WHITEHELM ADVISERS

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FEATURE ARTICLE:

LISTED INFRASTRUCTURE VERSUS LISTED PROPERTY – A DEFENSIVE EQUITY SHOWDOWN

Introduction

Listed property and listed infrastructure are both considered defensive, income yielding equities that provide a liquid proxy for 'real assets'.

Listed infrastructure and listed property funds hold similar underlying assets to their unlisted counterparts. Despite this, the return and volatility profiles of listed versus unlisted real assets are different. Much of this difference is driven by the frequency of valuation. Listed infrastructure and listed property can't match the low risk profile of unlisted real assets in the short-term, as they are continually priced in liquid markets rather than being valued every 6 or 12 months[1]. But returns do start to converge over the longer term. So, for investors seeking the advantages of greater liquidity or those that can look through the higher volatility, listed real assets can provide significant diversification benefits in a multi-asset portfolio.

Whilst listed property has performed admirably over the last decade, listed infrastructure has outperformed (particularly core infrastructure when looking through a variety of lenses, being return, volatility and downside protection – see Table 1.

However given the less than perfect correlation between listed property and listed infrastructure stocks, we believe there is certainly room for both sectors in an investor's multi-asset portfolio.

Table 1: Risk Adjusted Returns over 5 Years

	Return	Volatility	Risk Adjusted Return[2]	Downside Capture Ratio
Listed Core Infrastructure	13.3%	9.2%	1.4	74%
Listed Infrastructure	8.8%	8.7%	1.0	86%
Listed Property	7.1%	10.6%	0.7	107%
Global Equities	7.4%	10.2%	0.7	

Source: Bloomberg, Whitehelm Capital

[1] The positive dampening effect of infrequent valuation on investment return volatility is not necessarily that the individual asset returns for unlisted assets are lower volatility than for listed assets. Indeed, unlisted asset values can be more volatile than a listed equivalent. However, assets that are valued frequently become much more correlated to each other, as they are subject to equity market beta. So, the volatility of the unlisted asset portfolio in aggregate will tend to be lower largely due to the lower correlation of individual asset returns.

[2] Return divided by volatility; i.e. the Sharpe ratio with a risk free rate of 0%.

What is 'Core' Infrastructure?

Core infrastructure is a subset of listed infrastructure that excludes energy price and cyclically exposed quasi-infrastructure stocks.

For example, while a power plant is an infrastructure asset, it would not meet our core infrastructure criteria if the power was sold in an open market and would only be considered core if the revenues were under a long-term inflation linked contract or were regulated.

Not all definitions of 'infrastructure' are the same. But applying a strict definition focuses on the favourable characteristics of the asset class, that is, lower correlation to global equity markets, greater drawdown protection and higher yield. For example, of the 138 stocks held in the Dow Jones Brookfield Composite Infrastructure Index, there are around 60 that Whitehelm would not hold.

There is a similar dynamic for listed property. Some listed property funds are more defensive and conservative than the benchmark indices and so would similarly enhance the risk return profile of the asset class.

Note on data sources

Index data is sourced from Bloomberg and is as at December 2018.

All performance is measured in AUD hedged terms, in order to reduce the impact of currency movements. Results of the same analysis conducted in USD and USD hedged terms are similar and do not change the conclusions of this analysis. For index performance data we have used the net of tax total return versions of these indices.

For listed property performance we have used the FTSE EPRA/NAREIT Developed Listed Real Estate Index, and for characteristics data, the HSBC FTSE EPRA/NAREIT Developed UCITS ETF has been used as proxy.

For listed infrastructure, we have used the FTSE Developed Core Infrastructure Index. For global equities, we use the MSCI World Index, with holdings data proxied by the iShares MSCI World ETF.

For core listed infrastructure we use the performance of Whitehelm Listed Core Infrastructure Fund, gross of fees, from May 2016 (inception). Prior to 2016, we use the Whitehelm Capital customised core infrastructure universe. Backtested returns for this universe were calculated on an equal weighted basis, assuming monthly rebalancing. The simulation was produced using S&P ClariFI software, with a point-in-time database to avoid look-ahead bias.

Similarities and Differences

Listed infrastructure and listed property are mature and deep markets with a market capitalisation equivalent to approximately 10% of the MSCI World Index.

Both provide predictable, inflation linked cash flows that are a good diversifier due to their relatively low correlation to global equities.

