subject to change without notice and are not intended to be a forecast of future events or results. Further, opinions expressed herein may differ from the opinions expressed by Morgan Stanley Wealth Management and/or other businesses/affiliates of Morgan Stanley Wealth Management.

This is not a "research report" as defined by FINRA Rule 2241 or FINRA Rule 2242 and was not prepared by the research departments of Morgan Stanley & Co. LLC, Morgan Stanley Smith Barney LLC, or its affiliates.

Certain information contained herein may constitute forward-looking statements. Due to various risks and uncertainties, actual events, results or the performance of a fund may differ materially from those reflected or contemplated in such forward-looking statements. Clients should carefully consider the investment objectives, risks, charges, and expenses of a fund before investing.

Past performance is no guarantee of future results. Actual results may vary. Diversification does not assure a profit or protect against loss in a declining market.

Yes, here is that one:

Investing in ***stocks***, ***mutual funds*** and ***exchange-traded funds ("ETFs")*** entails the risks of market volatility. The value of all types of investments may increase or decrease over varying time periods. Besides the general risk of holding securities that may decline in value, ***closed-end funds*** may have additional risks related to declining market prices relative to net asset values (NAVs), active manager underperformance, and potential leverage. Some funds also invest in foreign securities, which may involve currency risk.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which allows the issuer to retain the right to redeem the debt, fully or partially, before the scheduled maturity date. Proceeds from sales prior to maturity may be more or less than originally invested due to changes in market conditions or changes in the credit quality of the issuer.

Alternative investments involve complex tax structures, tax inefficient investing, and delays in distributing important tax information. Individual funds have specific risks related to their investment programs that will vary from fund to fund. Clients should consult their own tax and legal advisors as Morgan Stanley Wealth Management does not provide tax or legal advice.

Interests in alternative investment products are offered pursuant to the terms of the applicable offering memorandum, are distributed by Morgan Stanley Smith Barney LLC and certain of its affiliates, and (1) are not FDIC-insured, (2) are not deposits or other obligations of Morgan Stanley or any of its affiliates, (3) are not guaranteed by Morgan Stanley and its affiliates, and (4) involve investment risks, including possible loss of principal.

Important note regarding economic sanctions. This event may involve the discussion of country/ies which are generally the subject of selective sanctions programs administered or enforced by the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the European Union and/or by other countries or multi-national bodies. The content of this presentation is for informational purposes and does not represent Morgan Stanley's view as to whether or not any of the Persons, instruments or investments discussed are or may become subject to sanctions. Any references in this presentation to entities or instruments that may be covered by such sanctions should not be read as recommending or advising on any investment activities involving such entities or instruments. You are solely responsible for ensuring that your investment activities in relation to any sanctioned country/ies are carried out in compliance with applicable sanctions.

The returns on a portfolio consisting primarily of ***environmental, social, and governance-aware investments (ESG)*** may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. The companies identified and investment examples are for illustrative purposes only and should not be deemed a recommendation to purchase, hold or sell any securities or investment products. They are intended to demonstrate the approaches taken by managers who focus on ESG criteria in their investment strategy. There can be no guarantee that a client's account will be managed as described herein.

Strategy Definitions

The Strategy Descriptions provided below may not, at any given time, completely describe, or account for, all the variations of a strategy that a manager utilizes, any evolution in the strategies, every instrument used within those strategies or new strategies that arise.

Private Equity An asset class typically consisting of equity and debt securities in operating companies or assets that are not publically traded. Sub-strategies include: Primary or direct investments in targeted companies, Secondary investments in existing private equity investments, Co-investment such as investing along-side other direct investors.

Private Equity Strategies

Buyouts: Equity investments to acquire a controlling interest in a company

Direct Lending: Providing capital to companies in a form of debt within the company's capital structure.

Distressed / Special Situations: Investments in securities of companies or government entities that may be or near default or under bankruptcy protection. Purchasers typically buy these securities at deep discounts and seek to profit from the entity emerging from the distressed situation.

Growth Equity: Equity investments made in more mature companies to provide funding for growth, expansion or restructuring, new markets or finance a significant acquisition without a change of control.

Mezzanine Debt: Subordinated debt or preferred stock that earns a coupon and may have warrants or conversion features. Mezzanine capital is only senior common equity.

