



MACQUARIE ASSET MANAGEMENT

Five reasons infrastructure belongs in your portfolio

Infrastructure can add resilience to your portfolio without sacrificing potential upside.

Private infrastructure investing involves the ownership, development and optimisation of essential assets not listed on public markets.

Infrastructure assets underpin our daily lives and support economic activity around the world. We all depend on reliable delivery of water, electricity, energy and waste services. The internet is now essential to daily life, as are the digital networks, cell towers and data centers that enable it. Transportation infrastructure – from roads, tunnels and bridges to airports, rail and shipping ports – is the backbone of every developed economy.



How can private infrastructure help optimise an investor's portfolio?

We explore the five potential benefits for investors¹:



Strong returns



Consistent performance



Resilience during downturns



Protection against inflation



Portfolio diversification

^{1.} Past performance does not guarantee future results.



Over the past two decades, infrastructure has delivered consistently strong risk-adjusted returns relative to both traditional equities and fixed income. Its resilience is grounded in the fundamental characteristic of the asset class: infrastructure assets support the function of essential services – such as transportation, utilities and communications – demand for which remains resilient through economic cycles. The nature of infrastructure assets' role in economies underpins the reliability of their returns.

This consistent demand through economic cycles translates into reliable revenue streams. And while

infrastructure may share some traits with fixed income – particularly yield – it is ultimately an equity investment with potential downside protection. Infrastructure also offers growth exposure to powerful secular trends such as digitalisation and decarbonisation.

As measured by the Sharpe ratio (Figure 1), which compares return to risk, infrastructure has outperformed global equities and bonds over the long term. For investors seeking to maximise risk-adjusted returns, infrastructure presents an attractive allocation opportunity.

Figure 1: Private infrastructure has delivered impressive risk-adjusted returns over the past 20 years

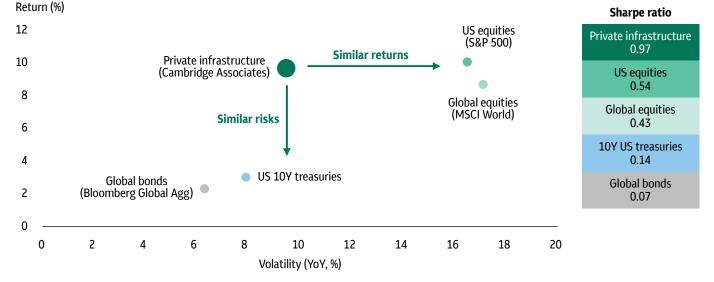




Chart takeaway

As measured by the Sharpe ratio, which compares return to risk, infrastructure has outperformed global equities and bonds over the long term. For investors seeking returns that match their risk appetite, infrastructure stands out as a stable and consistent allocation.

Sources: Cambridge Associates, Bloomberg. US equities: S&P 500 Index; Private infrastructure: Cambridge Associates Infrastructure Index; Global equities: MSCI World Index; Global bonds: Bloomberg Global Aggregate Index. Analysis conducted from 1 January 2004 to 31 March 2025. The Sharpe ratio is computed by dividing the excess return on a portfolio by its standard deviation. The risk-free rate is the 3-month US government bond yield. Past performance is not indicative of future returns. For illustrative purposes only.



Reliable performance through economic cycles

Because markets are cyclical, portfolio resilience is paramount.

Infrastructure has demonstrated consistent performance through multiple economic cycles, including during the global financial crisis and the COVID-19 pandemic. In periods of expansion, it generally performs in line with other equities. However, during downturns, its correlation diverges in a way that may help improve portfolio resilience (Figure 2).

This resilience stems from the essential nature of the services infrastructure provides. Even when GDP contracts, the demand for transportation and digital connectivity remains. Many of these assets are governed by long-term contracts or regulatory frameworks that provide relatively stable revenue streams even when broader markets falter.

Take airports as an example: many operate under multi-decade concession agreements, some lasting 30 years or more. These contracts ensure a degree of visibility and predictability of cash flows that's rare in traditional equities. Infrastructure can, therefore, provide a powerful anchor to portfolios, adding critical ballast and enhancing their resilience.

