Principal Real Estate

2024 Global Listed Infrastructure Outlook

Why we're optimistic for this year and beyond

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Principal Asset Management[SM]

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Summarizing our outlook

Listed infrastructure experienced challenging trading conditions in 2023. More resilient economic data ultimately pushed back market expectations of timing for both peak interest rates, as well as the potential for rate cuts. The consensus macro call shifted from recession to soft landing. These dynamics led stocks typically perceived as interest rate sensitive and defensive to materially underperform.

The good news is that today's listed infrastructure valuations offer an attractive entry point, with the asset class trading cheap relative to both broader global equities and unlisted infrastructure. Valuations versus equities screen near levels seen during the Global Financial Crisis, and listed infrastructure trades at an estimated 30 percent discount to the latest available unlisted infrastructure transaction data.

We also expect 2024 will bring a combination of decelerating growth and inflation that exceeds long-term averages, a backdrop that has historically been positive for the relative performance of listed infrastructure. If a deeper recession does materialize, history tells us that most risk assets—including listed infrastructure—would experience short-term selling pressure, but more defensive equity assets like infrastructure should outperform.

Alongside attractive valuations and a more supportive macro environment, we expect the fundamentals of listed infrastructure businesses to remain solid in the year ahead. The fundamental performance of listed infrastructure companies could also begin to appear increasingly differentiated as the consumer weakens.

2024 should present ample opportunities to generate excess returns from stock picking. Within listed infrastructure, our portfolios have already been benefitting from several pockets of dislocation that we felt had created scope for mean reversion, even in sectors with exciting fundamental dynamics. We also believe the pessimism reflected in select Chinese infrastructure stocks may now be overdone.

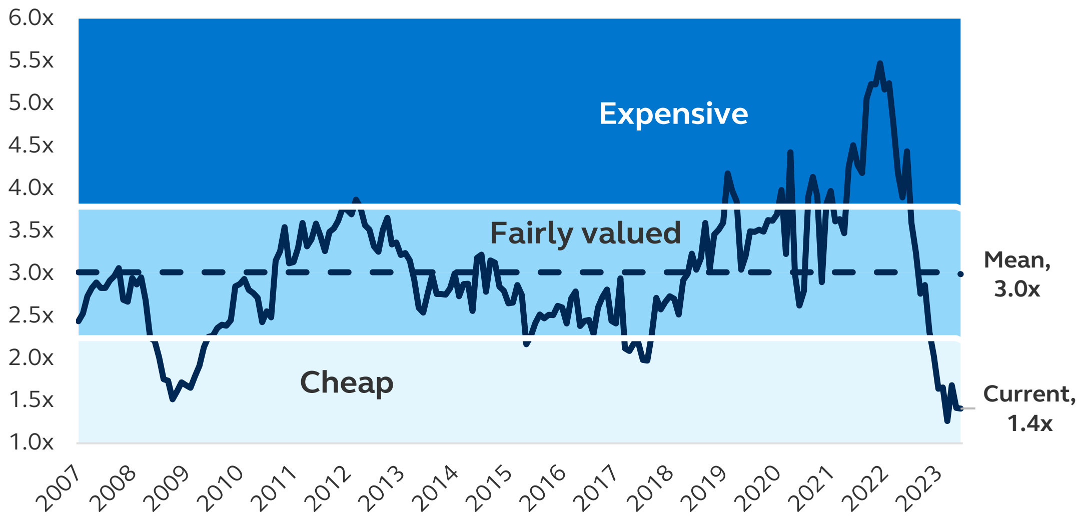
Moving beyond the immediate future, the long-term outlook for listed infrastructure remains attractive. We have high conviction that fundamental growth drivers for listed infrastructure companies will remain tailwinds that will outlast today's macro concerns.

Infrastructure stocks are cheap to start 2024, enhancing our confidence that listed infrastructure will outperform over a three-year horizon.

After a year in which defensive stocks suffered disproportionately from the higher-for-longer rate narrative, we believe listed infrastructure is attractively valued to start 2024. Valuations look cheap relative to equities, with the stocks trading near levels seen during the Global Financial Crisis. This is despite the bounce we saw late last year, when a series of softer inflation prints and weaker economic data catalyzed a sharp pull back in bond yields. Listed infrastructure also looks attractively priced relative to unlisted infrastructure assets, with average trading multiples for listed infrastructure companies at an estimated 30 percent discount to the latest available private infrastructure transaction data.