Royalties: The purchase of contractual rights to royalty rights for: for example, sales of medical products, including pharmaceuticals and devices. Also, may involve investment in equity of company that has current royalty interests.

Whole Loans: A single residential or commercial mortgage that a lender has issued and has not been securitized.

Venture Capital: Seed or startup capital provided to early-stage, high potential growth start-up companies. Investors seek to profit from the unique product, technology or business model. Venture capital investments typically take 5 or more years to reach full valuation.

Real Estate Strategies

Core Investing: Lower Risk/Lower Return Potential; well managed and high quality properties with high grade credit quality tenants. Buildings are substantially leased and diversified across property types with return derived primarily from income.

Opportunistic Investing: High Risk/High Return Potential; there is limited current income as the properties are generally distressed investments. The investment is driven by capital appreciation and speculative development.

Real Estate: Real estate investments seek to invest in physical real estate or real estate related securities across varying investment strategies, segments and geographies.

Value-Added Investing: Moderate Risk/Return Potential; undervalued properties due to suboptimal management. The value potential is through renovation, releasing, repositioning or redevelopment. The outcome is improved income as a result of better management.

Additional Definitions

Distribution to Paid in Capital (DPI): The proportion of the called capital that has been distributed or returned in Limited Partners.

Enterprise Value: A measure of a company's value, often used as an alternative to market capitalization. Enterprise value typically includes market cap plus debt, minority interests, preferred shares minus cash and cash equivalents

Entrance Queue: Funds will make calls for unfunded commitments from time to time with advanced' notice as new investment or capital activity warrants. Capital from new investors is called pro rata in order of the quarter in which the investor's commitment was received. .

Gross Property Value: Is the value of a fund's underlying assets inclusive of any leverage applied to individual assets or the portfolio as a whole.

Gross Return: Is the estimated or audited performance of a fund that excludes all associated fees and expenses.

Internal Rate or Return (IRR): The annualized effective compound rate of returns that makes the net present value of all cash flows equal to zero.

Investment Period: The period established by a fund in which the fund can make addition investments. Investments committed to prior to the expiration of the investment period may be made after the investment period has expired.

J-Curve Effect: Refers to the typical pattern of returns over the life of a private equity style portfolio as expenses and investments made to portfolio assets contribute to subdued or negative performance in the early years and rebound as the fund matures.

Loan-to-Value Ratio: Represents the first mortgage lien as a percentage of the properties appraised value.

Multiple on Invested Capital (MOIC): A measure to assess private equity performance. The measure typically includes all distributions plus any unrealized gains divided by paid-in-capital. An investment of $10,000 which grows to $20,000 is referred to a 2X MOIC.

Net Asset Value (NAV): The value of a fund's assets less liabilities.

Net Investment Value: Value of a fund's underlying assets based on the funds valuation methods and exclusive of any leverage.

Net Return: Is the estimated or audited performance of a fund less associated fees and expenses, such as management fees and carried interest.

Redemption Queue: Where a fund has a redemption provision and cannot meet redemptions requests in full, investors remaining redemption balance will be placed in the Redemption Queue. Future redemption payments will be made to investors on a pro-rata basis based on available proceeds.

Residual Value to Paid in Capital (RVPI): The value of the limited partners remaining interest in the partnership as derived from the General Partner's valuation of the unrealized portfolio.

Total Value to Paid in Capital (TVPI): Sum of distribution to paid in and residual value paid in, i.e., distributed cash and securities plus the value of the limited partner's remaining interest in the partnership.

Vintage Year: Typically refers to the year or period in which a fund initiated investments and typically used as reference period for performance review.

Index Definitions

Private equity funds are investments in various forms of private securities with different characteristics and objectives. As such meaningful indices to assess relative performance are difficult to construct with any relevance. Assessments of private equity performance are typically viewed with respect to similar styles and investment time frames referred to as "vintage year".

Bloomberg Aggregate Index - The U.S. Aggregate Index covers the dollar-denominated investment-grade fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS pass-through securities, asset-backed securities, and commercial mortgage-backed securities. These major sectors are subdivided into more specific sub-indices that are calculated and published on an ongoing basis. Total return comprises price appreciation/depreciation and income as a percentage of the original investment. This index is rebalanced monthly by market capitalization.

NCREIF Fund Index - Open End Diversified Core Equity, is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted. NCREIF will calculate the overall aggregated Index return.