Figure 2: Private infrastructure has delivered consistent, through-the-cycle performance over three major economic events

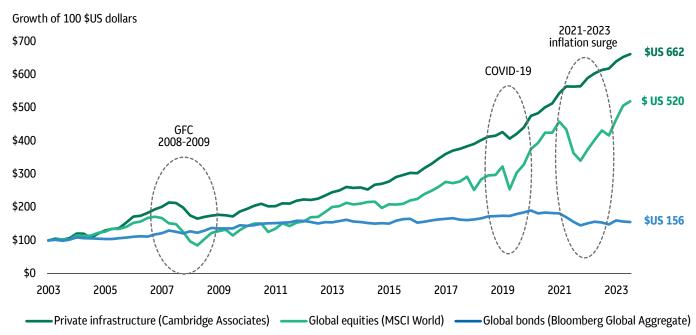




Chart takeaway

Infrastructure has historically provided consistent performance across major market events—including the GFC, COVID-19, and inflationary periods—demonstrating relative resilience and income stability.

Source: Cambridge Associates, Bloomberg Finance LP. Private infrastructure: Cambridge Associates Infrastructure Index; Global equities: MSCI World Index (The MSCI World Index captures large and mid-cap representation across 23 Developed Markets countries); Global bonds: Bloomberg Global-Aggregate Total Return Index. Analysis conducted from 1 January 2004 to 30 June 2024. GFC = Global Financial Crisis.

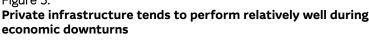
Resilience in low-growth or recessionary environments

In slower-growth environments, many asset classes struggle to deliver. Infrastructure is an exception.

By its nature, infrastructure is a defensive equity asset class, historically performing relatively well even when GDP growth weakens (Figure 3). Its revenues are often shielded by user fees, government payments, or long-term agreements, making them less sensitive to short-term economics shifts.

This makes infrastructure a reliable option for clients concerned about market drawdowns or economic turbulence. During downturns, when equities may be unpredictable, infrastructure can offer a stabilising presence with positive real returns. This is invaluable for retirees or risk-sensitive investors.

Figure 3: Private infrastructure tends to perform relatively well during



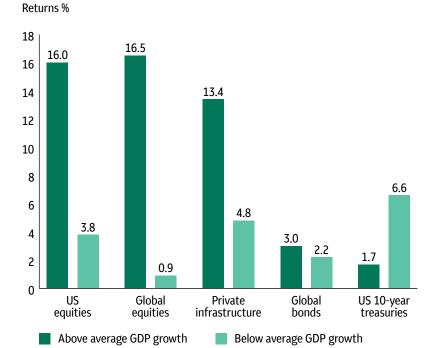




Chart takeaway

Infrastructure assets have outperformed during periods of economic contraction, supported by essential services and predictable revenues.

Sources: Cambridge Associates, Macrobond, Bloomberg Finance LP. US equities: S&P 500 Index; Private infrastructure: Cambridge Associates Infrastructure Index; Global equities: MSCI World Index; Global bonds: Bloomberg Global Aggregate Index. Analysis conducted from 4Q 2003 to 3Q 2024. (February 2025). GDP = gross domestic product. Average GDP growth over the period was 1.8%.



Protection against elevated inflation

One of infrastructure's strategic strengths is its ability to hedge inflation.

Unlike many traditional asset classes, infrastructure can benefit from a structural link to inflation. Many assets in the sector operate under regulatory frameworks or contractual agreements that allow revenues to adjust in line with inflation indices. Toll roads, for example, can adjust pricing annually to reflect inflation. Utilities often operate under regulations that allow investors to earn a defined real (inflation-adjusted) return. The result is that revenue – and therefore investor income – can keep pace with rising costs.

This trait has become even more valuable as inflation has proven persistent rather than transitory. With inflation concerns top of mind for many advisors and clients, infrastructure offers a proven history of inflation-hedged performance.

