

The Benefits of Global Property as a Portfolio Diversifier

Introduction

Listed property investments have generally been one of the more neglected sectors of the investment universe. This is despite global listed property being one of the best performing assets classes over the last fifteen years from both a total return and inflation-hedging perspective. Listed real estate has steadily been improving its accessibility as an asset class, primarily through the proliferation and success of listed property investment vehicles, such as Real Estate Investment Trusts (REITs).

Unfortunately, notwithstanding the consistently strong performance of REITs over long periods, global REIT stocks are generally underused in global, and particularly South African investors' portfolios as a return enhancing portfolio diversifier. To investigate this underutilisation and the benefits of listed real estate, there has been a growing number of robust research studies undertaken in the sector. Research has been driven by academic interest, as well as investment industry studies in order to market listed property as an investment class by better understanding its value as an investment.

Globally the REIT structure, and similar investment products, have offered a broad range of investors access to the same cash flow characteristics that previously were available only to direct commercial real estate investors. The introduction and growth of REITs and listed real estate securities has also created new investment opportunities for strategic asset allocation decision makers.



The United States has provided the majority of investment opportunities for REITs and listed real estate companies, but presently over thirty-nine countries have REIT-type structures and listed real estate companies operate in almost every global market. The latest market to adopt a REIT structure was Portugal in February 2019 with its *Sociedades de Investimento e Gestão Imobiliária* (SIGIs). South Africa adopted its REIT structure in 2013.¹

Global REIT markets have continued to expand and now constitute a total market capitalization of almost US\$2 trillion.

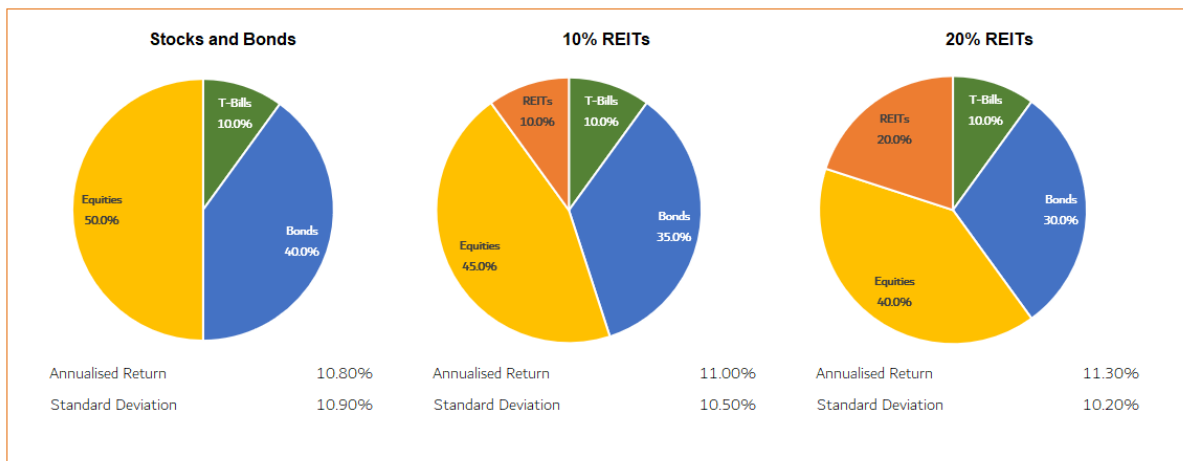
¹ In the USA to qualify as a REIT, the company must operate in the real estate business. It must invest at least 75% of its total assets in qualifying real estate assets and derive at least 75% of its gross income from rentals from physical property or interest on mortgages on physical property. In addition, a REIT must distribute annually to its shareholders at least 90% of its taxable income in the form of distributions/dividends. South African REITs are required to own at least R300 million of property; earn 75% of their income from rental or from property owned or investment income from indirect property ownership; and pay out at least 75% of its taxable earnings available for distribution to its investors each year.

This article aims to provide the reader with greater insights into the REIT asset class, as well as provide an overview of the most pertinent research studies of global REITs as a return enhancer and risk reducer. It then applies the international research to South African data to demonstrate the positive results of adding global REITs as a portfolio component for South African investors.

