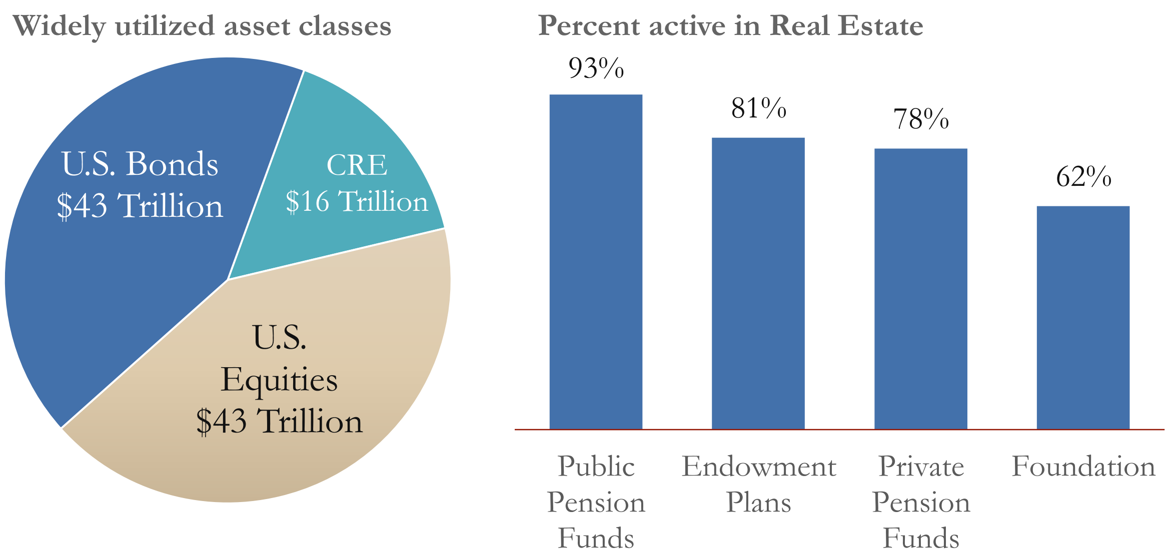
REITS – A FRESH LOOK

Commercial real estate has been broadly embraced by institutional, sovereign global, and individual investors. At the same time, equity REITs have matured and grown well beyond the "small-cap" generalization contained in many academic studies over the last two decades. With the Global Financial Crisis ("GFC") a decade past and negative interest rates prevalent in many global markets, a fresh look at the benefits of an institutional REIT allocation is warranted.

Why now? Commercial real estate is a significant portion of US wealth

- Commercial real estate has made a significant transition from a corporate and developer dominated market to an investable market with broad institutional acceptance (Figure 1).

Figure 1



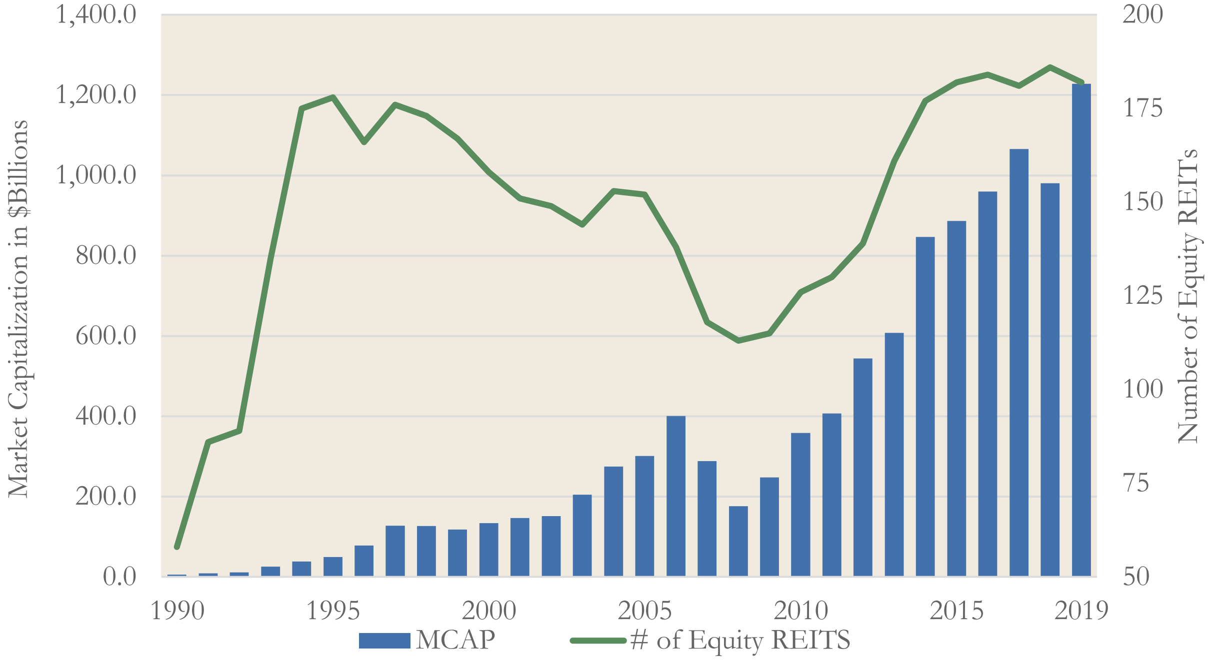
Sources: NAREIT, U.S. Department of Treasury, Federal Reserve System, Federal Agencies, Refinitiv, Bloomberg, SIFMA, and Preqin (February 2019).

