October 20, 2021

REAL ESTATE

Core Real Estate for U.S. Insurers

Introduction

Commercial real estate was once viewed as a niche investment sector, but after several decades of evolution it has emerged as a core asset class for many institutional investors. In recent decades liquidity has improved, transparency has risen, and core real estate's investor base has broadened substantially. Joint ventures, private funds, and public real estate companies draw capital from sources both foreign and domestic. These new vehicles and their investors play an important role in today's real estate capital markets, but the sector's oldest and most experienced investors remain as a solid foundation. Many of these investors can be found among the ranks of the nation's most established insurance companies.

MetLife Investment Management

Core real estate equity, with returns composed of both income and appreciation, can offer insurers a mix of benefits that are difficult to replicate with other asset classes. In our view, the sector has produced attractive total returns historically, and its risk-adjusted returns are among the highest of any major asset class. It can act as a strong portfolio diversifier, exhibiting relatively low historical correlation with other sectors, and can also help act as a hedge against inflation. As we will outline, we believe the National Association of Insurance Commissioners' (NAIC) recent reduction in C1 Risk Based Capital for real estate equity will also make the sector more attractive.

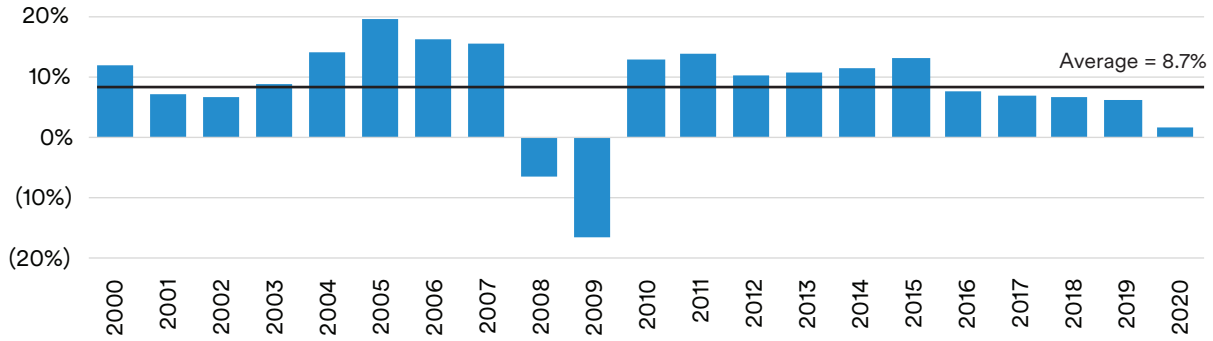
The sector's challenges lie primarily in the expertise necessary to execute individual transactions, manage national portfolios, and navigate insurance company asset-liability frameworks. For insurers with the expertise to address these challenges, we believe the rewards of an allocation to core real estate equity can meaningfully outweigh the risks.

Historical Performance

Since 2000, core real estate equity has offered attractive total returns. Unlevered gross returns during this period averaged 8.7%.[1], despite the economy enduring recessions induced by the asset bubbles of 2001 and 2008, and the pandemic that began in 2020. (Exhibit 1).

The sector's historical performance is driven by its reliance on contractual income. Since 2000, approximately 64% of the sector's total returns were derived from income. The remaining 36% came from appreciation, which was itself partially driven by expectations of future income growth. In addition to historically providing attractive absolute returns, the sector's flow of income also contributes to attractive risk-adjusted returns.

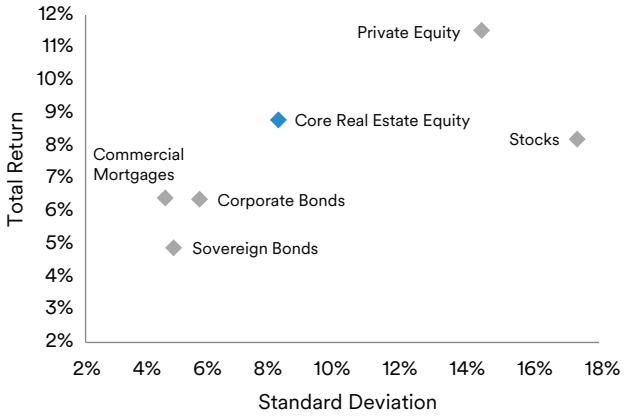
Exhibit 1 | Core Real Estate Equity Total Returns



