Quarterly valuation update for the energy and infrastructure sector

Q4 2022

mazars

Quarterly valuation update
Introduction

Welcome to the Q4 2022 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.

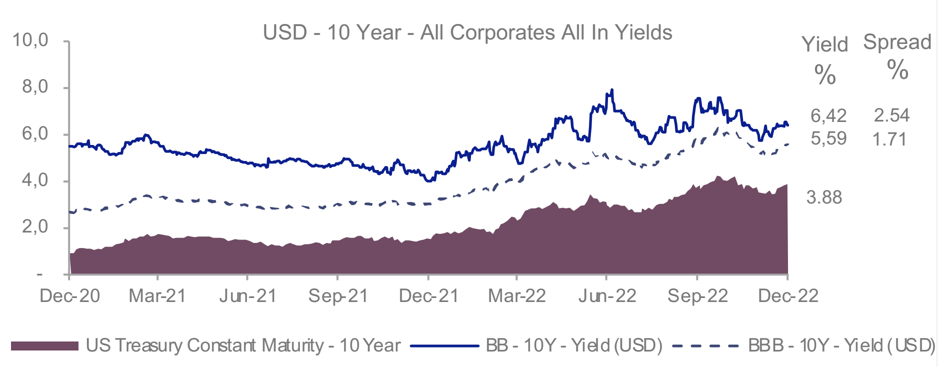
This quarter we continue to look at trends in debt and equity metrics relying primarily on publicly available information. In relation to the equity trends, we use the Mazars indices of listed infrastructure funds and listed renewable energy funds, compiled on the basis set out in Appendix 1 to this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

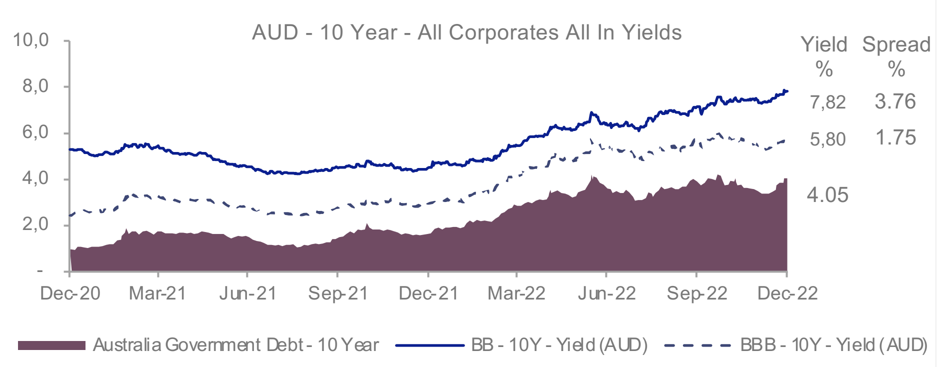
In addition, this quarter we have included a spotlight on valuing new sectors by comparing and contrasting return and risk expectations with established infrastructure sectors.

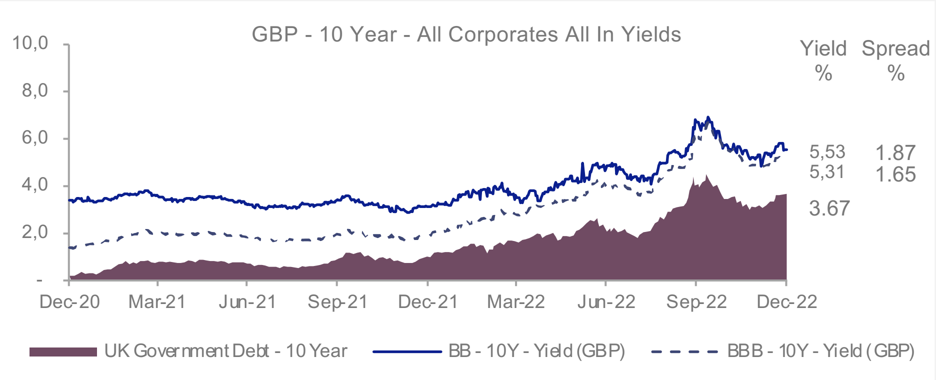
Quarterly valuation update
Debt valuation trends

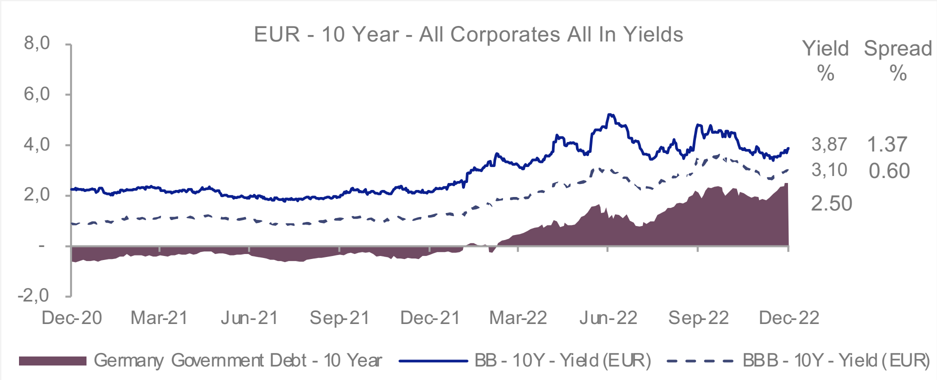
The rise in the cost of debt over the past year has mostly been driven by the increase in underlying Government bond yields

- Government bond yields are relevant to valuations because they are often used to inform the risk-free rate and also influence the cost of debt.
- Following significant increases in Q3, the last quarter of 2022 saw some stabilisation of the Government 10-year bond yields. There were further central bank interest rate increases in many jurisdictions, but signs that inflationary pressures may have reached their peak.
- The graphs show also how investment grade bond spreads have remained fairly consistent in recent quarters, but BB spreads have reduced significantly. In the UK, this trend has been particularly striking, with average BB yields very close to those for BBB-rated bonds.