Why now? REITs have become a successful vehicle to access commercial real estate

- The REIT market reemerged following the Savings and Loan Crisis, circa 1990, and has grown to be a significant owner of commercial real estate. The US Equity REITs market capitalization has surpassed $1 trillion (Figure 2).
- The REIT industry has two of the largest passive ETFs, (tickers "VNQ" and "IYR") $42.5 billion in AUM. Astonishingly, this represents 30% of the total institutional capital allocated to real estate.

Figure 2

Equity REIT Market Size and Growth 1990 to 2019

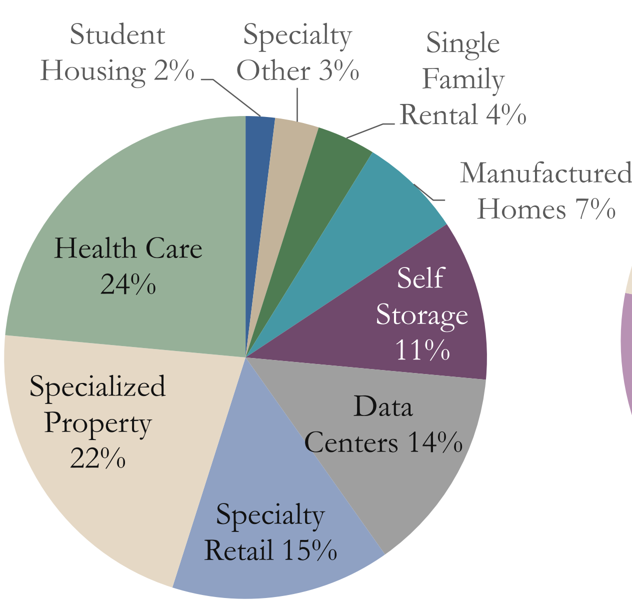


Source: Nareit December 31, 1989 through September 30, 2019.

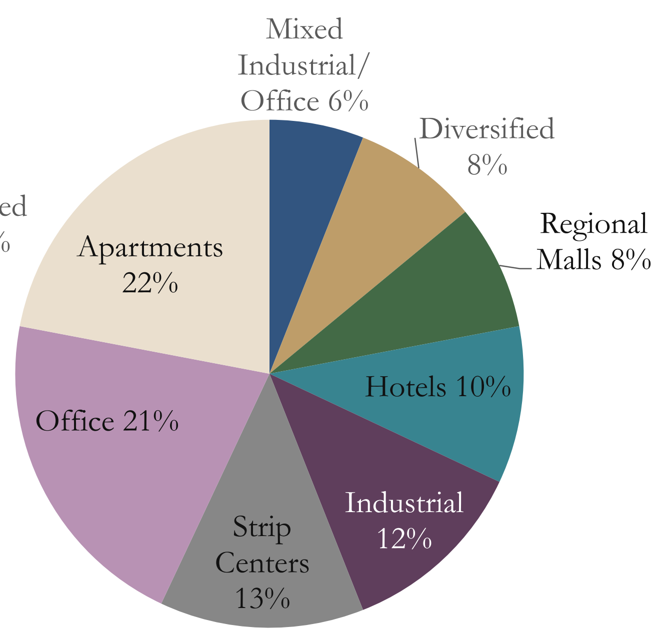
- The modern REIT era began in 1991 (Figure 2) with the IPO of many prominent real estate families and organizations. The industry has matured through consolidation and new property sectors, like data centers and towers, being embraced.
- In 2017, Adelante introduced two new indexes to segment the REIT industry into CORE property sectors (office, industrial, retail, multi-family and lodging) and NEXTGen property sectors (Figure 3).