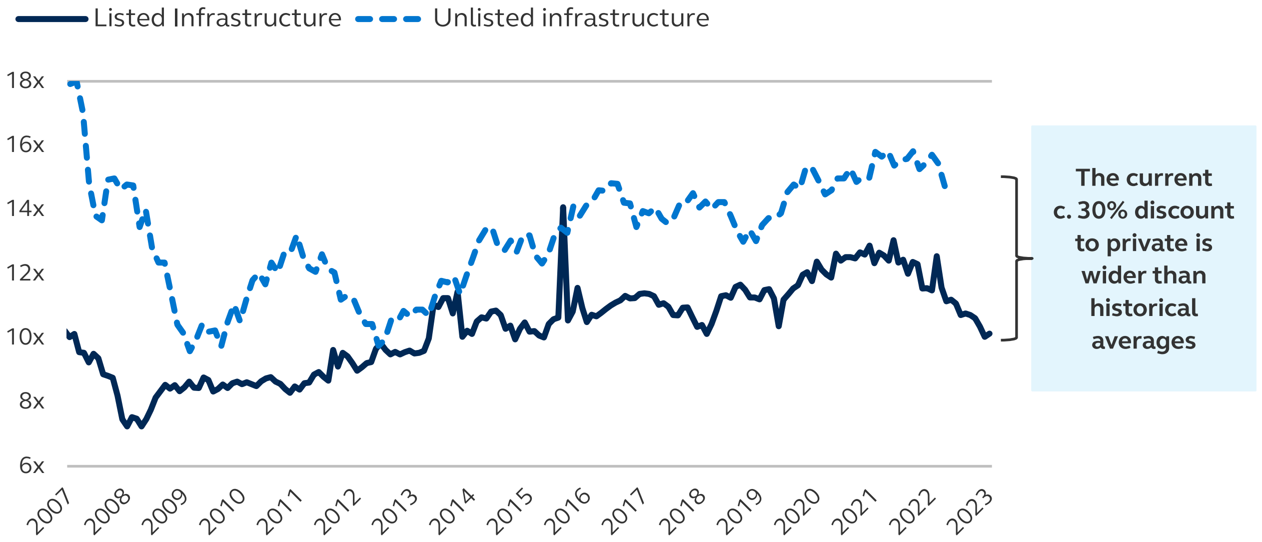
The current valuation backdrop enhances our confidence that listed infrastructure will outperform over a three-year horizon.

Infrastructure stocks now trade at EV/EBITDA multiple spreads relative to equities in excess of one standard deviation from long term averages



As of 31 December 2023. Source: FactSet. Weighted average enterprise value (EV) to EBITDA price multiples are used to measure valuations. The spread plotted is the EV/EBITDA of the FTSE Global Core Infrastructure 50/50 index minus the EV/EBITDA of the MSCI ACWI index. Indices are unmanaged and do not take into account fees, expenses, and transaction costs and it is not possible to invest in an index. Expensive and cheap valuations are represented by spreads higher or lower than one standard deviation from the mean, respectively. Fair value is represented by valuations between one standard deviation from the mean.

The latest divergence in private and public infrastructure multiples relative to historical levels provides additional valuation support



