

Quarterly valuation update for the energy and infrastructure sector Q4 2024 update and spotlight on multiples in infra valuations



Quarterly valuation update **Introduction**



Welcome to the Q4 2024 edition of our quarterly valuation update, which provides a snapshot of some of the main publicly available valuation trends across the energy and infrastructure sector, covering both debt and equity metrics.

This quarter we continue to look at trends in debt and equity metrics relying primarily on publicly available information. In relation to the equity trends, we use the Forvis Mazars indices of listed infrastructure funds and listed renewable energy funds, compiled on the basis set out in Appendix 1 to this update.

In addition, this quarter we have included a spotlight on multiples in infra valuations.

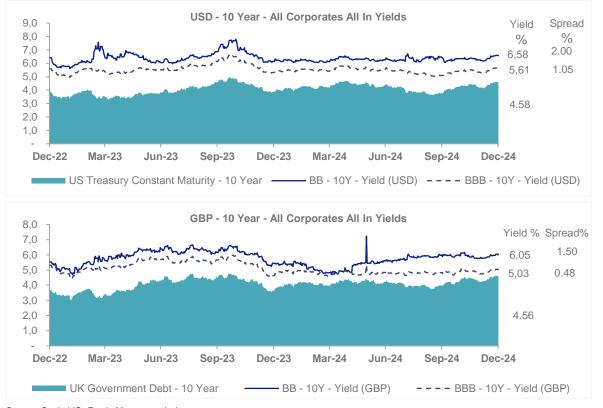
Disclaimer: The general indicative information provided by Forvis Mazars and its entities in this document are for general informational purposes only and are subject to further updates. While the information is provided in good faith, Forvis Mazars makes no representations or warranties of any kind, express or implied about the completeness, the accuracy, the reliability, the suitability or the availability with respect to the information contained in that document for any purpose. Any reliance placed on this document is therefore strictly at your own risk. This document does not replace formal valuation and advisory services carried out by an independent advisor and, as such, should not be used as a substitute for formal advice.

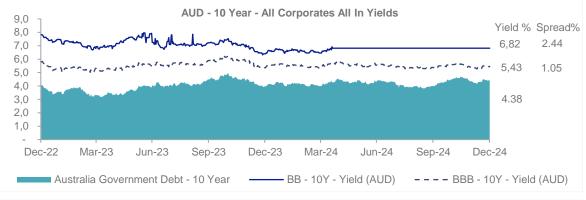


Debt valuation trends

Q4 2024 was characterised by rising Government bond yields across durations

- Government bond yields increased across all geographies during the quarter, moving towards the top of the yield range seen over the past 12-15 months. Although a number of central banks have cut benchmark rates in the past quarter, market expectations are generally for a slower pace and quantum of further rate cuts going forward.
- The rise in gilt yields has partly been absorbed through narrower bond spreads. But in the private markets, margins have remained relatively steady, and therefore the cost of debt has increased overall.
- The yield curve has normalised in most geographies, with longer durations typically priced up to 50-70bps higher than short-term durations





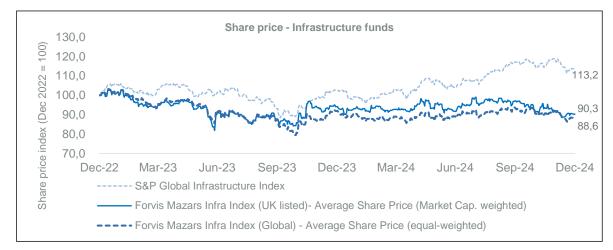


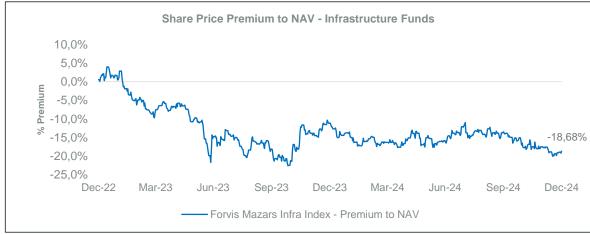
Source: Capital IQ, Forvis Mazars analysis



Equity valuation trends – infrastructure funds

Infrastructure funds have been trading at deeper discounts to NAV





- Share prices of infrastructure funds have reduced a little in Q4, linked in part to the increase in bond yields
- NAVs have either remained unchanged or decreased slightly, so the overall impact of decreased share prices is deeper discounts to NAV.
- Reported weighted average discount rates have been stable in the past 12 months. In its recently published interim results, HICL did increase the discount rate on a subset of assets to account for increased lifecycle risk. However, its overall view on discount rates across the sector was unchanged.
- Ultimately, this reflects the experience of infrastructure funds on transactions that continue to highlight the disconnect between public and private market valuations.

"The Company's Investment Manager continues to observe resilient valuations for high-quality core infrastructure assets across the private market, though transaction volumes remain below historical averages."