Table 2: Asset Class Overview

	Listed Property	Listed Infrastructure
Assets	Commercial buildings Office buildings Industrial buildings Residential buildings	Electric and gas grids Water utilities Communications towers Toll roads Airports Railroads
Size	USD $1.6 trillion	USD $2.0 trillion
(developed markets capitalisation)	4.3% of the MSCI World Index market capitalisation.	5.4% of the MSCI World Index market capitalisation.
Dividend Yield	4.4%	3.5%
Inflation linkages	Moderate to strong	Strong
Average contract or concession life	3 to 7 years	5 to 15 years
Leverage	High, 5.9x debt to EBITDA	High, 5.3x debt to EBITDA

Investment Characteristics

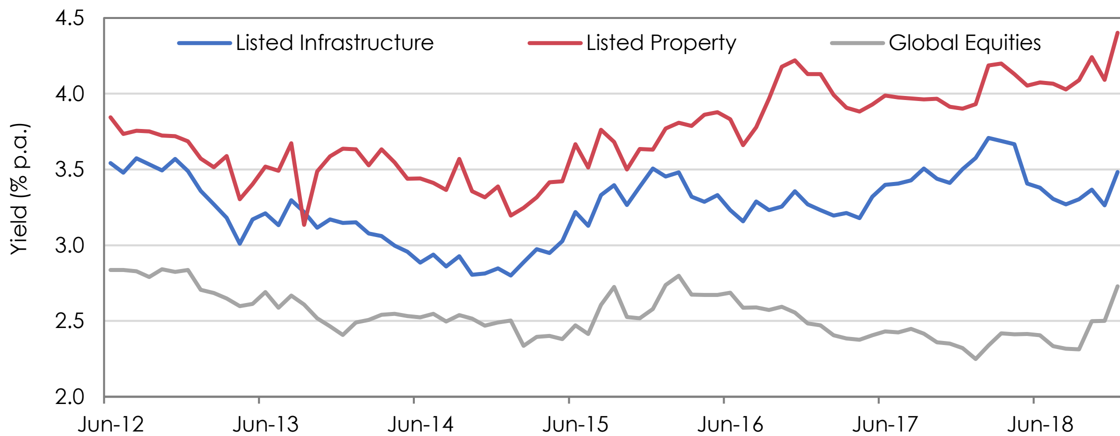
Listed property provides a consistently higher dividend yield compared to listed infrastructure and global equities. Many listed property companies are required to pay most of their income in distribution to their shareholders, and thus have a higher payout ratio. During the period from 2006-2018, listed real estate companies generated 65% of their total returns from the income component.

Table 3: Characteristics Comparison

	Core infrastructure	Listed infrastructure	Listed property[3]	Global equities[4]
Dividend Yield	3.6%	3.5%	4.4%	2.7%
Dividend Payout Ratio	58%	77%	127%	48%
Debt/Equity	113%	144%	83%	143%
Debt/EBITDA	4.2	5.3	5.9	3.5
Return on Invested Capital	5.8%	4.6%	5.6%	5.5%

Source: Bloomberg, Whitehelm Capital.

Chart 1: Dividend Yield History



Source: Bloomberg.

[3] Characteristics data for HSBC FTSE EPRA/NAREIT Developed UCITS ETF used as proxy for listed property.
[4] iShares MSCI World ETF used for characteristics data.

Risk and Return Analysis

Performance

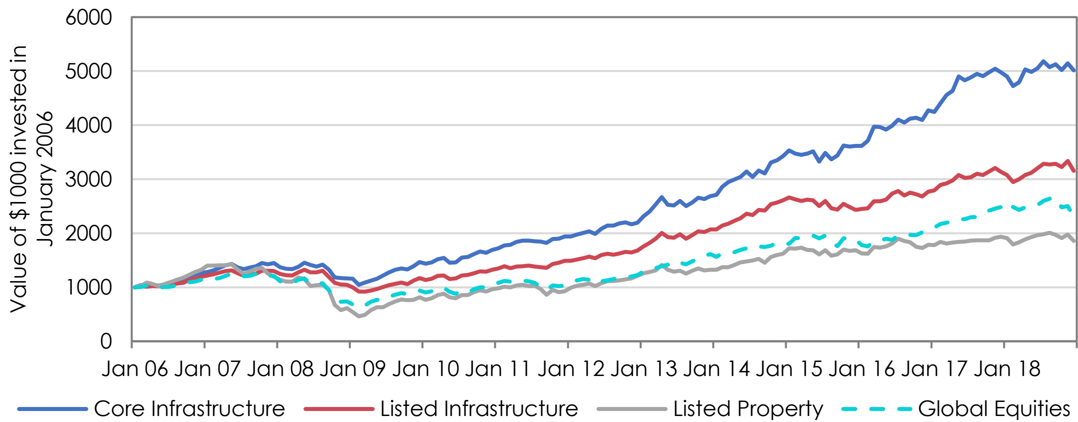
Listed infrastructure has consistently delivered superior returns relative to listed property and global equities over the last decade.