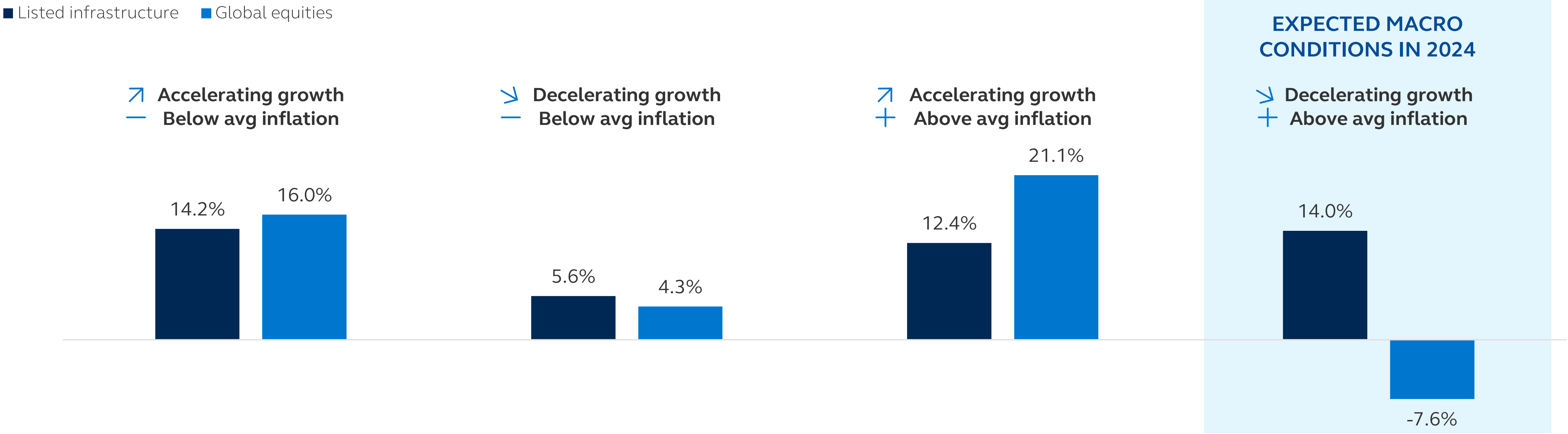
As of 31 December 2023. Source: FactSet, Macquarie Asset Management. Straight average enterprise value (EV) to EBITDA price multiples are used to measure valuations for listed infrastructure (FTSE Global Core Infrastructure 50/50 index) for comparability with private transaction data. Macquarie Asset Management private EV/EBITDA data is based on 1,054 data transaction multiples for deals that reached financial close between January 2008 and December 2022. The dataset is spread by sector, including transport, utilities, digital infrastructure, renewables, energy, and diversified.

Will 2024 bring a soft landing or traditional recession? Either way, listed infrastructure should be a relative winner.

Whether 2024 brings a soft landing or deeper recession, our base case expectation is for decelerating growth alongside inflation that exceeds long-term averages. This combination has historically proven positive for the relative performance of listed infrastructure.

Like many market participants, we expect volatility in the opening months of 2024 as the market reconciles its calls for both a soft landing and interest rate cuts in the first part of the year. We continue to see this combination as improbable. Should economic data remain stable, we do not believe that the Fed or other developed market central banks will be in a hurry to cut rates. At the same time, if a recession does occur in the next twelve months as leading economic indicators continue to foreshadow, there is downside risk to the market's expectations for the economy. We are not optimistic the market will take materially weakening economic data in stride for an extended period of time.

Listed infrastructure vs equities performance in various inflation and growth regimes