In fact, over the past 20 years, infrastructure has consistently outperformed equities and bonds during periods of above-average inflation. Figure 4 shows that private infrastructure has delivered stronger returns than traditional public asset classes when inflation is above average. More than just a defensive allocation, infrastructure can be a proactive solution for protecting real wealth.

Figure 4: Infrastructure offers a hedge against high inflation

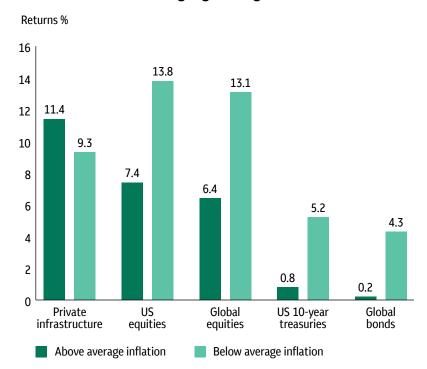




Chart takeaway

With many contracts linked directly to inflation indices, infrastructure has historically preserved real returns during periods of elevated inflation.



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With inflation concerns top of mind for many advisors and clients, infrastructure offers a proven history of inflation-hedged performance."

Sources: Cambridge Associates, Macrobond, Bloomberg. US equities: S&P 500 Index; Private infrastructure: Cambridge Associates Infrastructure Index; Global equities: MSCI World Index; Global bonds: Barclays Global Aggregate Index. Analysis conducted from 1 January 2004 to 30 June 2024. Inflation refers to changes in headline Consumer Price Index (CPI). Average annual inflation over the period was 2.4%. Past performance is not indicative of future returns. For illustrative purposes only.

Powerful portfolio diversification

In portfolio construction terms, infrastructure enhances the efficient frontier – the curve representing the most efficient risk-return combinations available.

Infrastructure's low to moderate correlation with equities and bonds introduces distinct return dynamics. When modelled using a mean-variance optimisation framework, private infrastructure often lies outside the efficient frontier for a traditional portfolio of

60% stocks and 40% bonds (Figure 5), enabling higher returns for the same level of risk or reduced volatility without sacrificing performance. Adding infrastructure to a portfolio can unlock access to optimal allocations that were previously available only to institutional investors. Infrastructure enables investors to diversify not just by geography or sector but by the nature of cash flow, contract structure, and economic sensitivity.



Figure 5: **Private infrastructure expands the efficient frontier**

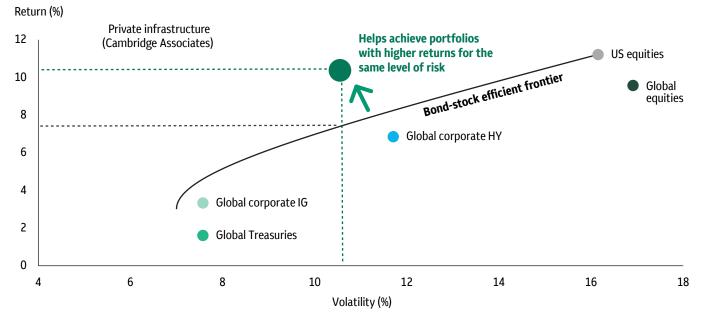




Chart takeaway

Due to its low correlation with equities and bonds, infrastructure can push out the efficient frontier - enhancing return potential for a given level of risk.

Sources: Cambridge Associates, Bloomberg. Private infrastructure: Cambridge Associates Infrastructure Index (unsmoothed); Global equities: MSCI World Index; US equities: S&P 500 Index; Global investment grade (IG) corporates: Bloomberg Global Aggregate Corporate Index; Global high yield (HY) corporates: Bloomberg Global High Yield Corporate Index. Analysis conducted from 1 January 2005 to 30 June 2024. Efficient frontier assumes a set of optimal portfolios under a mean-variance optimisation model with full investment at any time and no short selling allowed. Past performance is not indicative of future returns.



2. Past performance does not guarantee future results.

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