Looking further back, listed property was the best performer in the years leading up to the global financial crisis (GFC) in 2008-09. But it was also the sector most affected by the crisis, not surprising given the GFC was property induced and resulted in a drawdown of close to 70%. Arguably, it is unfair to be comparing asset class performance for this period. Crisis periods will always have their different, specific drivers. For example, utilities had a crisis of their own in the US in 2001. The industry was left in tatters as blackouts rolled through California, Enron collapsed amid massive scandal and the political will for further privatisations vanished.

Table 4: Annualised Returns

	3 years	5 years	10 years
Listed Core Infrastructure	11.5%	13.3%	15.8%
Listed Infrastructure	9.0%	8.8%	11.7%
Listed Property	3.3%	7.1%	11.7%
Global Equities	7.0%	7.4%	12.1%

Source: Bloomberg, Whitehelm Capital.

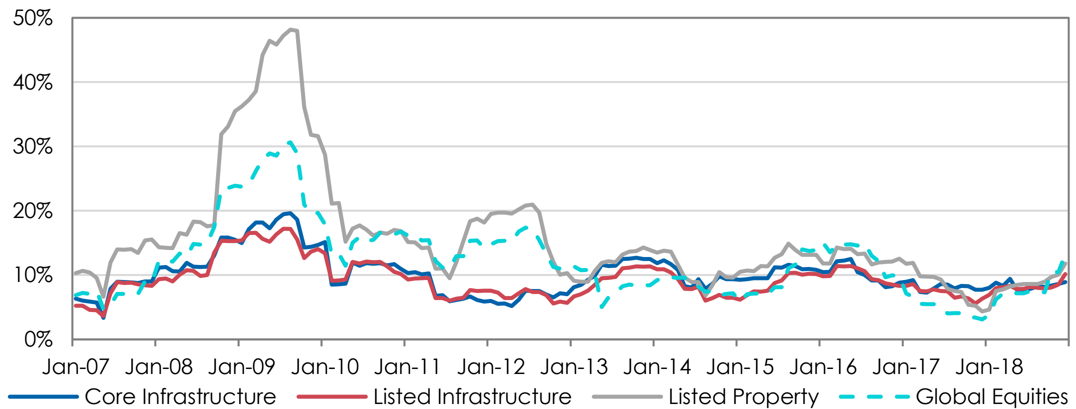


Source: Bloomberg, Whitehelm Capital.

Risk Measures

Real estate and infrastructure both provide inflation protected revenues. However, listed infrastructure has lower volatility levels compared to listed property and global equities.

The rolling 12 months annualised standard deviation in Chart 3 also shows listed property has been consistently riskier than listed infrastructure.



Source: Bloomberg, Whitehelm Capital.

Risk Adjusted Performance

Given the strong performance and lower volatility, it is no surprise that listed infrastructure has outperformed listed property as well as global equities on a risk adjusted performance basis. As illustrated in Table 5, core infrastructure has the highest risk adjusted return ratios over all periods covered by this analysis. Broader listed infrastructure comes in at second place, with global equities recording higher risk adjusted returns than listed property over both the short and long term. This is explained by the size and nature of the GFC, as well as the check on property stocks valuation in response to gradual rise in interest rates in recent years. While listed infrastructure stocks tend to react negatively in the short term to a rise in interest rates, these stocks have shown more resilience to rate rises than listed property.

Table 5: Risk Adjusted Performance[5]

	3 years	5 years	10 years
Listed Core Infrastructure	1.3	1.4	1.6
Listed Infrastructure	1.1	1.0	1.3
Listed Property	0.3	0.7	0.8
Global Equities	0.7	0.7	1.0

Source: Bloomberg, Whitehelm Capital.

Downside Protection

Over the last decade, the listed infrastructure index, and particularly core infrastructure, has demonstrated better downside protection than the listed property index. Table 6 below shows the downside capture ratios for listed infrastructure and listed property, measured against the MSCI World index. These ratios measure the percentage of the decline in the MSCI World (measured monthly) participated in by infrastructure and property indices over the specified time period.

Table 6: Downside Capture Ratio

	3 years	5 years	10 years
Core Infrastructure	71%	74%	64%
Listed Infrastructure	81%	86%	72%
Listed Property	117%	107%	122%

Source: Bloomberg, Whitehelm Capital.

Maximum drawdown is another measure of downside risk, which captures the peak to trough decline during a particular investment period. As expected, the GFC caused the biggest drawdown for all asset classes during the period under consideration. While core infrastructure suffered negative returns, the magnitude was smaller, and the recovery time quicker compared to the other asset classes in question. As shown in Table 7, listed infrastructure dropped 31% from its peak to trough and took 22 months to recover. Global equities lost more than half their value and recovered in just under 4 years. But the listed property sector suffered the biggest drawdown, dropping 68% from its peak.