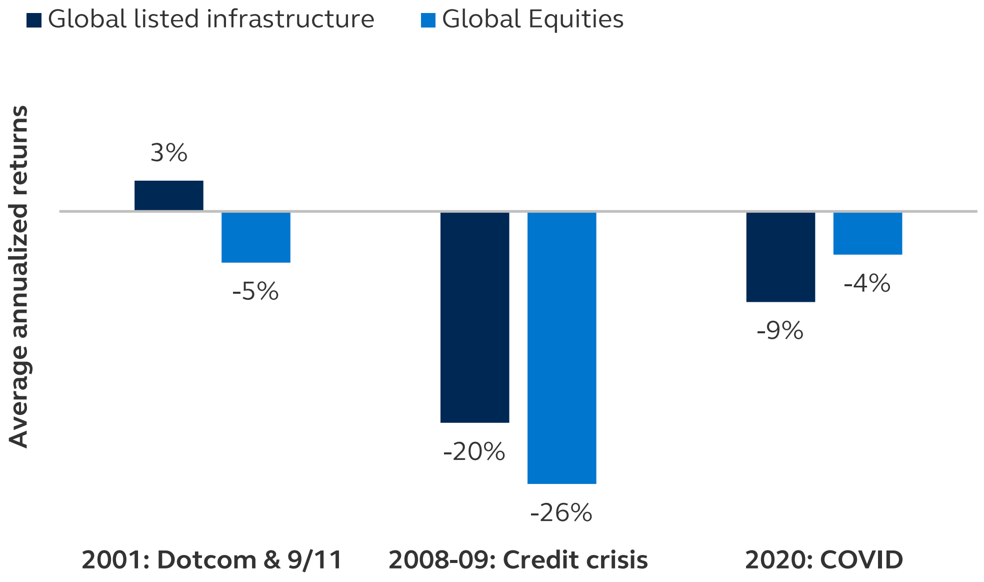
As of 30 September 2023. Source: FactSet. Growth represented by yoy change in real GDP growth. Inflation represented by the yoy change in U.S. core CPI. Listed infrastructure is represented by a 50/50 blend of MSCI ACWI Utilities Index and the Alerian MLP Index from 12/31/1995 through 3/31/2006, and the FTSE Global Core Infrastructure 50/50 Index thereafter. The FTSE index launched in March 2015. Equities is represented by the MSCI ACWI. Past performance does not guarantee future results. Indices are unmanaged and do not take into account fees, expenses, and transaction costs and it is not possible to invest in an index. There is no guarantee that any forecasts made will come to pass. It should not be relied upon solely to make investment decisions. Past performance does not guarantee future results.

Should a recession materialize, we would expect listed infrastructure to outperform as it did in the 2001 & 2008-09 recessions.

If a deeper recession or crisis does materialize, history tells us that most risk assets—including listed infrastructure—would experience short-term selling pressure. We would emphasize that more defensive equity assets like infrastructure should still outperform, consistent with two of three recessionary periods over the past 30 years. The exception was the 2020 recession brought on by the COVID-19 pandemic, during which fundamentals of transportation infrastructure companies were heavily impacted by mobility restrictions from which many large equity index constituents benefitted.

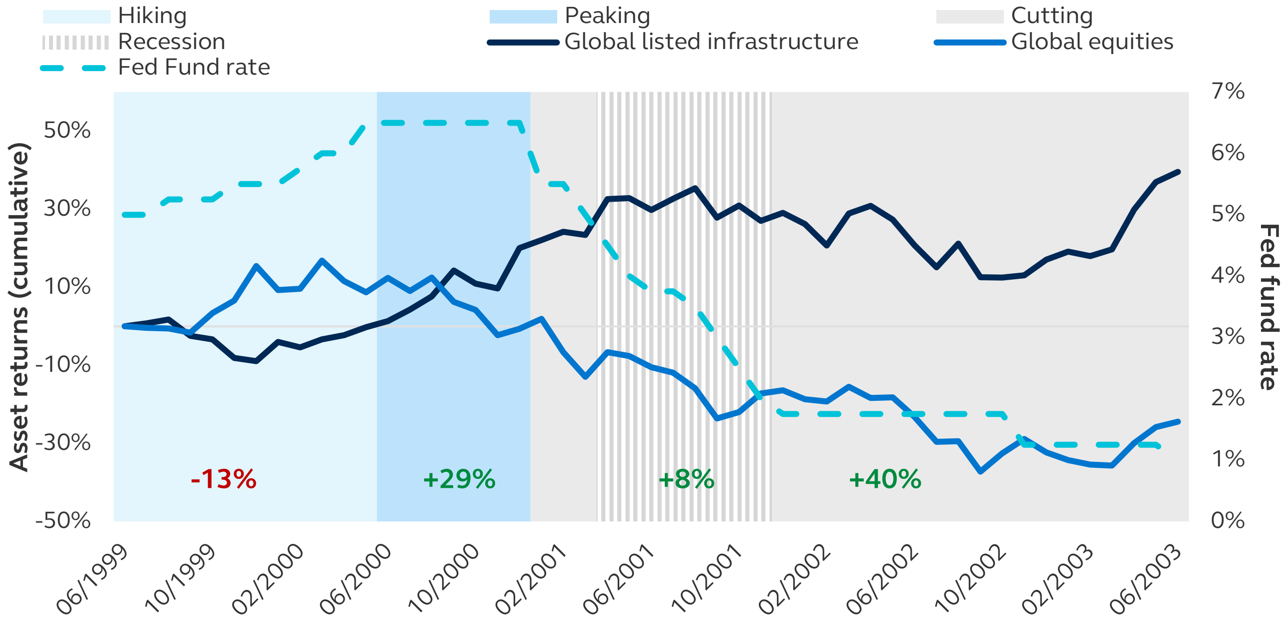
The primary scenario in which listed infrastructure could underperform equities is if the market is again forced to quickly digest upside risk to terminal rates, possibly resulting from a reversal in the inflation trend, or stronger economic growth. Even so, we'd likely see less pronounced underperformance than we saw in a similar situation in 2023 given what relative valuations are now reflecting.