Research into the Portfolio Benefits of Global Commercial Real Estate

While there have been several studies into REIT performance conducted since the introduction of REIT legislation in 1960, arguably the most important was that of Roger Ibbotson and Laurence Siegel's 1984 paper: "Real Estate Returns: A Comparison with Other Investments." The study looked at the diversification benefits of Real Estate for US investors. Ibbotson and Francis built on the 1984 study, and in 2001 published an article that reviewed the risk and return statistics from physical property as well as REITs in the USA, compared to returns from bonds, gold, silver, common stocks, and commodities. For the time period of 1972-2002, adding REITs into the investment portfolio increased annualised returns by up to 0.5% while also reducing portfolio volatility.²

Portfolio Performance Improvement with REITs 1972 – 2002



Source: Ibbotson Associates. "New Analysis Validates Benefits of Including Real Estate as Core Portfolio Holding." Nareit, 2003.

It is therefore unsurprising that the first major study into the impact of global REITs on diversified portfolio performance was commissioned from Ibbotson's company, Ibbotson Associates, during 2006 by the National Association of Real Estate Investment Trusts (Nareit), Nareit is the primary representative body for US REITs and some global publicly traded real estate companies. They commissioned an analysis of global commercial real estate from an investment perspective, and the study was conducted to focus on combining modern financial theory and real-world investment practice.

² Ibbotson Associates. "New Analysis Validates Benefits of Including Real Estate as Core Portfolio Holding." Nareit, 2003.

The study was led by Tom Idzorek, Michael Barad and Steve Meier, and is now generally referred to as the Ibbotson Analysis. The study used the widely recognised mean-variance asset allocation process to demonstrate that incorporating US and International REITs could raise the return and lower the risk of a wide range of multi-asset portfolios. For example, REITs can add significant diversification benefits to pension plans, which often include no real estate investment choices.

The Ibbotson research focused on the equity commercial real estate asset class and its two sub-classes, private (direct) commercial real estate equity, and public commercial real estate equity. It used global REIT and listed real estate indices to proxy the international commercial real estate asset class.

The advantages of REITs and listed real estate stocks over direct physical property investments include liquidity, corporate transparency and governance, real-time pricing and lower transaction costs. Research has increasingly shown that returns from REITs are a very close proxy for direct property investment.³

During the study, Ibbotson constructed various portfolios with and without REIT allocations. Whenever allocations to REITs were available, the asset allocation model chose the maximum allowable allocation to REIT stocks to build the most efficient portfolios, which provide the highest possible rates of return at any given level of risk.

In order to test the hypothesis that small and mid-capitalisation stocks generally offer adequate diversification levels, Ibbotson expanded its analysis to include additional asset classes not previously considered. These were small and mid-market capitalisation stocks, emerging market stocks, high-yield bonds and investment-grade corporate bonds.

The results showed that in all cases, listed property was included in the most efficient portfolios of highest returns and lowest risk, suggesting that the small and mid-cap asset classes are not effective substitutes for the diversification power that listed property can provide.

The optimised portfolios created by Ibbotson were also based on two methodologies:

- Historical portfolio performance using actual investment returns
- Future portfolio performance using forward-looking, expected investment returns

Ibbotson's historical analysis of data clearly demonstrated that for the period 1990-2005, global real estate allocations improved the returns of a global portfolio, with nearly all that increase coming from North American real estate investment. The results of the model demonstrated that investing ten or twenty percent in listed property both increased the portfolio's total return and lowered the portfolio's overall risk.

The analysis further highlighted two fundamental aspects of listed property returns:

³ Kirby, M. and Rothmund, P. "Heard on the Beach - Alternative Facts." Green Street Advisors. February, 2017.