Source: MIM, NCREIF

Core real estate exhibits one of the highest average annual total return and lowest standard deviation of any major asset class (Exhibit 2). While more volatile than bonds when measured by standard deviation, core real estate equity has exhibited stronger total returns and experienced fewer years of negative returns. Ideally, investors prefer asset classes with low standard deviations and high returns but must usually accept a tradeoff between these characteristics. Commercial mortgages can boast lower volatility and fewer years of negative returns, but at the cost of lower total returns during positive years. We believe core real estate equity's combination of historically attractive total returns and moderate volatility allow it to effectively straddle the low and moderate risk buckets in a multi asset class portfolio. We believe its greatest contribution to such a portfolio, however, may lie in its diversification benefits.

Exhibit 2 | Annual Total Returns and Standard Deviation by Major Asset Class[2]



Source: MIM, NCREIF

Benefits of Real Estate in a Multi Asset Class Portfolio

In addition to historically attractive absolute and risk-adjusted returns, core real estate equity can act as a strong diversifier in a multi asset class portfolio as well as an effective hedge against inflation. Over the last two decades the sector has exhibited relatively low correlations with direct commercial mortgages, CMBS, stocks, bonds, and private equity investments (Exhibit 3). Its average correlation with these sectors is only 0.1, and its strongest correlation with any single asset class measures only a 0.41.

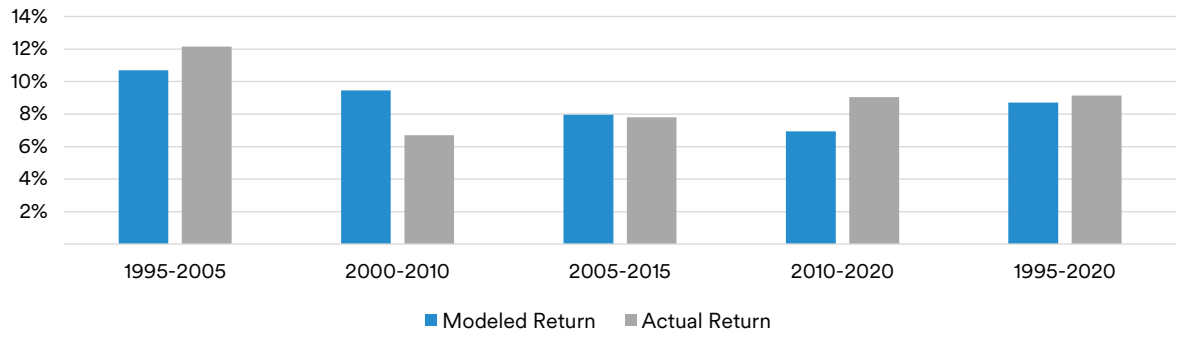
Exhibit 3 | Correlations Between Major Asset Classes[3]

	Core RE	CMLs	Stocks	Corp. Bonds	Gov. Bonds	Private Equity
Core RE	1.00					
CMLs	0.09	1.00				
Stocks	0.13	-0.08	1.00			
Corp. Bonds	-0.21	0.47	0.25	1.00		
Gov. Bonds	-0.05	0.34	-0.62	0.34	1.00	
Private Equity	0.41	0.05	0.76	0.13	-0.55	1.00

