



Independent Journal Publishes Study of REIT Out-Performance Versus Private Real Estate Funds

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Introduction

A recent article in the Journal of Portfolio Management delivered important findings for investors who maintain an allocation to real assets. Researchers Thomas R. Arnold, David C. Ling, and Andy Naranjo found that closed-end private equity real estate (PERE) funds underperformed listed real estate investment trusts (REITs).¹ Given the liquidity premium and other factors, many allocators have assumed the opposite is true. The researchers used a "horse race" methodology to analyze returns of PERE funds versus REITs. Rather than simply comparing index returns, this methodology uses fund-level data to account for variables including inception dates and investment horizons of individual PERE funds. The study's sample of 375 U.S. focused PERE funds underperformed listed real estate, as measured by the FTSE EPRA/NAREIT U.S. Net Total Return Index, by an average of 165 basis points annually when analyzed over the last 20 years.

In order to provide a sound comparison, the researchers also examined returns after adjusting for the different risk profiles of REITs versus PERE funds. During the study's sample period, researchers noted "...REITs generally engaged in low-risk core real estate investment strategies focused on high-

1 Arnold, T., Ling, D., and Naranjo, A. (2021). Private Equity Real Estate Fund Performance: A Comparison to REITs and Open-End Core Funds. The Journal of Portfolio Management Special Real Estate Issue 2021, 47 (10), 107-126. DOI: https://doi.org/10.3905/jpm.2021.1.276. Given the differences in performance reporting as well as performance calculation methodologies in use for PEREs versus REITs, detailed information on the methodologies used and assumptions made by the researchers to derive the comparison are contained in the article. In addition to this information, note that PERE results are net of management fees while index returns used to represent REIT returns are gross of investment management fees. Actual returns will be reduced by investment advisory fees and other expenses that may be incurred in connection with an account.



quality stabilized properties." Further, they noted how REITs "...typically take on less development and operational risk and deliver a significant portion of investors' total returns through quarterly dividend distributions." In contrasts, many PERE funds sought "...moderate-to-high risk/return opportunities with short-to medium-term horizons" with more leverage typically employed. In some cases, PERE funds pursued riskier development or conversion projects, with the aim of delivering an even higher percentage of total return from value appreciation. As a result, Arnold et al. developed a series of adjustments to compare returns on a risk-adjusted basis. In this analysis, PERE funds' underperformance increased with each assumed risk adjustment. The researchers also found that macroeconomic factors contributed to the performance difference between PERE funds and REITs, as the difference increased with interest rate variables and decreased with rising GDP growth.

The performance advantage held by listed real estate and documented by Arnold et al. is not altogether surprising, given the maturation of the public REIT market over the past 30 years. And it is one more reason institutional investors are increasing their allocations to listed real estate, which we explore further in this piece.

Liquidity

Listed real estate generally offers a high level of liquidity and the ability to deploy or raise capital when the investor chooses. For investors who must pay particular attention to short-term drawdown risk—such as retirement funds with on-going cash needs—liquidity is essential. REITs may be a great choice for investors who need access to income-producing real estate sectors such as apartments, self-storage and industrial buildings, but do not want to sacrifice liquidity. Conversely, a typical closed-end PERE fund is less liquid and may require investors to supply "dry powder" whenever the fund chooses to call for it.

Moreover, the REIT structure has offered reasonable transaction costs and facilitated asset allocations of virtually most any size. These features contribute to the bridge REITs can build between the liquidity of capital markets and the breadth and depth of commercial real estate.

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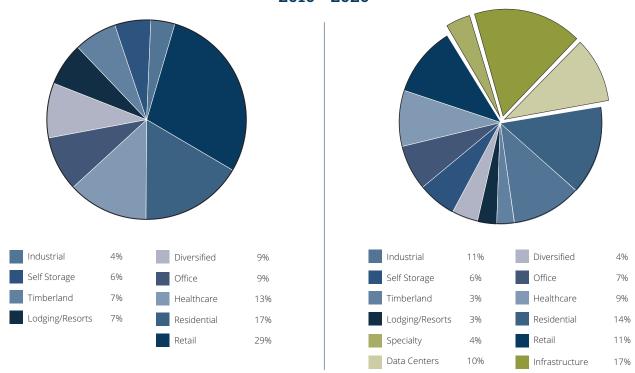


Diversification

Listed real estate provides investors access to a diverse set of sectors, property types and geographies. In fact, REIT sectors have changed significantly over the last decade. In 2010, the largest sectors were traditional property types, including retail centers, residential, health care and office. Since then, the number of U.S. REIT sectors has grown from nine to twelve and may be considered as high as seventeen if retail and residential

subsectors are included. Some of the new or expanded sectors such as data centers, infrastructure (which includes wireless towers), industrial (which includes logistics), and single-family home rentals benefit from secular growth and represent increased investment opportunity. REITs offer institutional investors easy access to many of these specialty asset types and niche sub-markets.

Comparison of Sector Market Capitalization Shares



Source: FTSE Russell, Nareit. Data as of December 31, 2010 and December 31, 2020.

Listed real estate thus combines a broad opportunity set with strong diversification capabilities. For example, a listed real estate portfolio may encompass 30-40 REITs with 50-100+ properties in each company. That is just in the United States. In contrast, private real estate investing (either via direct property ownership

or via a private fund with pooled ownership of multiple properties) typically includes a significantly smaller collection of properties. Consequently, when investing in private real estate, it can be easier to inadvertently increase idiosyncratic risk in exposures and the levels of expected cash flows.