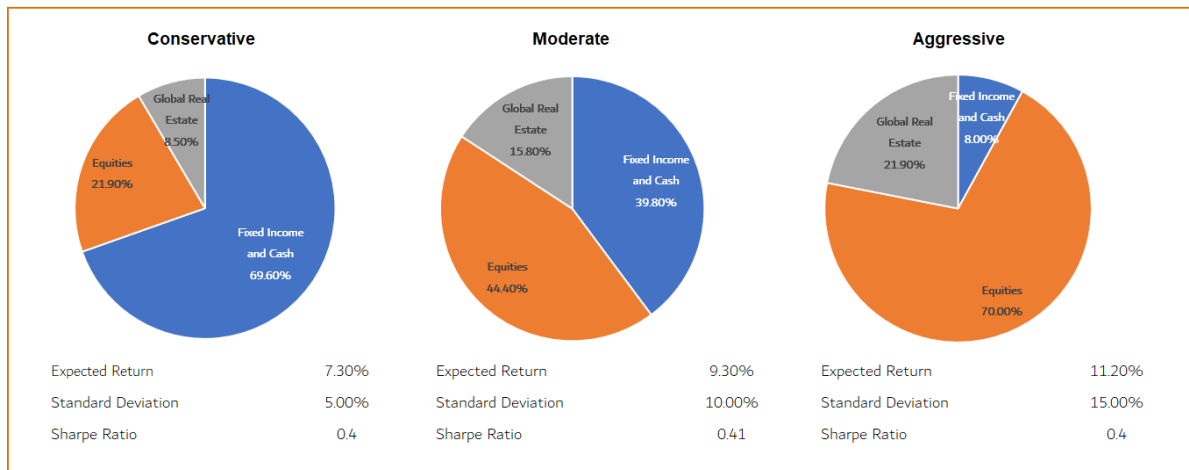
- Substantial current income, and
- Moderate, long-term price appreciation that protects investors against inflation over long investment horizons.

Besides income, the balance of REIT total returns comes from long-term price appreciation of the REIT shares that an investor owns. Over the past 20 years, REIT share prices have more than kept pace with the US Consumer Price Index.

Not content with having looked at historical data, the Ibbotson team then turned their attention to modeling the future. Ibbotson constructed estimates of future investment returns, including expected returns from global real estate investments, by blending historical returns with expected future returns based on levels of risk. This was done (utilising standard deviation measures) for each of the various asset classes in the various portfolios. The assumption behind the blended expected returns was that, over time, higher levels of risk are commensurate with higher returns. Ibbotson's optimised forward-looking portfolio, including global real estate, produced a 9.6% average annual return compared with the 10.98% return for the portfolio based only on historical data.

The forward-looking analysis indicated that, while North American real estate should continue to be more than half of the total real estate allocation in an optimized global portfolio, future allocations to European and Asian real estate should increase.

Forward Looking Model Portfolios Indicate Good Potential to Reduce Risk and Increase Return.



Source: Idzorek, T., Barad, M., and Meier, S. "Commercial Real Estate: The Role of Global Listed Real Estate Equities in a Strategic Asset Allocation." White Paper for the National Association of Real Estate Investment Trusts. November 2, 2006.

Additionally, the real estate allocation of the optimised forward-looking portfolio contained more balanced allocations to the real estate markets around the world. More than half of the total 23.3% real estate allocation was still invested in North America. One-third of the forward-looking real estate allocation went to Europe and the remainder to Asia (North America = 12.1%, Europe = 7.8%, Asia: 3.4%). The study therefore concluded, that not only should portfolios include local US listed property but should also be

diversified internationally with the relative weightings mirroring market capitalisation-based weights.

Idzorek, Barad and Meier found that real estate was an effective portfolio diversifier, and even more so when both domestic and international real estate assets are considered. The study stated that the optimal allocation to real estate is 15% to 25%. Various other studies on optimal allocation levels found that while estimates of optimal allocations to real estate vary strongly, that the median of the proposed allocation in these studies was 15%, with a median range of 6%-21%.

Post the 2006 study, the role of REITs in a mixed asset portfolio has been examined extensively across several countries, including the USA, United Kingdom, Canada, Australia and Malaysia. Several studies have built on Ibbotson's findings and the vast majority have supported the discoveries that the effect of REITs on a portfolio's risk and return profile is either to increase the returns of the portfolio at the same risk level, or reduce the risk, while offering the same return.