Listed infrastructure has outperformed in two of three recessions over the past 30 years



Listed infrastructure has a track record of outperforming over a full rate cycle, even after performance was challenged as rates were hiked

(Data labels show GLI returns relative to equities at each phase during the 1999-2003 Fed Fund rate cycle)



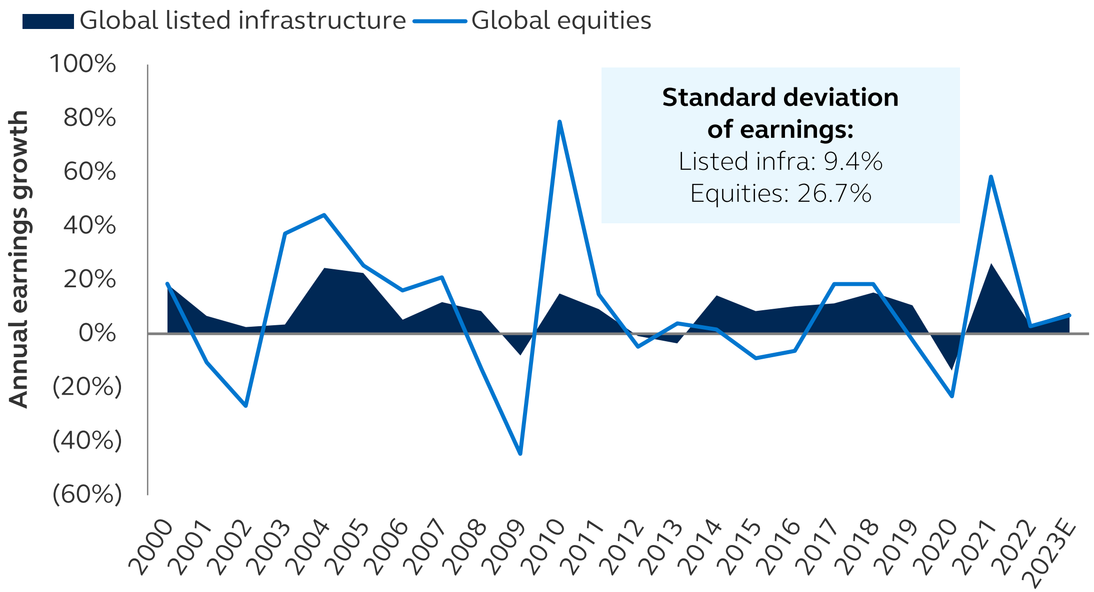
Source: National Bureau of Economic Research (NBER), FactSet. NBER was utilized to identify past recessions. Listed infrastructure is represented by a 50/50 blend of MSCI ACWI Utilities Index and the Alerian MLP Index from 12/31/1995 through 3/31/2006, and the FTSE Global Core Infrastructure 50/50 Index thereafter. The FTSE index launched in March 2015. Equities is represented by the MSCI All Country World Index. Past performance does not guarantee future results. Indices are unmanaged and do not take into account fees, expenses, and transaction costs and it is not possible to invest in an index.

Listed infrastructure fundamentals could prove increasingly differentiated in 2024, particularly if the consumer weakens as is forecasted.

Against the backdrop of compelling valuations and a macroeconomic environment that is more favorable to the asset class, we expect fundamentals of listed infrastructure businesses to remain solid in the year ahead. Historically, listed infrastructure has offered lower earnings volatility and better cashflow visibility than equities. We also believe the fundamental outlook for listed infrastructure could start to be increasingly differentiated, largely because infrastructure businesses offer products and services for which demand is relatively inelastic. A weaker consumer in 2024 will be forced to make choices about how to spend as economic growth slows, and ‘needs’ will likely take priority over ‘wants.’