Figure 3

Adelante NEXTGen Property Securities Index



Adelante CORE Property Securities Index



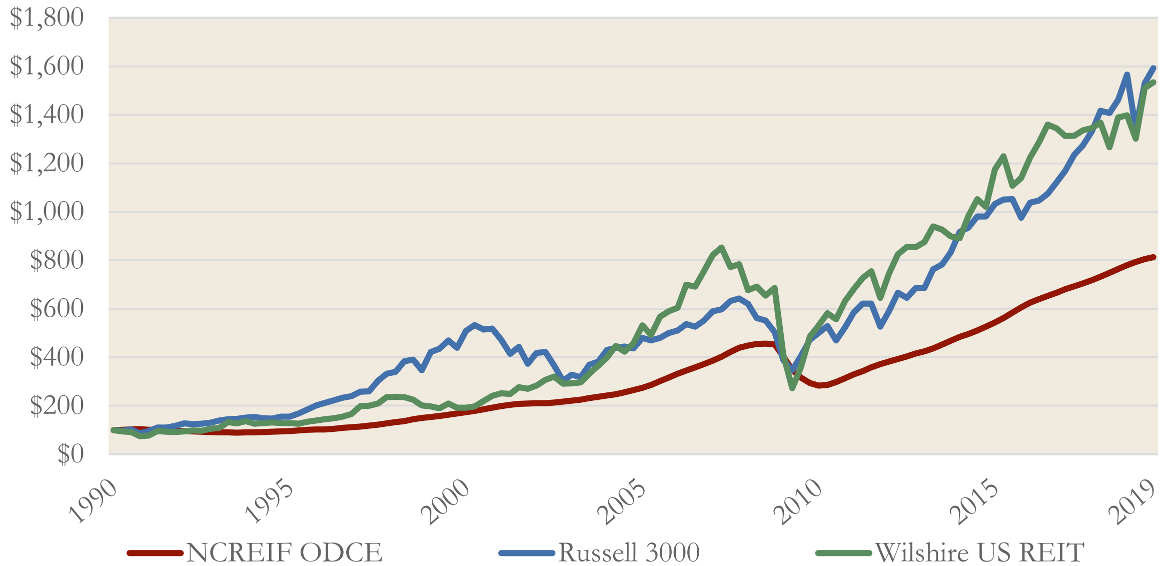
Sources: Adelante Capital Management as of September 30, 2019.

US Equity REITs have delivered

- The US Equity REIT market capitalization is now twice the size of tax-exempt exposure to commercial real estate as measured by NCREIF ODCE.
- REITs own and operate diversified and desirable portfolios of commercial property across the United States and house businesses, people and things.
- Over the past 29 years, REITs have provided competitive returns and significantly outperformed private real estate funds (Figure 4).
- A REIT is a unique ownership vehicle with the requirement to distribute 90% of its taxable income to protect its pass-through tax status, i.e. no corporate taxes. As a result, REITs provide a cash dividend premium over the equity market (Figure 5).

Figure 4

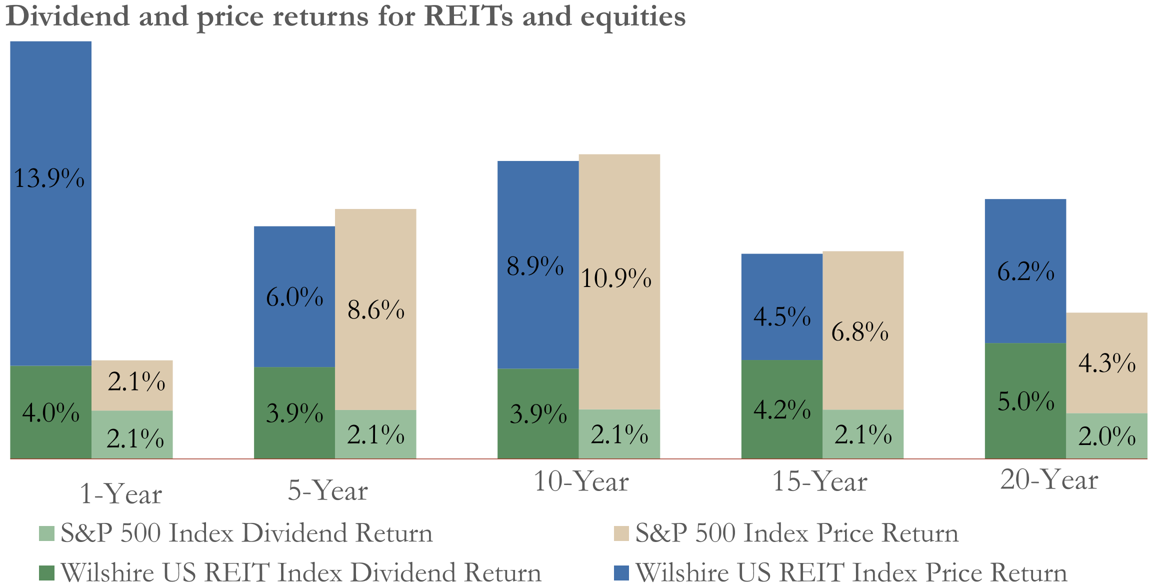
Growth of $100
29.75 years



Sources: eVestment December 31, 1989 through June 30, 2019.