Between 1990 and 2020, commercial real estate prices increased at roughly the average annual rate of inflation, based on property value changes as tracked by NCREIF. Similarly, same-store net operating income growth approximately matched the rate of inflation. With both values and incomes strongly correlated with inflation, the real estate sector can potentially provide an effective hedge against inflation risks in a portfolio. The two primary reasons commercial real estate can help act as a hedge against inflation are the frequent re-pricing of commercial real estate leases, and the cost of constructing new buildings. Commercial real estate assets are typically occupied by multiple tenants who sign leases of varying lengths. As these leases expire, rental rates as well as reimbursements of operating expenses are adjusted to reflect current market rates, which include the effects of inflation. The cost of construction also plays a pivotal role in commercial real estate's relationship to inflation. Although real estate is typically valued by discounting the projected cashflow, value can also be influenced by trends in "replacement costs". The cost to rebuild an existing building can be viewed as an estimate of current value. As the cost of land, labor, and materials rise with inflation, so does replacement cost. If property price appreciation exceeds inflation, then the premium between current market values and the cost to build will cause construction to increase. If the premium between current market values and the cost to build is low, or negative, then new construction will slow or stop.

The relationship between commercial real estate values and inflation is further illustrated in Exhibit 4. In this chart, we show how, over time, commercial real estate performance can be modeled as a function of inflation. Specifically, returns modeled[4] as cap rates plus the rate of inflation, were generally in line with actual returns, over the past 25 years.

Exhibit 4 | Actual returns vs. Modeled returns (Inflation+Cap Rates)



Source: NCREIF, MIM

In summary, we believe commercial real estate can be an attractive option for investors seeking to diversify an investment portfolio, or to hedge from potentially rising inflation.

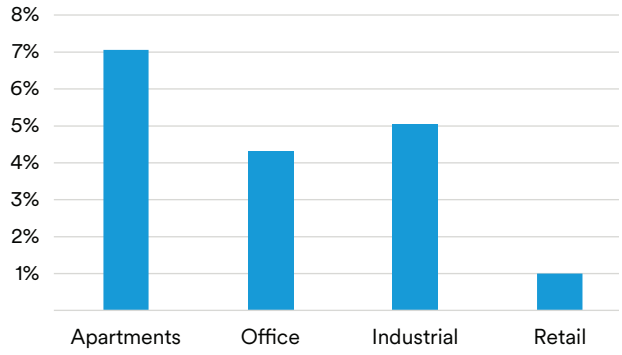
Diversification of a Real Estate Portfolio

In addition to CRE providing diversification of a multi asset class investment portfolio, it is also possible to construct highly diverse portfolios within the real estate sector itself.

The four major property types that make up most commercial real estate portfolios are each driven by different economic and demographic factors. The office sector is heavily driven by job growth in office-using employment sectors. The apartment sector is driven by a combination of employment and demographic trends. The retail sector is fueled by consumer spending, and retail tenants and formats adapting to changes in consumer behavior. The industrial sector today is being driven by consumer spending, population distribution, and consumer demand for faster e-commerce fulfillment.

Depending on the outlook for these and other drivers, the income growth each property type is able to achieve in a given period can vary significantly (See Exhibit 5). During the past 20 years, the apartment and industrial sectors have been the standouts. Apartment investors have benefited from NIMBYism[†] that has slowed new housing developments. Industrial investors have benefitted from structural changes due to the rise of e-commerce. These structural changes have also reduced income from traditional brick and mortar retail properties, which saw steep declines during the pandemic of 2020.

Exhibit 5 | Income Growth by Property Type (2001-2020)



Source: NCREIF, MIM

† NIMBY, an acronym for the phrase "not in my back yard", is the opposition by residents to proposed developments in their local area/neighborhood, as well as support for strict land use regulations.

Furthermore, even within the individual property types, performance can also vary greatly. The U.S. economy is highly decentralized relative to other developed markets, and the nation's tradition of local control results in a lack of consistency between zoning and land use laws at the metro level. With each metropolitan area driven by different industries and demographic drivers, real estate demand growth can vary substantially, as can the development community's ability to respond to that demand with new construction.

The result is that there is often a low correlation between the income growth of commercial real estate assets across markets with different economic drivers. For example, over the past 20 years, there have been low correlations between apartment markets, depending on the economic drivers of each market. (See Exhibit 6). We chose apartments for this example because the returns in this property type have been the most stable over time and thus less subject to distortions in correlation factors.