As infrastructure businesses are capital intensive, higher interest rates have had a modest impact on earnings in 2023, although many companies were able to offset such headwinds through other cost cutting initiatives. Looking ahead, as interest rates stabilize below their peak levels and rate cuts materialize, financing costs could begin to serve as a tailwind for infrastructure earnings. More broadly, balance sheets remain in solid condition, with long-dated debt an ongoing feature of the asset class.

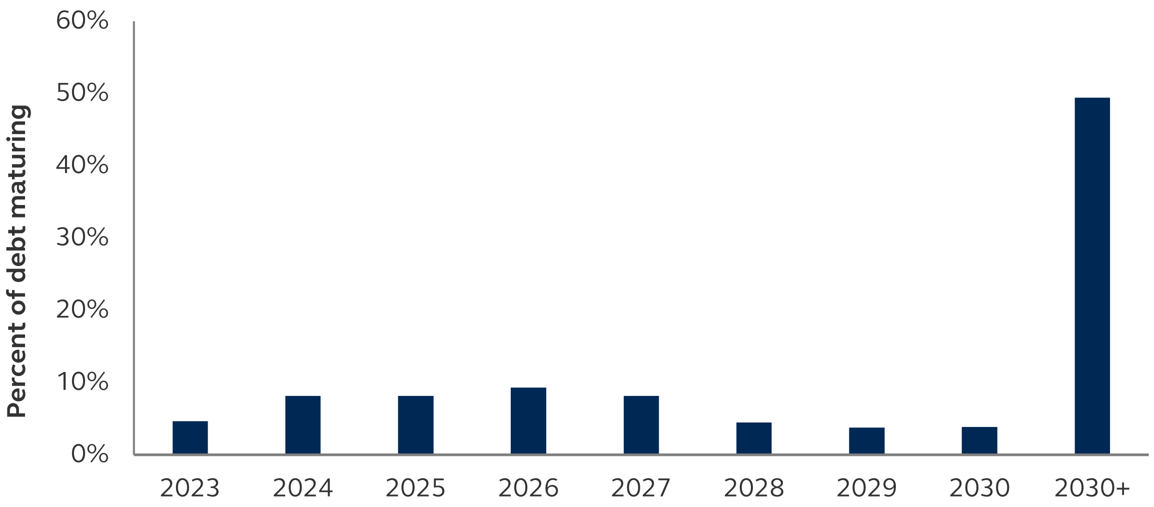
Listed infrastructure has historically delivered lower earnings volatility than equities with better cashflow visibility



As of 20 November 2023. Source: FactSet. Equities earnings growth is represented by index-level earnings growth of the MSCI ACWI index. Global listed infrastructure earnings growth from 2000 to March 2015 is represented by the average earnings growth of the constituents of the FTSE Global Core Infrastructure 50/50 index at its inception in March 2015, and by the index-level earnings growth of the FTSE Global Core Infrastructure 50/50 index thereafter.

Balance sheets of listed infrastructure companies remain solid, as long-dated debt is a defining feature of the asset class

Global listed infrastructure debt maturity schedule



As of November 2023. Source: FactSet.

Within listed infrastructure, we see ample room for stock picking in 2024. Pockets of dislocation have created strong potential for share price recovery.

The market's focus on interest rates in 2023 was not always applied evenly in our view. This was evident across equity markets more generally, as select long-duration equities such as the 'Magnificent 7' were rewarded for their visible growth, strong balance sheets, and other quality characteristics, while many other stocks struggled, despite offering similar features. The market's lack of focus on fundamentals was also evident within the listed infrastructure opportunity set, where some sectors with the more positively differentiated growth opportunities experienced the most turmoil when market perception of greater interest rate sensitivity became the single most important factor driving stock prices at various points throughout the year. We highlight cell phone towers and renewables developers as examples in the table below. We also believe the pessimism reflected in select Chinese infrastructure stocks may now be overdone.