Table 7: Drawdown Analysis

	Core infrastructure	Listed infrastructure	Listed property	Global equities
Maximum Drawdown (%)	-28.2%	-30.6%	-67.6%	-50.9%
Length of Max DD (in Months)	10	22	63	47

Source: Bloomberg, Whitehelm Capital.

[5] Return divided by volatility; i.e. the Sharpe ratio with a risk free rate of 0%.

Diversification

Diversification is one of the key considerations for long term investors when investing in real assets. Defensive equities like listed property and listed infrastructure can reduce overall portfolio risk if they are sufficiently diversified from global equities. Otherwise they will simply add more equity beta to the portfolio. As shown in Table 8, both listed infrastructure and listed property have historically shown less than perfect correlations to global equities. In particular, infrastructure stocks have a lower correlation to global equities, when compared to listed property stocks. This correlation further reduces for core infrastructure stocks.

Table 8: Correlation Analysis – Since February 2006

	Global equities	Listed property	Listed infrastructure	Core infrastructure
Core Infrastructure	0.72	0.74	0.91	1.00
Listed Infrastructure	0.74	0.76	1.00	
Listed Property	0.84	1.00		
Global Equities	1.00			

Source: Bloomberg, Whitehelm Capital

Equity Market Beta

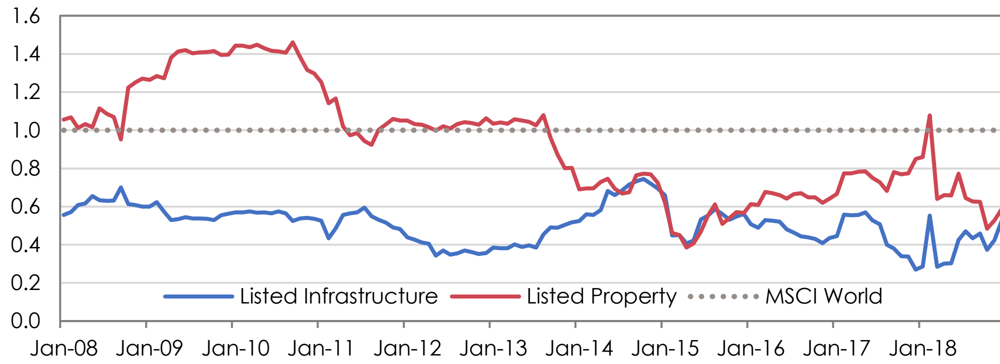
Beta represents the volatility or reactivity of an investment to movements in equity markets. A beta of more than 1 means that if the market moves up or down 1%, the investment will move by more than 1%, whereas a beta of less than 1 means an investment is less volatile or sensitive to the market. For investors seeking defensive returns, a beta less than 1 is highly desirable.

Table 9: Betas to the MSCI World Index

	3 years	5 years	10 years
Core Infrastructure	0.40	0.45	0.50
Listed Infrastructure	0.43	0.49	0.50
Listed Property	0.68	0.63	1.00

Source: Bloomberg, Whitehelm Capital.

Infrastructure stocks have consistently maintained a beta of less than 0.6 in the rolling 24-month beta analysis, while property stocks carried a beta greater than 1 in the aftermath of the GFC until 2013. This further supports our correlation analysis that investing in listed infrastructure stocks is more defensive and provides greater diversification than investing in property stocks. However, it does not mean listed property stocks do not provide diversification and, excluding the post GFC recovery which shifted betas for these stocks, listed property equities still provide attractive beta of less than 1.



Source: Bloomberg, Whitehelm Capital

Conclusion

Listed property and listed infrastructure are both defensive equities. They offer a higher dividend yield underpinned by stable inflation linked cash flows and are a diversifier from global equities.

Listed property and listed infrastructure have different risk and return profiles, and so allocation to these asset classes should be made as separate decisions.

Investors in listed infrastructure over the last decade, particularly listed core infrastructure would have enjoyed superior risk-adjusted returns and strong downside protection relative to listed property equities, albeit received a slightly lower dividend yield

In addition, core infrastructure has also provided for better downside protection in falling equity markets as well as better diversification to global equities and listed property stocks.

However, the last few years have seen the defensive and diversifying characteristics of Listed property gradually normalise

With many investors expecting market volatility to increase, the defensive characterises of listed infrastructure (particularly core infrastructure) and listed property are appealing. Given the less than perfect correlation between the two asset classes, there is certainly room for both sectors in an investor's diversified asset portfolio.

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