Exhibit 6 | Income Correlation by Market Driver

	Energy	Lifestyle	Tech	Demo	Gov't	Stable	Financial
Energy	1.00						
Lifestyle	0.62	1.00					
Technology	0.70	0.64	1.00				
Demographic	0.52	0.50	0.53	1.00			
Government	0.53	0.44	0.52	0.51	1.00		
Stability	0.69	0.51	0.65	0.39	0.53	1.00	
Financial	0.51	0.49	0.51	0.37	0.54	0.51	1.00

Sources: MIM, NCREIF Apartment NOI Growth, 2001-2020

As exhibits 5 and 6 illustrate, commercial real estate can allow investors to diversify across property types as well as across the various drivers of the US economy.

Exhibit 7 describes the various market types analyzed and identifies the representative markets included in the correlation estimates.

Exhibit 7 | Market Classifications

Lifestyle	These markets offer residents fair weather and a diverse array of job opportunities. Example markets include; Miami and Los Angeles.
Energy	Markets with economies that are significantly influenced by the energy sector. Example markets include; Houston and Denver.
Government	Markets driven by federal spending and a high level of government employment. Example markets include; Wash DC and San Antonio.
Stability	Markets that exhibit relatively slow population growth balanced against historically stable labor markets. Example markets include; Chicago and Philadelphia.
Technology	Located across the United States, these markets are heavily driven by job growth in the technology sector Example markets include; San Francisco, San Jose, Boston, Seattle, Baltimore, Austin and Portland.
Demographics	Economically diverse markets with high affordability and strong population growth, particularly among those aged 30 – 54. Example markets include; Atlanta, Charlotte, Nashville, Phoenix, and Dallas.

Lastly, the commercial real estate sector's potential diversification benefits are often supplemented by tenants in a wide array of industries. As a result, asset level incomes are often resilient and high levels of vacancy in properties with diversified and stable tenancy are rare, even in times of slow economic growth.

In summary, core real estate can be a highly attractive option for investors seeking to diversify their portfolios by asset class, and also those seeking diversification within an asset class. In addition to diversification, commercial real estate can also offer insurance company investors options for more tax efficient investment returns.

Tax Advantages

For insurers that own real estate assets directly, the tax advantages can be significant. Direct holders of real estate assets can reduce taxable income by depreciating the cost of existing improvements and ongoing capital expenditures. For office, retail, and industrial assets this depreciation can be taken on a 39-year basis, for multifamily assets it can be taken on a 27.5-year basis, and for certain building systems it can be assessed at an even faster rate.[5] At the standard corporate tax rate of 21%, a core multifamily asset purchased at a cap rate of 4.0% could be expected to produce a pre-tax yield from net operating income (NOI yield) of 4.2% in the year following acquisition (assuming a 3% annual growth in pretax NOI). However, the depreciation deduction reduces the tax liability, and increases the yield of the investment. We estimate the NOI yield, adjusted for the tax benefit of depreciation, would be 4.7%, rather than the 4.2% level achieved without the tax benefit.[6] For this example, one year of benefit is estimated by multiplying a year of depreciation times the corporate tax rate of 21% then adding the result to NOI to imply an "adjusted" NOI yield. (see Exhibit 8).

The adjusted NOI yield, as well as the investment's total rate of return (including asset value appreciation), has the potential to rise substantially over time. As depreciation deductions are taken, the asset's book value will decline. Also, as the investment's leases are renewed or its rents contractually increased, net operating income can rise. The result is that by year five the adjusted NOI yield on book value could be expected grow to 5.8%.

It should be noted that these returns are calculated on a nominal basis and as a result do not reflect the additional benefits depreciation offers via deferred taxation. Deferred taxes on net operating income can be reinvested to seek additional income, and long-term inflation can help reduce the impact of those taxes when depreciation is recaptured in the future. As such, the impact on portfolio level returns may be even greater than our asset level income returns suggest.