Opportunity	What happened in 2023?	What will matter in 2024?
Cell phone tower operators	• Rising rates pressured this long duration sector • Organic top line growth decelerated as telecom providers prepare for the next phase of capex • Public companies responded to higher rates by pivoting to improve balance sheets vs the M&A focus of recent years	• The favorable long-term backdrop for growth with revenues linked to structural drivers, like data consumption and the 5G rollout • A positive inflection point in organic growth expected in H2 • Outcomes of strategic reviews and ongoing progress on deleveraging • Tower stocks screen cheaply, particularly relative to private data points—public companies trade at high-teens EV/EBITDA multiples vs recent private deals up to 28x
Renewables developers	• Markets priced in higher discount rates and there were fears of asset write-downs and less private market demand for renewables • Disappointing 3Q23 updates from several high-profile companies further challenged market sentiment	• Returns on capital deployed in renewables development could be stronger than they have been in years, particularly for developers operating at scale • Power purchase agreement (PPA) pricing has largely captured higher capital costs • The offshore wind industry, which has been among the most challenged due to higher capital inputs, looks to be stabilizing as governments accept higher pricing to achieve clean energy goals • 2024 should be the first-year companies materially benefit from the Inflation Reduction Act
Select Chinese infrastructure operators	• The 4Q22 rally sparked by China abandoning its zero-COVID policies proved short-lived • Equities faced a deluge of weaker economic data, ongoing property market stress, geopolitical conflict, and underwhelming policy responses • The Hang Seng index ended the year trading near 20-year low valuations	• Fundamentals generally remain more stable and/or stronger than reflected in share prices • Natural gas volumes continue to grow at high single digits for distribution companies with higher quality Tier 1 city exposure, and sector earnings momentum should resume • We expect ongoing recovery in international traffic to China to provide a positive catalyst for airport stocks, as data shows China-Europe capacity increasing to 100% of 2019 levels (60% in Q4) and China-U.S. capacity increasing to 40% of 2019 levels (20% in Q4) in the first quarter

As of December 2023. Source: Principal Real Estate.

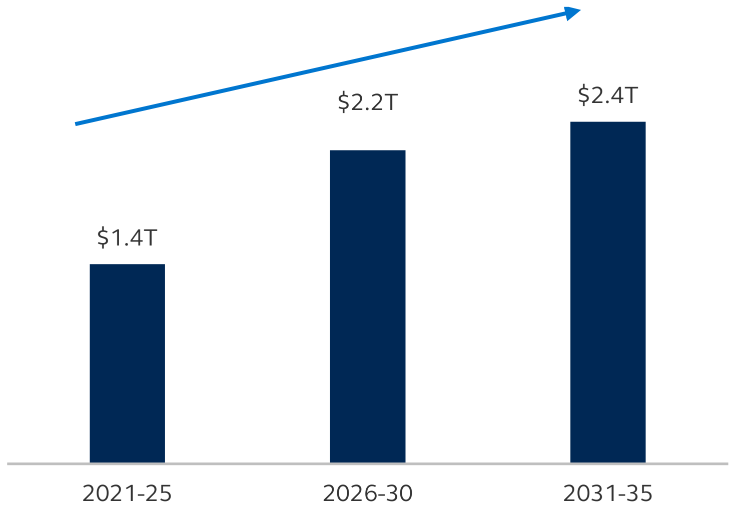
The long-term outlook for the listed infrastructure asset class remains attractive. We suggest investors take advantage of today's entry point to build a strategic allocation.

We have high conviction that fundamental growth drivers for listed infrastructure companies will remain tailwinds that meaningfully outlast today's macro concerns. We continue to expect utility and energy infrastructure companies to accelerate investment for the clean energy transition as we move into the latter half of the decade and are further encouraged by recent company commentary pointing to accelerating electricity demand. More electricity demand creates greater bill headroom for capital investment. In addition, demographic trends are driving new demand for all types of infrastructure, and the increasing digitalization of our world represents a favorable driver for digital infrastructure companies in particular.

Taking the long-term view, listed infrastructure should continue to deliver comparable returns to global equities at meaningfully lower volatility. For investors who do not yet have a strategic allocation to listed infrastructure, we would strongly suggest leveraging the current valuation backdrop as an entry point into an asset class that has the potential to add value to diversified portfolios for decades to come.