Figure 5

Dividend and price returns for REITs and equities

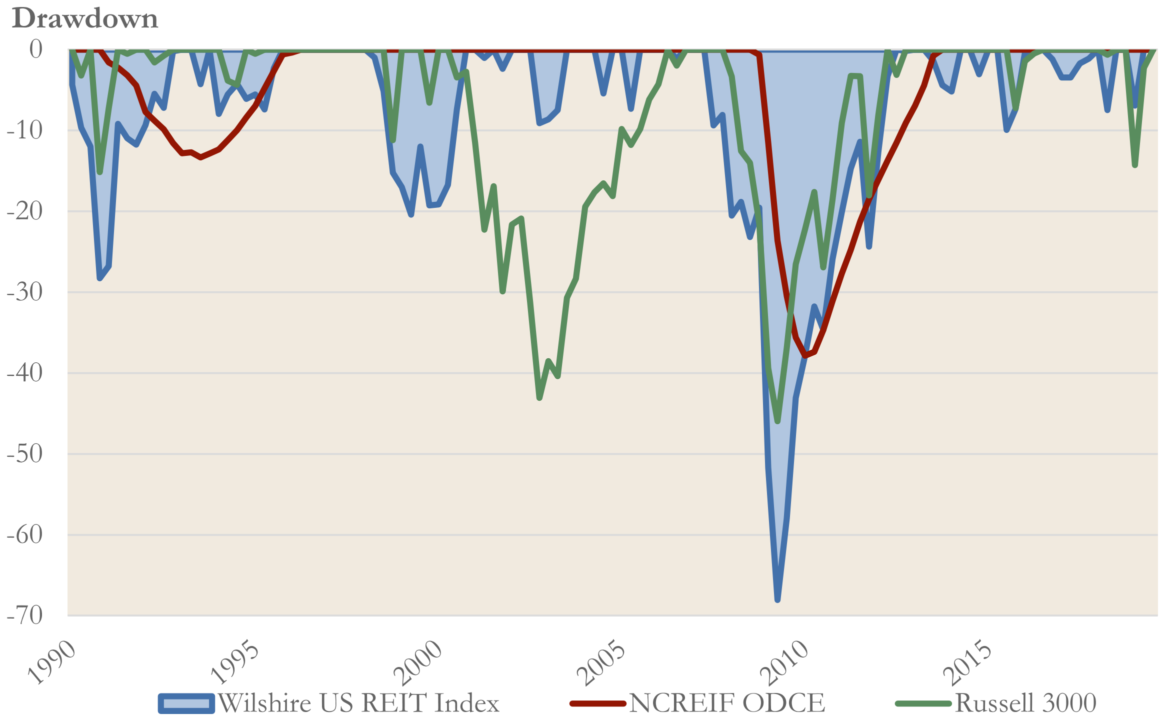


Sources: FactSet and Wilshire US REIT Index as of September 30, 2019.

Institutional Investor Experience

- Institutional investors have experienced two pronounced drawdowns in private real estate (Figure 6 – red line), yet the sharp drawdowns in REITs have been short-lived comparatively.
- For the 10-year period ending June 30, 2019, REITs have outperformed the NCREIF ODCE Index by more than 200 bps. Institutional investors that maintained their REIT allocations since the GFC have outperformed their peers' respective real estate allocation.
- REITs have rewarded investors with excess return over the NCREIF ODCE Index, despite observed share price volatility, when analyzed on rolling 1, 3, and 5-year periods (Figure 7).

Figure 6



Source: eVestment December 31, 1989 through June 30, 2019.

Figure 7

Excess Return	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year
Long Run	3.0%	1.6%	1.6%
# periods	97	88	80
Post GFC	6.5%	2.4%	1.7%
# periods	40	40	40

Source: eVestment as of September 30, 2019.

Asset Allocation Considerations

Volatility is the most common objection to a REIT allocation. The pronounced spike of US REIT standard deviation during GFC has discouraged or eliminated REITs from some investor portfolios.