The potential tax benefits of core real estate also extend to the point of sale. In addition to income returns, investors may also benefit from appreciation driven by net operating income growth and changes in capital market conditions. For insurance companies who are holding real estate assets at book value, unrecognized gains can grow to be substantial over time. The recognition of these gains through disposition can potentially be used to offset losses elsewhere in the portfolio, helping bring greater stability to portfolio level returns during volatile periods. If the aforementioned asset grew at a 3% rate for the next five years the asset would offer not only a income return on book value of 5.8% in year five, it would likely also carry an unrealized gain equal to 15.9% of its original purchase price (see Exhibit 8). A potential side benefit of this unrealized gain is the ability to cushion potential declines in market value during the hold period. If real estate assets are held directly, and thus at book value, the decline in market value required to result in an impairment would need to be in excess of 15.9%, after year 5. As a result, directly held real estate equity generally exhibits lower statutory capital volatility than equity investments in other asset classes.

Exhibit 8 | Insurance Company Accounting of Commercial Real Estate (Hypothetical Example)

Year	0	1	2	3	4	5
Asset Market Value	$100.0	$103.0	$106.1	$109.3	$112.6	$115.9
Prior Year End Book Value	$100.0	$100.0	$97.5	$94.9	$92.4	$89.8
Statutory Depreciation		-$2.5	-$2.5	-$2.5	-$2.5	-$2.5
Year End Book Value	$100.0	$97.5	$94.9	$92.4	$89.8	$87.3
Cap Rate	4.0%					
NOI (Grown at 3%)		$4.1	$4.2	$4.4	$4.5	$4.6
NOI/ Avg. Book Value		4.2%	4.4%	4.7%	4.9%	5.2%
Taxable Income		$1.6	$1.7	$1.8	$2.0	$2.1
Corporate Taxes (@21%)		-$0.33	-$0.36	-$0.38	-$0.41	-$0.44
After Tax NOI		$3.79	$3.89	$3.99	$4.09	$4.20
Annual Taxable Depreciation		-$2.5	-$2.5	-$2.5	-$2.5	-$2.5
Tax Benefit From Depreciation		$0.5	$0.5	$0.5	$0.5	$0.5
NOI + Tax Benefit from Dep. (Adjusted NOI)		$4.7	$4.8	$4.9	$5.0	$5.2
Adjusted NOI/Avg. Book Value		4.7%	5.0%	5.2%	5.5%	5.8%
Initial Purchase Price	$100.0	$100.0	$100.0	$100.0	$100.0	$100.0
Asset Market Value	$100.0	$103.0	$106.1	$109.3	$112.6	$115.9
Unrealized Gain over Purchase	$0.0	$3.0	$6.1	$9.3	$12.6	$15.9
Unrealized Gain/Purchase Price	0.0%	3.0%	6.1%	9.3%	12.6%	15.9%

A Reduction of Real Estate RBC Factors

All US insurance companies are required to calculate and report on risk-based capital (RBC). RBC is a method of measuring the minimum amount of capital appropriate for an insurer to support its overall business operations. The RBC framework requires that insurers with higher levels of risk hold a higher amount of capital.

In June 2021, the body that regulates insurance companies (NAIC) updated the RBC "factors" for bonds and real estate equity, for implementation at year-end 2021. "A Very Long Engagement", a report published by MIM in August 2021, outlined these changes, with special focus on the rationale and implications of bond factor changes. The report concluded that US life insurance company capital charges will generally increase, although the reduction in RBC charges for real estate equity will partially offset the effect. The factor for real estate held on schedule A, which includes most direct investments, was lowered from 15% to 11%. The factor for real estate held on schedule BA, which includes most fund and joint venture investments, was reduced from 23% to 13%.

Exhibit 9, which was presented in "A Very Long Engagement", estimates and compares the risk based capital-adjusted yields, incorporating differences in RBC capital charges of commonly held asset classes at the 30-year part of the curve. As the illustration shows, real estate equity's relative attractiveness improves materially, and now ranks highest of the 11 asset classes examined.