- HICL, September 2024 Interim Report

Source: Capital IQ, Reports from Funds, Forvis Mazars analysis



Equity valuation trends – renewable energy funds

Listed funds have traded at deepening discounts to NAV, but NAVs continue to be supported by transaction outcomes in the sector.





- This quarter, listed renewable energy funds have shown a downward share price trend, with NAVs also decreasing but to a lesser extent. Consequently, the discounts to NAVs have deepened during the period.
- The recent fall in share prices was driven by a mix of factors: ongoing geopolitical issues; grid and supply chain issues; and delays to project pipelines. The US presidential election result also impacted on sentiment in the sector.
- Similar to the infrastructure sector, however, asset valuations have been much more stable, and reported NAVs continue to be underpinned by transactional activity, with some funds disposing of assets at a premium to their carrying value. For eg: NESF reported that it has sold a 35 MW operational subsidy-free solar asset at a 14% premium and a 50 MW operational subsidy-free solar asset at a 21.5% premium.
- Yieldcos have therefore tended to keep reported discount rates steady. Reported weighted average discount rates have barely changed in the past 12 months.

"UK gilt yields have remained at elevated levels consistent to those prevalent at the start of the year and transactional activity continues to indicate support for the Company's valuation assumptions, therefore no changes have been made to discount rates at either 30 June 2024 or 30 September 2024 in relation to the macroeconomic backdrop."

- FGEN, September 2024 Interim Report

Source: Capital IQ, Reports from Funds, Forvis Mazars analysis

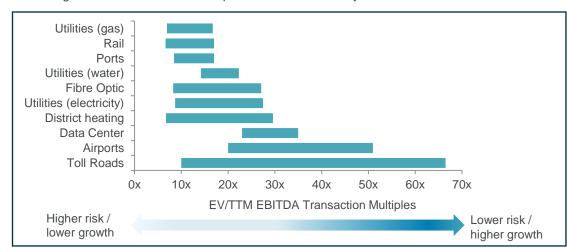


Spotlight on: The use of multiples in infrastructure valuations

The market method, relying on the application of transactional or trading multiples, is a standard valuation technique. In the infrastructure and energy sector, a deep understanding of what drives value needs to be at the heart of how to interpret these.

Expressing the value of energy and infrastructure assets as a multiple of EBITDA allows for straightforward comparison between assets and asset classes.

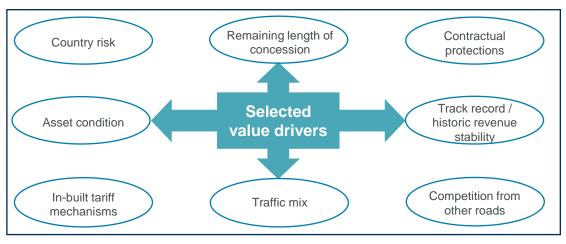
The following chart is an analysis of infrastructure sector transactions since 2020, focusing
on the relationship between transaction values and the trailing 12 months ("TTM") EBITDA of
the targets. It shows that the multiples have varied widely across different subsectors.



- · As the chart suggests, two of the key drivers of where multiples sit are risk and growth.
 - The impact of higher risk is relatively intuitive: it means higher discount rates are used in a DCF analysis, lowering the valuation.
 - High growth may be less obvious as there will often be risk attached to this growth.
 But growth is not always high-risk, e.g. for infrastructure assets benefiting from backended contractual payment mechanisms or companies with strong contractual orderbooks. In this context, the valuation is likely to be a high multiple of the relatively low current EBITDA.

Even within sectors, multiples can vary widely, and understanding why needs to be at the heart of every valuation analysis

• The very large range for toll roads for instance is linked to big variations across assets in terms of risk and growth profile, influenced by factors such as the following:



 The projects with very high transaction multiples have tended to be relatively insulated from competition, whilst benefiting from long remaining concession periods and contractual tariff mechanisms that lock in growth above inflation.

Sector-specific multiples can sometimes be more useful than EV/EBITDA multiples

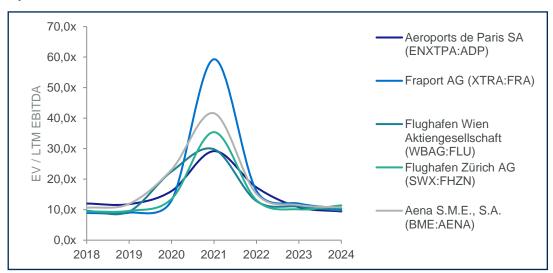
- Examples would include looking at EV as a multiple of regulatory asset value or linked to capacity in MW or as a multiple of number of premises passed or connected.
- Sector-specific multiples can be particularly useful where EBITDA data is limited or where EBITDA is negative (and therefore multiples can't be meaningfully applied).