NCREIF Property Index: This index measures the performance of a very large pool of commercial real estate properties acquired in the private market for investment purposes. The data are updated quarterly with a lag of several months.

The NFI-ODCE: short for National Council of Real Estate Investment Fiduciaries, NCREIF Fund Index - Open End Diversified Core Equity, is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted. NCREIF will calculate the overall aggregated Index return.

MSCI USA IMI Extended Real Estate Index - is a free float-adjusted market capitalization index based on the MSCI USA IMI (Investable Market Index), that consists of large, mid and small cap segment of the US equity market

S&P 500 Index: Covers 400 industrial, 40 utility, 20 transportation and 40 financial companies of the U.S. market (mostly NYSE issues). The index represents about 75% of NYSE's market cap and 30% of NYSE issues. It is a capitalization-weighted index calculated on a total return basis with dividends reinvested.

Risks Associated with Private Equity and Real Estate Investments

Investments in private equity and real estate related entities are subject to various risks but not limited to the following. For additional risk factors, please see the offering memorandum.

Currency: Private equity style funds may or may not hedge out currency risk when investing internationally. Currency values may have a positive or negative impact on the funds periodic and final valuations based on currency movements over time.

Failure to make capital contributions: If Investors fail to fund their subscription obligations or to make required capital contributions when due, the fund's ability to implement its investment strategy or otherwise continue operations may be substantially impaired. A default by a substantial number of Investors would limit opportunities for investment diversification and likely reduce returns to the fund. In addition, Investors may be required to make additional capital contributions to replace a shortfall caused by a default, thereby reducing the diversification of their investments. Any Investor who defaults in making a required capital contribution will be subject to certain penalties

Fat Tail Risk: Fat tails are anomalies in return distributions, where extreme occurrences are more frequent and larger than standard deviation would explain. Fat tails in alternative investment strategies typically produce an asymmetrical risk profile whereby the frequent and larger extreme occurrences tend to occur on the negative side of the return distribution. In other words, standard deviation understates risk. The investments and associated risk characteristics of private equity style investments may exacerbate typical fat tail risk.

General Credit Risks/Lending: Funds based on credit or lending strategies may be exposed to losses resulting from default and foreclosure. Therefore, the value of the underlying collateral, the creditworthiness of the borrower, and the priority of the lien are each of great importance. Funds in general cannot guarantee the adequacy of the protection of the fund's interests, including the validity or enforceability of the loan and the maintenance of the anticipated priority and perfection of the applicable security interests. Furthermore, Fund's cannot assure that claims may not be asserted that might interfere with enforcement of the fund's rights. In the event of a foreclosure, the fund or an affiliate of the Fund may assume direct ownership of the underlying asset. The liquidation proceeds upon sale of such asset may not satisfy the entire outstanding balance of principal and interest on the loan, resulting in a loss to a fund. Any costs or delays involved in the effectuation of a foreclosure of the loan or a liquidation of the underlying property will further reduce the proceeds and thus increase the loss.

Investments with Intrinsic or Extrinsic Leverage: The investment strategies utilized by the manager and/or the underlying funds may from time to time employ the use of leverage. Such leverage may be achieved through various methods and magnifies the degree of risk and the potential volatility of investment returns. The effects of leverage may be further exacerbated to the extent that an investment in a fund represents a leveraged investment in one or more investments or underlying funds (i.e., leveraging an already leveraged investment).

Lack of diversification: A fund may participate in a limited number of investments and there can be no assurances concerning the

diversification of the Fund's assets. A limited degree of diversification increases risk because, as a consequence, the aggregate return of the Fund may be substantially adversely affected by the unfavorable performance of even a single investment.

Lack of liquidity of investments: It is unlikely that there will be a public market for the investments held by a fund. In some cases a fund may be prohibited by contract from selling investments for a period of time. In addition, the types of investments held by a fund may be such that they require a substantial length of time to liquidate. In particular, these risks could arise from absence of an established market for a property, changes in the financial condition or prospects of prospective purchasers, changes in national or international economic conditions, and changes in laws, regulations or fiscal policies of jurisdictions in which the property is located.