In 2016 a study by Buller, Wald, and Rubin, from Fidelity Investments that looked at a 20-year period (December 1995 to December 2015) once again clearly demonstrated that an allocation to REIT stocks would have boosted the risk-adjusted returns of a portfolio including US stocks and investment-grade bonds.

Risk/Return Spectrum of Hypothetical Portfolios with REIT Exposure

Allocation	Avg Annual Return	Sharpe Ratio	Standard Deviation
REITs 33.3% / Equity 33.3% / Bonds 33.3%	8.70%	0.61	10.90%
REITs 20% / Equity 40% / Bonds 40%	8.10%	0.68	9.20%
REITs 10% / Equity 55% / Bonds 35%	7.90%	0.58	9.90%
Equity 80% / Bonds 20%	7.80%	0.48	12.20%
Equity 60% / Bonds 40%	7.30%	0.55	9.20%

Source: Buller, S., Wald, S. and Rubin, A. "REIT Stocks: An Underutilized Portfolio Diversifier." Fidelity Leadership Series. April 2016.

The Benefits to Adding Global Property to South African Portfolios

With several studies consistently demonstrating the value of adding global listed real estate to a portfolio, the author decided to research the benefits of adding global property (represented by the FTSE EPRA Nareit Global Index) to various portfolios consisting of diversified South African equities (the All Share Index - ALSI), bonds (the All Bond Index - ALBI), money market (Short Term Fixed Interest Index - STeFI), and South African listed property (SA Listed Property Index - SAPY). The time period reviewed was a seven-year period from June 2012 to June 2019. The portfolio structuring objective was to maximise risk-adjusted returns, and utilised the standard Sharpe ratio to provide the measurement of risk-adjusted performance.

Risk/Return Spectrum of Hypothetical South African Portfolios with Global REIT Exposure

Allocation	Avg Annual Return	Sharpe Ratio	Standard Deviation
Global Property 30% / Equity 45% / Cash 25%	12.74%	0.87	11.51%
Global Property 25% / Equity 50% / Cash 25%	12.35%	0.84	10.89%
Global Property 15% / SA REITs 10% / Equity 65% / Cash 10%	11.85%	0.62	9.86%
Global Property 33.3% / Equity 33.3% / Cash 33.3%	11.12%	0.85	11.96%
Equity 80% / Cash 20%	10.46%	-0.05	15.28%
Equity 60% / Cash 40%	9.92%	-0.04	14.85%

Source: Datastream, Reitway Global Analysis.

The results clearly demonstrated the positive contribution of global property to portfolios, significantly improving annualised performance and Sharpe ratios, as well as lowering portfolio standard deviations. Mirroring international findings for Global Property allocations of 15% to 25%, the best risk adjusted returns were obtained with an allocation between 15% to 30%.

The drivers of these results are the primary benefits that global listed property offers, namely:

- An asset class that offers low correlations – Compared to South African asset classes, global listed property has demonstrated low correlations, and is negatively correlated with SA fixed income, money market and property. Combining assets that demonstrate low performance correlation can play an important role in reducing portfolio risk, without sacrificing returns, a vital component of optimisation.
- An asset class that offers good inflation protection – Landlords generally link rental escalations to inflation and rent tends to rise during periods of increasing inflation, generally protecting listed property from the detrimental effect of inflation. In deflationary periods, longer dated lease structures in sectors such as triple net lease and healthcare provide deflationary protection.
- An asset class that offers solidly growing distributions – Due to the income distribution requirement, REITs generally have higher dividend yields compared to general equities and bonds. On average global distribution growth has recently averaged 5% per year (in USD terms).

Correlations of Global Property with SA Equities and Bonds

	ALSI	ALBI	STEFI	SAPY	Global Property
ALSI	1	0.16	0.01	0.44	0.09
ALBI	0.16	1	-0.02	0.38	-0.44
STEFI	0.01	-0.02	1	0.01	-0.02
SAPY	0.44	0.38	0.01	1	-0.10
Global Property	0.09	-0.44	-0.02	-0.10	1

Source: Datastream, Reitway Global Analysis.