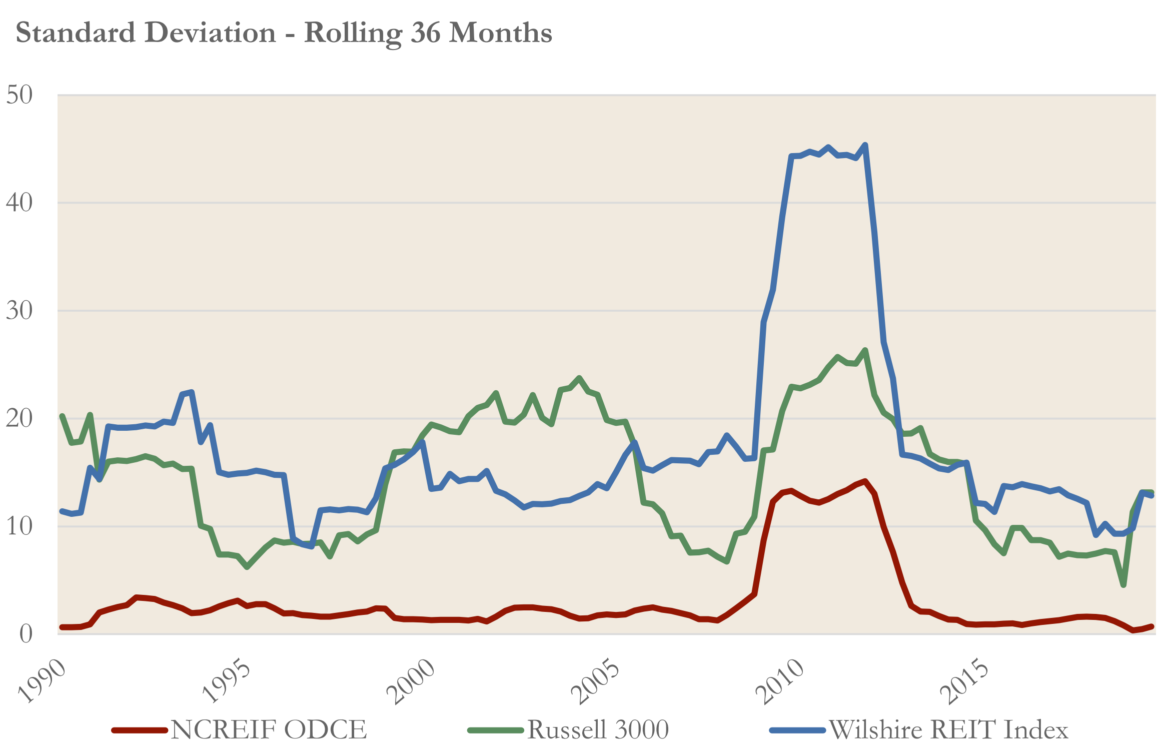
- The REIT industry has been steadily reducing leverage since the GFC; the rolling 36-month standard deviation has declined more than has been observed or assumed through traditional modeling assumptions (Figure 8).
- Similarly, private real estate market volatility rose during the GFC and is correlated to the REIT market (Figure 9) as presented on a rolling 36 month basis.

Figure 8

Time Period	5 yr		10 yr		20 yr		25 yr	
Asset Class	Return	Risk	Return	Risk	Return	Risk	Return	Risk
Wilshire REIT	**10.2%**	**14.5%**	**13.1%**	**15.6%**	**11.4%**	**21.1%**	**10.8%**	**19.8%**
Russell 1000	10.6%	13.3%	13.2%	12.7%	6.6%	14.8%	9.9%	14.7%
Russell 2000	8.2%	16.8%	11.2%	17.3%	8.0%	19.5%	8.8%	18.9%
MSCI AWI	3.5%	13.0%	5.0%	14.5%	4.8%	16.9%	5.4%	16.3%
Bonds-Aggregate	3.4%	3.2%	3.7%	2.9%	5.0%	3.4%	5.6%	3.5%
Global Bonds Ex US	0.9%	7.3%	1.3%	7.1%	3.8%	8.0%	4.4%	7.9%

Source: eVestment December 31, 1989 through June 30, 2019.

Figure 9



Source: Bloomberg as of September 30, 2019.