Market dislocation: An extended or worsening economic downturn could adversely affect the financial resources of a fund and its

investments and their ability to make principal and interest payments on, or refinance, outstanding debt when due. In such event, a fund could lose both invested capital in, and anticipated profits from, the affected investments. The recent financial crisis has led to a marked decrease in the availability of financing (and, in many cases, an increase in the interest cost) for leveraged transactions, which may impair a fund's ability to consummate certain transactions or cause a fund to enter into such transactions on less attractive terms.

Small Capitalization Companies: Companies with small capitalizations may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies. Funds that invest a large percentage of assets in only one industry sector (or in only a few sectors) are more vulnerable to price fluctuation than funds that diversify among a broad range of sectors.

Risks Associated with Real Estate Investment: Risks include adverse changes in national or international economic conditions; local market conditions and the financial condition of tenants; changes in availability of debt financing; increases in interest rates, real estate taxes, energy prices, operating expenses and the possible reliance on operating partners. Changes in investment opportunities, environmental regulations, zoning laws and other governmental rules and policies; changes in the relative popularity of properties; risks due to dependence on cash flow; as well as acts of God, uninsurable losses and other factors beyond the control of the Fund.

Restrictions on redemption: Private closed-end investment funds typically include long-term, illiquid investments. As result, do not offer redemption provisions. Key events as defined in the funds Offering Documents may provide for selective liquidity events for investors. Please consult the funds Offering Documents for fund specific redemption provisions.

Use of leverage: Although the use of leverage (in the form of either debt or preferred equity) may increase the return on Fund capital and offer inflation protection, it also creates greater potential for loss.

Conflicts of Interest

The goal of the Global Investment Manager Analysis ("GIMA") is to provide professional, objective information in support of Morgan Stanley Wealth Management's alternative investments business. GIMA has policies and procedures to help us meet this goal. However, we also believe that investors are entitled to full disclosure of conflicts of interests which could affect the objectivity of our Manager Profiles. Morgan Stanley Wealth Management and its affiliates, which include Morgan Stanley & Co. LLC, (together "our Company") do and seek to do business with various alternative investment firms") that are covered in the Manager Profiles. Our Company receives compensation, directly or indirectly, from the Funds and their affiliated investment management companies in a variety of ways.

Our Company is generally compensated for placing investments in the Funds with investors in several possible ways. As described in each Fund's confidential Offering Documents, our Company may receive a placement fee, a portion of the management fee or performance incentive compensation, servicing or trail fee paid to the manager of the Fund. The type and amount of our Company's compensation is not standard; it varies depending upon our Company's agreement with each Fund.

Our Company receives reimbursement from Funds for various sales meetings, seminars and conferences held in the normal course of business. In addition, our Company receives compensation from Funds for providing traditional brokerage services (including related research and advisory support); fund administration and prime brokerage services; investment banking services; provision of various lending facilities; and for other types of financial services including, but not limited to, transfer agent or record-keeping services. Our Company may invest, either at risk, or with respect to hedge swaps relating to the total return on a Fund or a group of Funds.

Some of the Funds we cover have affiliates in the business of separate account investment management or investment management of mutual funds. Such affiliated investment management companies may be clients of our Company and, as such, our Company provides services and receives compensation for such services. In the case of mutual funds and certain alternative investments, such compensation may include, but is not limited to, a mutual fund support fee, also known as a "revenue sharing" payment, based upon the amount of assets of its funds held by our clients. For more detailed information on how our Company charged for mutual fund revenue sharing in the past year, the names of the fund families from whom we collected such charges, and further details on fees for mutual fund recordkeeping and related services, please go to www.morganstanley.com.

Ideas and suggestions for which Funds or managers should be evaluated by GIMA come from a variety of sources, including, but not limited to persons employed by our Company's investment banking and trading businesses, its Financial Advisors/Private Wealth Advisors ("FA/PWAs") and their direct or indirect managers, and other business persons within our Company. Such persons have an ongoing business relationship with those Funds whom they propose to be evaluated wherein such person, or some business within our Company, would be receiving compensation from such Fund. For example, an FA/PWA may suggest that GIMA evaluate a Fund that is already being utilized by that FA/PWA for a portion of his or her clients' assets. While such a recommendation is permissible, final responsibility for the views expressed rests with GIMA.

No GIMA representative that prepared this Manager Profile received compensation that may be directly or indirectly related to the specific recommendations or views contained in this Manager Profile.

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