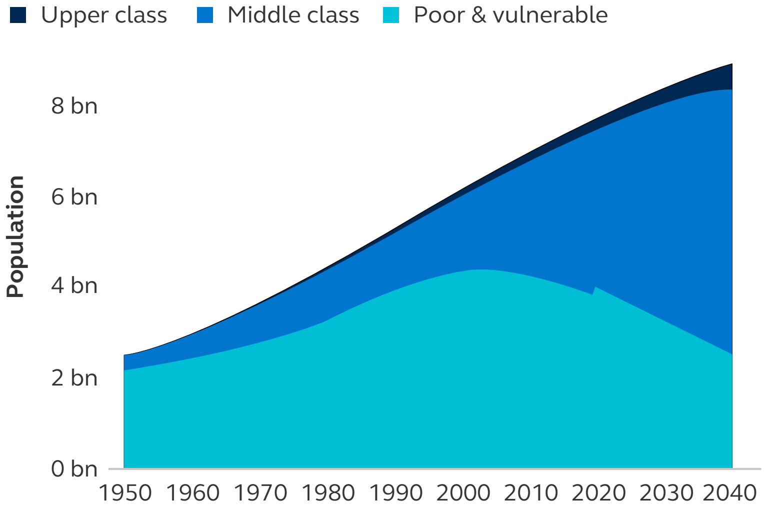
Annual investment in the clean energy transition should accelerate later this decade

(Average annual capital expenditures)



Source: EMIT database by McKinsey Sustainability Insights (September 2021), Network for Greening the Financial System 2021 (Net Zero 2050 scenarios) REMINDMAgPIE model; Vivid Economics; McKinsey Power Solutions

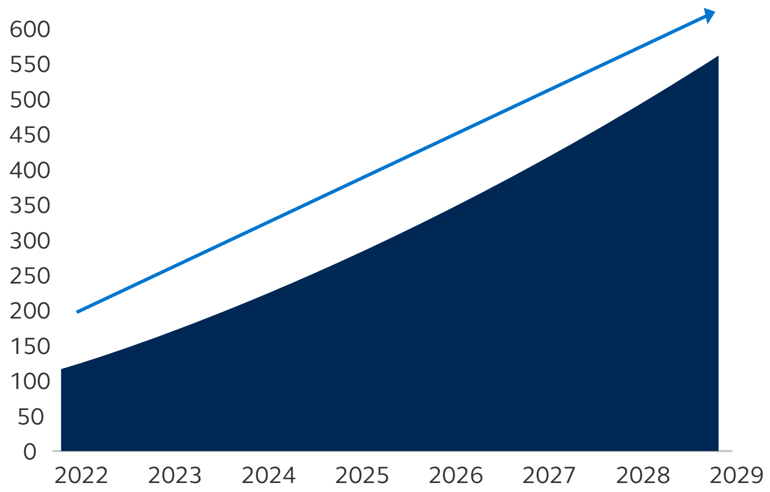
Increasing global middle class drives further demand for infrastructure



Source: Brookings Institute, May 2021.

Global mobile data traffic is expected to more than triple by the 2029

(EB per month)



Source: Ericsson Mobility Report November 2023.

Index descriptions

FTSE Global Core Infrastructure 50/50 Index - index launch date is 2 March 2015. The Index includes the listed stocks of companies that meet FTSE Russell's definition of core infrastructure. To be included in the index, companies must derive a minimum of 65% of their revenue from FTSE Russell-defined core infrastructure activities.

The MSCI All World Country Index - is designed to track broad global equity-market performance. It comprises the stocks of nearly 3,000 companies from 23 developed countries and 25 emerging markets.

The MSCI ACWI Utilities Index - captures large and mid cap representation across 23 Developed Markets and 24 Emerging Markets countries. All securities in the index are classified in the Utilities sector as per the Global Industry Classification Standard.

The Alerian MLP Infrastructure Index - is a composite of energy infrastructure Master Limited Partnerships (MLPs). The capped, float-adjusted, capitalization-weighted index constituents earn the majority of their cash flow from midstream activities involving energy commodities.

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