# Listed infrastructure for decarbonising, digitalising and deglobalising economies

Infrastructure is critical for modern economies. Investors should consider the benefits of owning mission-critical fortress assets through the stock market. Combined with non-listed, listed infrastructure offers significant asset allocation advantages.

By Shaun Stevens

Infrastructure supports all aspects of business and social life, including energy, transportation, water, and communications. There is a significant global need for investments in new infrastructure alongside upgrading existing, ageing assets. Governments will be unable to meet funding needs without the support of private capital. These unique assets benefit from wide moats given their strategic importance and the massive capital costs needed to develop and operate them. They are resources which are difficult to replicate and replace.

### Modern economies need infrastructure

Structural trends impacting global economies, including digitalisation, decarbonisation and deglobalisation, will require ongoing infrastructure investment. Current estimates overlook the full impacts on infrastructure needs of the energy transition. Similarly, the use of AI in the economy will have structural consequences for infrastructure needs. Additionally, the eroding of the international consensus around global trade will have long term implications for national economies' infrastructure assets.

Listed infrastructure's investment characteristics include attractive total returns, driven by predictable cash-flows that are generally linked to inflation. The global sector provides diversification across geographies as well as various sub-sectors. International investors view it as comparable to investing in private infrastructure over the long-term.

Some institutional investors prefer investing in infrastructure through non-listed funds. However, the underlying entities owned by listed and unlisted investors are essentially the same assets. The assets are regulated in the same manner regardless of the ownership structure. Managers need the same expertise to manage the assets, irrespective of whether they are publicly or privately held.

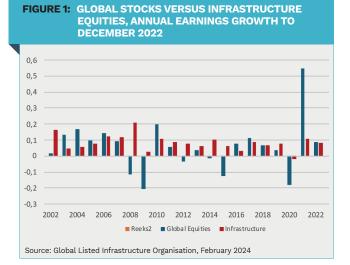
The need for global infrastructure investment is confirmed by recent studies. The Global Infrastructure Hub estimated \$ 3.7 trillion is required annually to 2040 to meet basic infrastructure needs globally. The research estimated that there was an existing annual shortfall of upwards of around \$ 500 billion in unmet funding for vital infrastructure.

Despite the abundant need for investment, there's little danger that the assets owned by investors will face competition. Unlike other built environment sectors like real estate, barriers to entry are considerable. The infrastructure sector's assets require massive initial capital outlays, are highly regulated, and provide concession-based or contracted revenues. Infrastructure companies enjoy monopolistic businesses that often have regulated revenues. These features potentially reduce financial risk, generate attractive risk-adjusted returns, and provide downside protection.

## Support from secular trends

The secular trends of decarbonisation, digitalisation, and deglobalisation will remain dominant themes in 2024 and beyond, supporting demand for infrastructure. The energy transition will require substantial infrastructure investment. The need to decarbonise economies through electrification implies demand for new generation and transmission capacity. Energy supply is structurally tight. Existing energy infrastructure companies will benefit from owning existing assets. The energy transition will make it difficult to build additional hydrocarbon-based infrastructure assets.

The growth in AI applications will require new digital and energy assets to support this nascent economic



revolution. Increased digital demand will affect the way infrastructure assets operate. It will also require more energy-related assets and accelerate investment in data centres and telecommunication towers.

Deglobalisation of the international economy implies a growing focus on infrastructure investments that support localised supply chains like energy, water, transport, and trade. It could also add more layers of regulation, requiring investors to deal with more national supervisory authorities. Investment managers will need to be able to capture the benefits of infrastructure ownership in more complex, regulated sectors operating across jurisdictions.

## Listed infrastructure's investment characteristics

Listed infrastructure has delivered attractive total returns underpinned by predictable long-term cash-flows, generally linked to inflation. The global sector provides diversification across geographies and sub-sectors. International investors observe it is a proxy for owning private assets over the longer term. Infrastructure equities are transparent and liquid compared to less visible and tradeable private vehicles. Infrastructure's cashflow income has typically exceeded the broader equity market helping to grow dividend income (Figure 1). This is partly due to the monopolistic, regulated nature of the income stream. There is usually little competition, with the income being supported by regular price escalators.

The asset class has provided higher income and total returns than general equities. Global listed infrastructure has outperformed equities and bonds over longer periods. Its sensitivity to prices has been evident in its performance during periods of inflation (Figure 2). There's considerable published evidence that infrastructure has delivered strong relative returns during periods of higherthan-expected inflation.

Listed infrastructure provided impressive returns over 10 and 20 years, an attractive Sharpe ratio and outperformed inflation.

FIGURE 2: TOTAL RETURNS, VOLATILITY, AND SHARPE RATIOS FOR LISTED INFRASTRUCTURE VERSUS OTHER ASSET CLASSES

	1 Year	3 Years	5 Years	10 Years	20 Years	Volatility	Sharp
USD Return						(20 years)	Rat
(Yrs Annualized)							(20 year
Listed Infrastructure							
Developed	2,5%	3,9%	5,3%	7,2%	9,6%	13,0%	0,
Infrastructure							
Equities							
Global equities	25,6%	9,2%	12,2%	9,6%	8,5%	15,4%	0,
REITS							
Global REITs	1,5%	-0,4%	0,7%	3,6%	6,0%	18,7%	0,
Bond &							
CPI Benchmarks							
Global Bonds	3,1%	-5,5%	-1,0%	-0,1%	2,2%	6,0%	0,
CPI	3,6%	5,6%	4.0%	2,7%	2,3%		

Source: GLIO, FTW, FTSE EPRA Nareit, S&P, DJBGI, Bloomberg. As of 29 February 2023.

These characteristics imply that adding infrastructure to a portfolio improves its efficient frontier. There is additional evidence for blending listed and unlisted infrastructure allocations. Research confirms that a blended combination of public and private infrastructure in an optimal allocation of bonds and equities can improve a portfolio's risk return profile (Hughes and Creswell, GLIO). Clearly, over longer holding periods, infrastructure is a single asset class, regardless of its capital structure.

#### Future proofing investor portfolios

Listed infrastructure provides investors with exposure to the future cornerstones of modern economies. The sector offers hard, essential assets that are scarce but crucial resources. It has offered competitive performance over the long term and has the same underlying characteristics and investment performance as privately owned assets. One of the puzzles for listed infrastructure companies and fund managers is to convince a substantial section of institutional investors to look past the public-private divide. Listed and private infrastructure are two ways to access the same asset. Fortunately, investors in markets like the USA and Australia increasingly recognise the critical value of investing via private and public markets. Investment from both sectors will be fundamental, given the challenges presented by the demands of digitalisation, the energy transition and a de-coupling of international trade.



Shaun Stevens

Founder of Real Assets Research, and advisor to the Global Listed Infrastructure Organisation (GLIO)

#### SUMMARY

Listed infrastructure has historically been overlooked. The sector owns fortress-like assets with predictable longterm cashflows matching institutional investors' liabilities.

Secular trends like digitalisation, decarbonisation and deglobalisation, underpin demand for infrastructure.

Listed infrastructure has the characteristics of privately held assets and there's compelling evidence for combining both in optimal portfolios.