Conclusion

Listed real estate is an asset class that has proven itself over the long-term. It has shown why it should be included in all South African investors' opportunity sets. Global property offers South African investors a diversified, uncorrelated, income producing asset class that delivers hard currency returns.

The majority of academic and practitioner studies have come to the conclusion that adding listed real estate improves the risk-return profile of a mixed-asset portfolio, and that achieving the optimal inter-asset allocation of investors' capital is of prime importance due to the critical impact it has on portfolio performance.

The international property universe offers investors over 500 investible global companies, diversified across over 20 sub-sectors, over 30 countries, and a range of international currencies. All of this combines to offer investors an asset class that offers superior long-term diversification, inflation protection and income generation through economic cycles.

The study bolsters the view that from a diversification standpoint global REITs may boost returns and/or reduce risk when added to a diversified portfolio of South African equities and fixed income.

South African investors have the ability to efficiently add Global Property exposure to their portfolios through funds such as the Reitway BCI Global Property fund.

About the Author

Garreth Elston is the Chief Investment Officer of Reitway Global's suite of global listed property funds. He is an investment management professional with over 20 years of international capital markets' experience in South Africa, North America, the United Kingdom and Europe.

Garreth has a deep passion for real estate and has significant experience in listed and unlisted real estate investments, property development and real estate private equity.



Garreth holds an MBA from the Rotman School of Management at the University of Toronto, an MA in International Relations, and a BCom in Banking Management. He is a Certified Associate of the Institute of Bankers in South Africa (CAIB) SA, and a Fellow of the Institute of Financial Markets (FIFM).

Sources and Suggested Reading:

- Beath, A.D. and Flynn, C. "Asset Allocation and Fund Performance of Defined Benefit Pension Funds in The United States, 1998-2016." CEM Benchmarking, 2018.
- Bergsman, S. "Investing in the Global Market." Real Estate Portfolio Special Issue. 2005, pp. 16-20.
- Black, F. and Litterman, R. "Global Portfolio Optimization." Financial Analyst's Journal. September/October, 1992, pp. 28-43.
- Buller, S., Wald, S. and Rubin, A. "REIT Stocks: An Underutilized Portfolio Diversifier." Fidelity Leadership Series. April 2016.
- Hudson-Wilson, S., Fabozzi, F. J. and Gordon, J. N. "Why Real Estate? An expanding role for institutional investors." Journal of Portfolio Management. 2003, pp. 2-25.
- Hoesli, M., Lekander, J. and Witold, W. "International Evidence on Real Estate as a Portfolio Diversifier." The Journal of Real Estate Research. Volume 26, Number 2, 2004, pp. 161 - 206.
- Ibbotson Associates. "New Analysis Validates Benefits of Including Real Estate as Core Portfolio Holding." Nareit, 2003.
- Ibbotson, R.G. and Siegel, L. B. "Real Estate Returns: A Comparison with Other Investments." American Real Estate and Urban Economics Association Journal. Volume 12, Number 3, 1984, pp. 219-242.
- Idzorek, T., Barad, M, and Meier, S. "Commercial Real Estate: The Role of Global Listed Real Estate Equities in a Strategic Asset Allocation." White Paper for the National Association of Real Estate Investment Trusts. November 2, 2006.
- Kirby, M. and Rothmund, P. "Heard on the Beach - Alternative Facts." Green Street Advisors. February, 2017.
- Francis, J. C. and Ibbotson, R. "Empirical Risk-Return Analysis of Real Estate Investments in the U.S., 1972-1999." Journal of Alternative Investments, 2001, Summer, pp. 1-7.
- Markowitz, H. M. "Portfolio Selection." The Journal of Finance. March, 1952, pp. 77-91.
- Sharpe, W. F. "Capital Asset Prices: A Theory of Market Equilibrium." Journal of Finance. September, 1964, pp. 425-442.
- Nyachiro, D. and Jagongo, A. "Role of Real Estate Investment Trusts (REITs) in a Mixed Asset Portfolio: A Review of Literature." Journal of Business and Management. Volume 19. Issue 3, March 2017, pp 102-108.