Spotlight on: The use of multiples in infrastructure valuations

EV/EBITDA multiples are often used to sense-check or triangulate the DCF results. When doing this, understanding the EBITDA component of the multiples can be as critical as the multiple itself

The following chart shows how trading multiples based on last twelve-month ("LTM") EBITDA in the airport sector were impacted by the Covid-19 pandemic

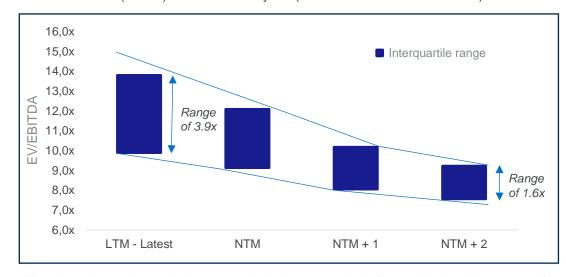
 The chart shows trading multiples for 5 listed European airport companies over the past six years.



- In the period when airports were closed or heavily restricted due to Covid-related measures, EBITDA levels dropped dramatically.
- Asset values also fell, but as these were driven primarily by the value of future cashflows, they reflected the expected recovery and long-term performance of these assets.
- LTM multiples therefore rose steeply, highlighting the disconnect between recent historical performance and long-term value expectations. They have since normalised as EBITDA levels have reverted towards historical levels.

Multiples of expected EBITDA in two years time can be a more reliable measure

• This chart again looks at trading multiples, this time comparing the current values of 20+ listed renewable energy power producers (IPPs) not just to LTM EBITDA but also expected next 12 months ("NTM") EBITDA and beyond (based on consensus forecasts).



- The chart shows that multiples are typically lower on a look-forward basis. It is common for EBITDA to increase over time as IPPs acquire or bring more assets online.
- More interesting to note though is the convergence of multiples, with a much smaller
 interquartile range on a 2-year look forward basis. Valuations are based on long-term future
 cashflows rather than historic results, and future EBITDA multiples can therefore be more
 reliable cross-checks. In the case of renewable IPPs, they are more likely to account for
 development portfolios that are not necessarily cash generating at the point of valuation.



Quarterly valuation update **Conclusions**

Three key themes from Q4 2024:

Rising Government bond yields, partly absorbed through lower spreads

The underlying cost of debt rose a little in the past quarter, driven by increasing gilt yields. The overall change was not dramatic; however, we would expect that if they continue to rise into 2025, we may start to see a more direct impact on discount rates and transaction volumes.

Listed funds trading at discounts to NAV but underlying asset valuations holding steady

Despite the trading performance of listed funds, underlying asset valuations have remained relatively steady in the past quarter, with little movement in discount rates. In the renewable energy space, lower power price forecasts have impacted modestly on asset values, but listed funds have continued to sell assets at valuations that are higher than the listed carrying values.

Multiples can be an important part of a valuation analysis but sector knowledge is needed to apply them reliably

Variations in multiples are driven by asset and sector-specific factors that impact on risk and growth potential amongst other things. When applying multiples, understanding the EBITDA component is often critical. Forward EBITDA multiples or sector-specific multiples can be more useful than historic EBITDA multiples by providing more normalised results.



Appendix 1

Information about the Forvis Mazars indices



Infrastructure is an increasingly mature asset class, with an increasing number of listed and unlisted funds set up specifically to invest in and manage real assets across the infrastructure and energy sectors. For the purpose of our analysis, we have constructed two global indices that focus on listed funds, as follows:

- · An index of infrastructure funds, currently including 9 funds with activities across 15 countries
- An index of renewable energy funds, currently including 18 funds with activities across 23 countries

While other infrastructure and energy company indices exist in the public domain, they tend to have a broader scope, including for instance construction companies, transport operators, concessionaires and utilities to gauge broad sentiment across the sector.

By focusing on pure asset owners, the Forvis Mazars indices aim to be more closely aligned with market sentiment on the valuation of these assets. This is reflected in this update and includes a number public statements from funds on how they are currently approaching their own valuations.



Contact

Forvis Mazars

Ben Morris

Partner ben.morris@gif.mazars.com

Karishma Merchant

Director karishma.merchant@gif.mazars.com

Julian Macmillan

Director julian.macmillan@gif.mazars.com

Forvis Mazars is the brand name for the Forvis Mazars Global network (Forvis Mazars Global Limited) and its two independent members: Forvis Mazars, LLP in the United States and Forvis Mazars Group SC, an internationally integrated partnership operating in over 100 countries and territories. Forvis Mazars Global Limited is a UK private company limited by guarantee and does not provide any services to clients. Forvis Mazars LLP is the UK firm of Forvis Mazars Global.

Visit forvismazars.com/global to learn more about the global network.

© Forvis Mazars 2025. All rights reserved.