Asset Allocation Considerations (continued)

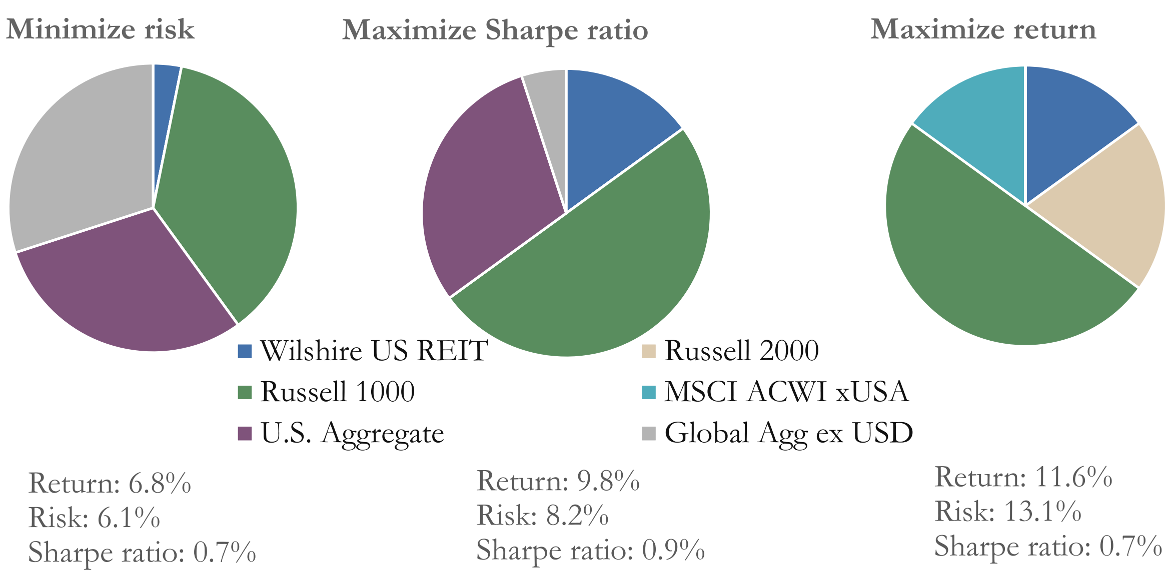
- The correlation of REITs to equities has declined over the past 10 years as the REIT industry has diversified and grown (Figure 10).
- REITs deserve an allocation in a diversified portfolio, ranging from 3% to 15% (Figure 11), whether the investor is striving to minimize risk, maximize return or maximize Sharpe Ratio.

Figure 10

	Wilshire US REIT TR	RUSSELL 2000 INDEX	RUSSELL 1000 INDEX	MSCI ACWI xUSA	US Aggregate	Global Agg ex USD
Wilshire US REIT TR	1.00					
RUSSELL 2000 INDEX	0.62	1.00				
RUSSELL 1000 INDEX	0.64	0.90	1.00			
MSCI ACWI xUSA	0.57	0.73	0.86	1.00		
US Aggregate	0.25	-0.29	-0.20	-0.08	1.00	
Global Agg ex USD	0.32	0.12	0.28	0.50	0.47	1.00

Source: Bloomberg for the 10 year period ending September 30, 2019.

Figure 11



Portfolio Weights	Wilshire US REIT	RUSSELL 2000	RUSSELL 1000	MSCI ACWI	US Aggregate	Global Aggregate
Min. Weight	0%	0%	0%	0%	0%	0%
Max. Weight	15%	20%	50%	25%	30%	30%
Min. Risk	3%	0%	37%	0%	30%	30%
Max. Sharpe	15%	0%	50%	0%	30%	5%
Max. Return	15%	20%	50%	15%	0%	0%

Source: Bloomberg for the 10 year period ending September 30, 2019.

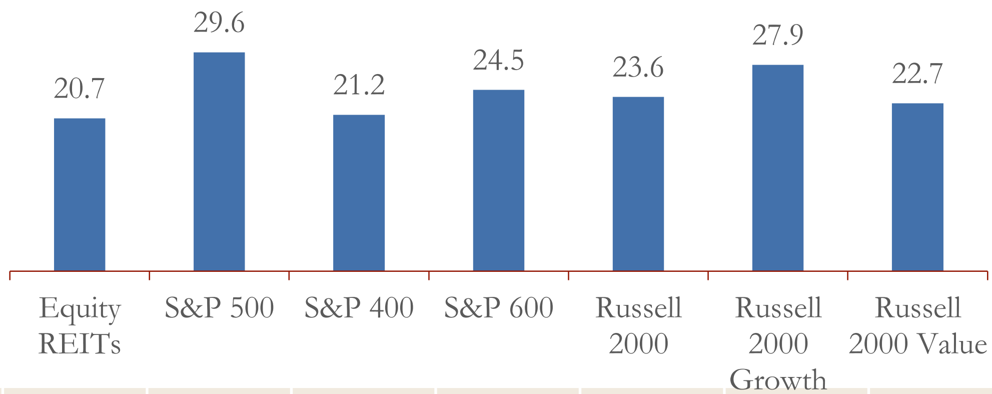
Real Estate – Industry Sector vs Allocation

In August 2016, Real Estate became the 11th sector under the Global Industry Classification Standards (GICS), the first new headline sector since GICS was created in 1999. Since then, real estate has been labeled 'defensive' and a 'bond-proxy' with the financial media. Yet, institutional investors have held true with their real estate allocations, when it is increasingly clear that the REIT industry complements a private allocation because of the new property types accessible in the public markets.