Exhibit 9 | Hypothetical RBC-Adjusted Yields Under New RBC Regime[7]

Old Rank	New Rank	Asset Class	New RBC-Adjusted Yield
11	1	Real Estate Equity	4.17%
1	2	Emerging Markets BBB-	3.33%
2	3	Emerging Markets BBB	3.23%
3	4	Emerging Markets BBB+ and higher	2.99%
4	5	Private Corporates BBB- and higher	2.94%
6	6	Public Corporates BBB+ and BBB-	2.72%
8	7	Taxable Municipals BBB+	2.72%
5	8	Taxable Municipals A-	2.69%
9	9	Agency CMO	2.69%
10	10	Taxable Municpals AAA to A	2.62%
7	11	Public Corporates A- and Higher	2.61%

Historically, most life insurance companies have allocated less than 5% of their portfolio to real estate equity.[8] We believe this has primarily been due to the previous RBC requirements. We expect that many insurers will increase their allocations to real estate equity in the future due to the adjusted RBC requirements.

Investment Vehicles

The decision on whether to invest in core real estate through a fund or direct ownership rests on a number of different considerations. Unlike fund investments, direct ownership offers insurers the ability to craft portfolio strategy, maintain operational control of assets, direct additional capital investment, and make acquisition and disposition decisions. The size of individual core real estate assets can, however, make it difficult to construct a diversified portfolio within the direct ownership without a significant allocation.

By contrast, investments in comingled funds cede the decision-making authority in these areas to fund managers. In return, funds offer a host of potential benefits. Fund structures often provide insurers with access to a greater diversification of assets, strategies, and markets at smaller investment sizes.

The largest set of private core real estate funds are benchmarked through the NCREIF Open End Diversified Core Equity ("ODCE") fund index. As of the second quarter of 2021, the index was comprised of $280 billion in assets, with an average asset market value of $89 million.[9] While many core assets can be acquired for lower amounts, this figure illustrates the limits to which even relatively large allocations can be used to construct diversified portfolios.

In addition to diversifying across property types and markets, funds often enjoy a greater flexibility in the use of leverage and modest exposure to non-core investments.

> As of the second quarter of 2021, the index was comprised of $280 billion in assets, with an average asset market value of $89 million.

Required Expertise

Core real estate equity offers insurers numerous benefits, but that does not mean that they are easy to access. Real estate assets are management intensive, requiring specialized investment, operational, and legal expertise spread across multiple teams. Despite significant advances in information transparency the sector also remains heavily relationship oriented, and we feel experienced players will enjoy advantages over new entrants in access to market information and deal pipelines. While the analysis of global, national, and regional trends remains crucial to developing portfolio level strategies, we believe superior asset selection can often only be achieved with extensive local knowledge. We feel that this places investors with a local presence and years of market experience at a significant advantage to those who lack it.

While these challenges can be overcome with a significant investment of time, capital, and human resources, we believe that new investors would be best served by selecting an advisor. We believe that advisors with experienced teams, research-driven strategies, and extensive regional networks are best positioned to successfully invest in the sector.

Conclusion

Core real estate equity offers insurers a multitude of potential benefits. Through economic cycles, the sector has historically produced attractive absolute and risk-adjusted returns while acting as a strong diversifier in multi-asset class portfolios. Commercial real estate has also demonstrated an ability to withstand short-term economic shocks and recover long-term value. Lastly, we believe that insurers' historically low allocations to the sector could modestly increase as a result of lower Risk Based Capital charges.

However, real estate remains a relationship driven asset class where local knowledge can be as essential as analysis of macro trends. We believe that all of these challenges can be met in strategic partnership with an experienced advisor attuned to the goals and needs specific to insurance companies. We believe that those insurers that choose to make an allocation to the sector may soon recognize its potential benefits and join the many other insurers that have long been counted among commercial real estate's largest and most important investors.

Endnotes

[1] National Council of Real Estate Investment Fiduciaries. The figure shown represents unlevered returns for operating assets in the NFI-ODCE Index from 1Q2000 – 4Q2020.

[2] The indices used for each asset class are: Commercial Mortgages, Giliberto-Levy Commercial Mortgage Performance Index; Government Bonds, Barclays U.S. Treasury Index; Corporate Bonds, Barclays U.S. Investment Grade Corporate Credit Index; Core Equity Real Estate, NCREIF Property Index (NPI); Stocks, S&P 500 Total Return Index; Commercial Mortgage-Backed Securities, Barclays Capital U.S. Investment-Grade CMBS Index, Private Equity, Cambridge Associates LLC U.S. Private Equity Index; Hedge Funds, HFRI Hedge Fund Index; International Stocks, MSCI EAFE Index. Data is from 2000Q1-2021Q1.