Additions since 2010



Correlation

Since the beginning of the modern REIT era in the 1990s, REITs have continued over the long-term to provide an effective diversifier to traditional stock and bond portfolios. REIT/equity correlations have run about 0.5-0.6, depending on which benchmark is being referenced, and bond correlation has essentially been zero.

Furthermore, the correlation between REITs and the broad stock market has decreased with a longer view, as the brick-and-mortar value of the assets, backed by contractual, lease-based cash flows, shines through.

While private real estate has demonstrated similar characteristics, it has delivered no better correlation benefit in exchange for less liquidity, greater risk, and higher fees. For example, a 2017 MSCI study between European REITs and private real estate indexes demonstrated that listed/unlisted correlation converges over time as short-term market volatility fades from the comparison.

Key Correlations

1998 - 2019

	REITs	Private Real Estate	US Long Bonds	US Large Cap	US Small Cap	Non-US Equities	Private Equity	Hedge Funds
REITs	1.00	0.84	0.08	0.55	0.64	0.58	0.52	0.52
Private Real Estate		1.00	0.08	0.48	0.56	0.51	0.54	0.40
US Long Bonds			1.00	-0.21	-0.29	-0.31	-0.31	-0.19
US Large Cap				1.00	0.92	0.89	0.86	0.89
US Small Cap					1.00	0.88	0.89	0.78
Non-US Equities						1.00	0.89	0.85
Private Equity							1.00	0.77
Hedge Funds								1.00

Source: CEM Benchmarking, 2021. Data and charts sourced from Nareit. Please see Nariet.org

Asset quality

The listed REIT market has significantly matured over the last three decades. Many REITs have restructured their portfolios and redeployed capital into newer, higher-quality assets and stronger markets. Overall, this has led to listed real estate offering higher underlying quality assets versus private real estate investments.

The ongoing influence of the capital markets has driven the improvement of REITs across multiple fronts

including capital allocation plans and leverage levels. While the financial crisis of 2008 cast a shadow on commercial real estate and the way in which mortgages on some of it were securitized, this period ultimately brought about positive developments for listed real estate. First, low-quality management teams, balance sheets, and property portfolios largely disappeared while investors rediscovered the importance of distinguishing between good and bad owners and



operators in the real estate space. Second, new bank regulations tilted the playing field in favor of listed REITs, which were better able to take advantage of development opportunities. Since REITs do not have to borrow from banks, which became subject to higher capital requirements on construction loans following Basel III post the financial crisis, they developed properties on their own balance sheets with broader and less-leveraged capital stacks.

Management Quality

Real estate investing is a capital-intensive, asset-heavy activity. We firmly believe that reliable management teams add value beyond the current property portfolio. With REITs having an undefined lifespan (unlike some private vehicles), capital allocation and balance sheet management are essential to this process. In addition to the improvement in quality of underlying assets mentioned above, the maturation of the market has also influenced the quality of public real estate management teams. Whether REITs are seeking to develop pricing algorithms, bid efficiently on search terms, or acquire more insights from tenants, REITs have steadily expanded their talent base as necessary to achieve these goals.

On a related note, it is important to recognize the difference in compensation structures between public and private REIT management teams. Public REITs are typically self-advised and self-managed, and compensation usually hinges on performance. On the other hand, private funds usually have external managers and advisers, which can lead to conflicts of interest and misaligned priorities. For example, when an external entity manages multiple competing properties, an inherent conflict of interest exists when making decisions about where new tenants lease. For example, if an external manager is on the cusp of earning a promote fee for one property it manages, will it put others it manages at a disadvantage to do so? Intrinsically, we believe listed properties may fare

better in the long run due to more aligned management teams.

Transparency

The transparency and discipline inherent in the public REIT market are also advantages for investors seeking to meet environmental, social, and governance (ESG) criteria. In the last five years, the research teams at individual firms and third parties, such as Sustainalytics, have deepened their ESG analysis of listed firms, many of which have been leading significant strides on ESG over the past decade. In addition to third party vendors expanding their ESG research, listed investors in real estate such as Duff & Phelps integrate ESG analysis into their fundamental processes. These collective efforts allow investors of listed real estate to better understand how ESG factors may impact economic value within their portfolios. Importantly, listed real estate investors regularly engage with companies to encourage improvement in ESG practices and disclosures, a practice more limited in the private space. As a result, we believe listed real estate owners are better positioned to meet the future ESG requirements of tenants, employees, stakeholders, and shareholders as ESG practices and opportunities continue to grow in importance.

Cost

Due to their management structure, private real estate investments generally require investors to bear more direct costs. These costs can include profit splits, property acquisition and disposition fees, and placement fees. Listed REITs have a defined and transparent fee structure that is generally lower than the fees levied in the private space. This fee differential also contributes to the higher net returns delivered by listed REITs over the long run, even after deducting investment management fees for listed REITs, as applicable.



Conclusion

Even for investors who have significant resources and a higher tolerance for illiquidity, the findings of Arnold, Ling, and Naranjo make a compelling addition to the argument for listed real estate. For more than three decades, REITs have provided an attractive intersection of benefits to those seeking commercial real estate investments. A performance advantage versus PERE funds, now documented by rigorous academic research, simply underscores the opportunity for all investors.

About Duff & Phelps

Duff & Phelps has invested in listed REITs for more than 20 years using a consistent philosophy and process. Our team seeks to add value through rigorous fundamental research, a focus on high-quality owner/operators, and comprehensive ESG analysis. Our strategies offer exposure to a range of real estate markets around the globe.

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