- REITs are constituents of Growth and Value styles, including Large and Small cap Indexes (Figure 12) – returns from the "real estate" sector differ because of the property types within the underlying index constituents. Additionally, approximately 33% of the REIT universe capitalization is NOT represented in certain equity indexes.
- Within the public real estate market, investors recognize the differing attributes of lease duration, net operating income growth, and cap-ex requirements, which creates significant dispersion of returns among the 13 property segments within the REIT market (Figure 13).

Figure 12

YTD REIT total return within various market indices (%)

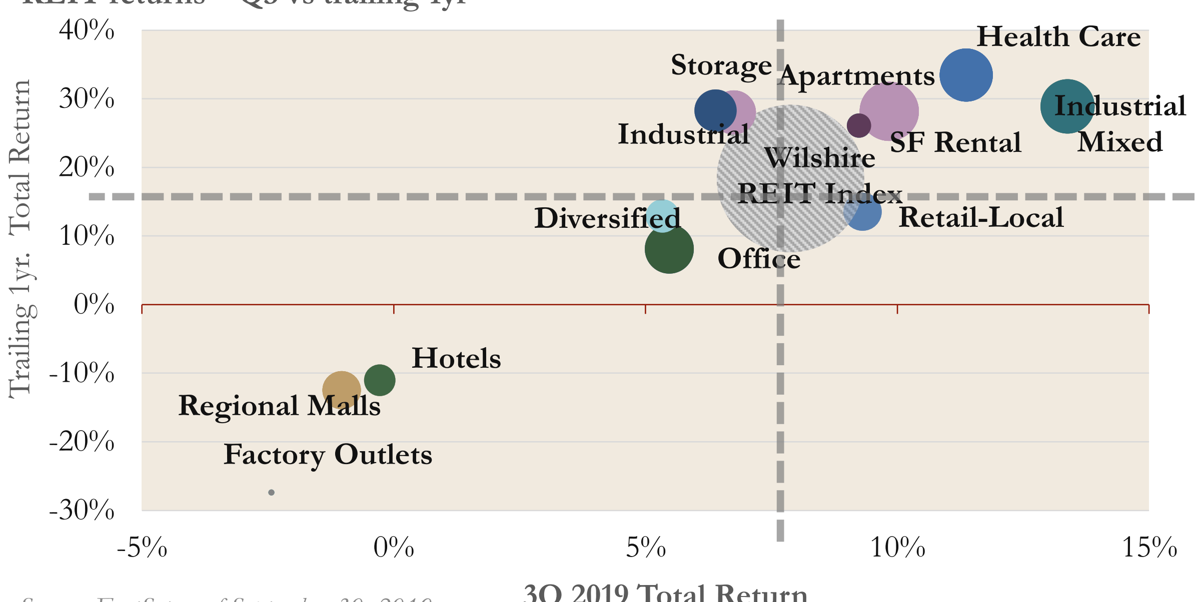


Real Estate Sector Weight	100%	3.15%	11.01%	8.33%	8.53%	4.10%	13.13%

Source: FactSet December 31, 2018 through September 30, 2019. Weights and performance are estimated values using quarterly weights of the associated ETF portfolios.