[3] Ibid

[4] Modeled returns also include a small fixed adjustment (10bps) that accounts for modest asset deterioration with age. Data is based on NCREIF Total Rate of Return and capitalization rate data, as well as Moody's CPI-U. This model is hypothetical and does not reflect actual investment results. Actual results might differ from modeled results. Hypothetical results are calculated in hindsight, invariably show positive performance, and are subject to various modeling assumptions, statistical variances and interpretational differences. No representations are made as to the reasonableness of the assumptions used and any change in these assumptions would have a material impact on the hypothetical performance results portrayed. Hypothetical results have other limitations including: they do not reflect actual trading and therefore reflect the impact that actual market conditions may have had on the investment manager's decision making process; regulatory or tax rules that may have existed during the periods modeled; and it also does not take into account an investor's ability to withstand losses in a down market and assumes the strategy was continuously invested throughout the periods modeled. There is no guarantee that any actual product or strategy that followed any of the hypothetical portfolios modeled herein would have had similar performance. A decision to invest in an investment strategy should not be based off of hypothetical or simulated performance results.

[5] Neither MetLife Investment Management nor any of its employees provide tax or legal advice and all investors should consult with their own tax or legal professionals to evaluate their individual circumstances.

[6] Assumes a year one stabilized cap rate of 4.0%, improvement value equal to 70% of purchase price, a standard corporate tax rate of 21%, no capital expenditures in the first year, and a depreciable life of 27.5 years calculated on a straight-line basis. The corporate tax rate could change as the result of new tax legislation, which could also change the value of the hypothetical depreciation benefits.

[7] Bloomberg Barclays, NAIC, MetLife Investment Management, Real estate equity represents a blend of strategy/structure (core/opportunistic and joint venture/wholly-owned). The RBC adjusted yield for Real Estate Equity assumes a 400% RBC ratio, 10% ROI, 3.37% before tax interest on capital, 21% tax rate, 9% levered real estate yield, and a 13% RBC rate.

[8] Blackrock, JP Morgan, S&P Global

[9] National Council of Real Estate Investment Fiduciaries.

MetLife Investment Management Real Estate Research and Strategy

WILLIAM PATTISON
Head of Real Estate Research & Strategy

William Pattison is the head of the real estate research & strategy team within the risk, research & analytics group of MetLife Investment Management (MIM). He is responsible for research and strategy development in support of MIM's real estate equity and debt platforms. In this role, he works closely with MIM's real estate regional offices and portfolio managers to craft the strategic house view, drive thought leadership initiatives, project capital market trends, and develop investment strategies that seek to maximize returns while minimizing market, rate, and liquidity risks. As a member of the Investment Committee, William is responsible for reviewing and voting on all U.S. real estate acquisitions. Prior to joining MetLife in 2015, he worked for ten years in the real estate group at Aegon Real Assets. William is a graduate of Iowa State University, where he earned his Bachelor of Science degree in economics.

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Associate Director

Reginald Ross is an Associate Director in the Risk, Research, and Analytics Division of MetLife Investment Management (MIM). He is responsible for market forecasts, client engagement, investment committee participation. Reginald has over 16 years of experience in CRE financial and econometric modeling. He joined MetLife in 2019. Prior to joining MetLife, Reginald was a Director at JLL focusing on redevelopment finance and advisory. He began his career in investment banking at Wolfensohn & Co and UBS. Reginald earned a Bachelor's degree in Economics from Morehouse College and an MBA from the Wharton School of Business at the University of Pennsylvania.

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For more information, visit: investments.metlife.com/real-estate

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[2] As of June 30, 2021. At estimated fair value. Represents the value of all commercial mortgage loans and real estate equity managed by MIM, presented on the basis of gross market value (inclusive of encumbering debt). At estimated fair value. Includes MetLife general account and separate account assets and unaffiliated/third party assets.

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