Figure 13

REIT returns – Q3 vs trailing 1yr

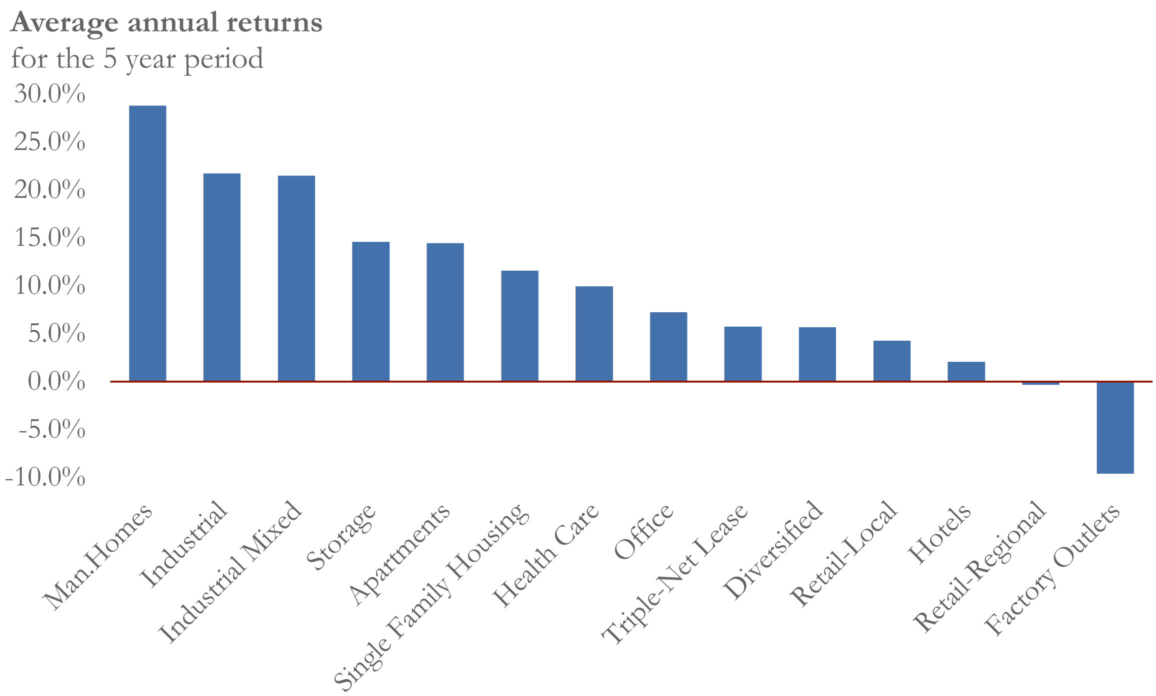


Source: FactSet as of September 30, 2019.

Alpha Potential Remains – The Case for Active Management

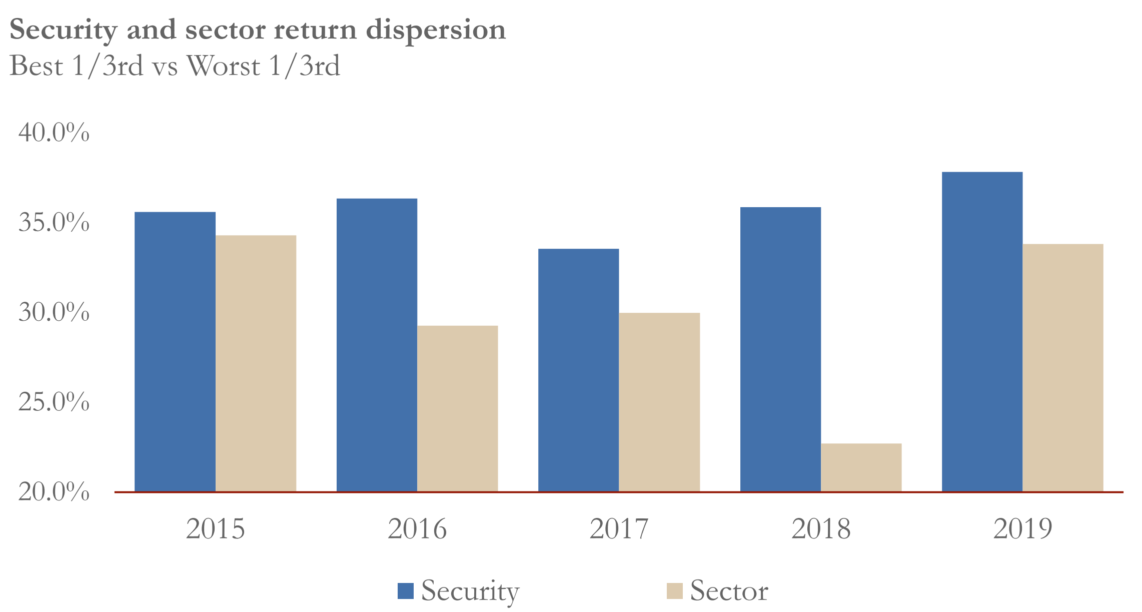
- REITs remain one of the most misunderstood and underappreciated asset classes available to institutional and individual investors as evidenced by real estate being the largest passively owned industry sector, despite delivering strong absolute returns (Figure 14).
- Price discovery, quarterly reporting, transparency, and governance are REIT attributes that are systematically undervalued.
- Over the last 5 years, there has been potential alpha from security and sector selection (Figure 15), despite the consensus "bond-proxy" generalization.

Figure 14



Source: FactSet for the 5 year period ending September 30, 2019.

Figure 15



Source: FactSet from December 31, 2014 through September 30, 2019.

Disclosure

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