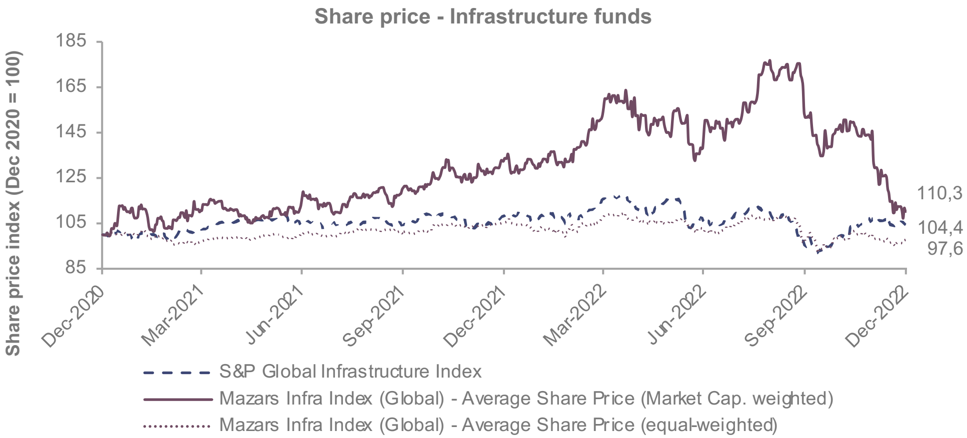




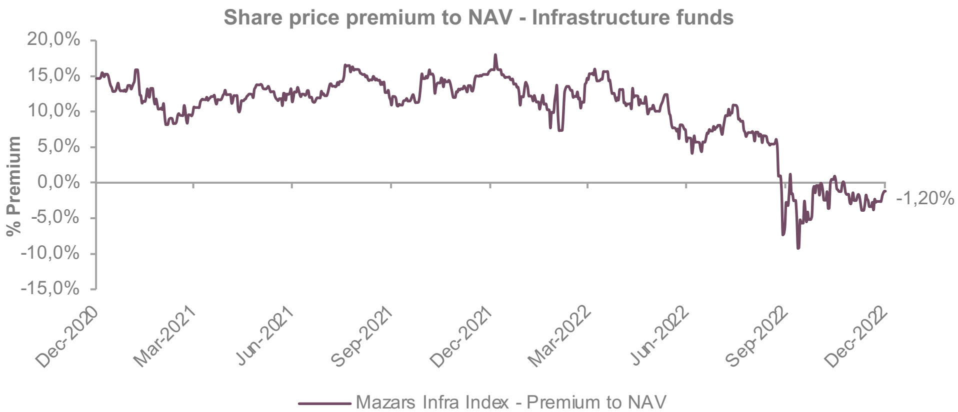
Source: Capital IQ, Mazars analysis

Quarterly valuation update
Equity valuation trends – infrastructure funds

Robust market demand has put a limit on how far rising risk-free rates have impacted on discount rates



Source: Capital IQ, Mazars analysis



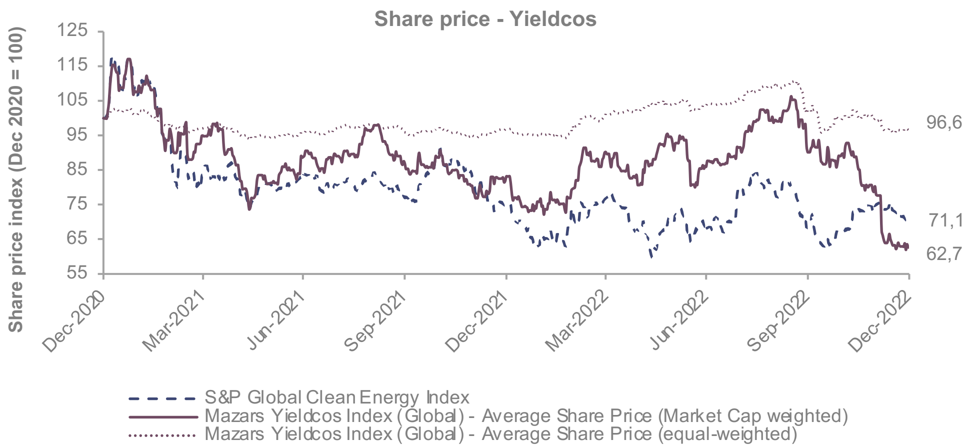
Source: Capital IQ, Reports from Funds, Mazars analysis

- The top left graph shows that on a weighted average basis, share prices of infrastructure funds reduced overall in Q4 2022. However, on an equal weighted basis, they were actually fairly flat over the quarter.
- The volatility seen towards the end of Q3 thus stabilised in the following quarter, and this can be seen also in the premium to NAV graph on the bottom left. But stabilisation is not the same as full reversal of previous falls. Infrastructure funds were, on average, still trading at a small discount to NAV at the end of Q4.
- A number of funds announced increases to discount rates used to value their portfolios over the past quarter, although in some cases this has been offset by inflation and other assumptions. It could be that the discount to NAV trading positions reflected a market view that discount rate rises have further to go given the higher cost of debt.

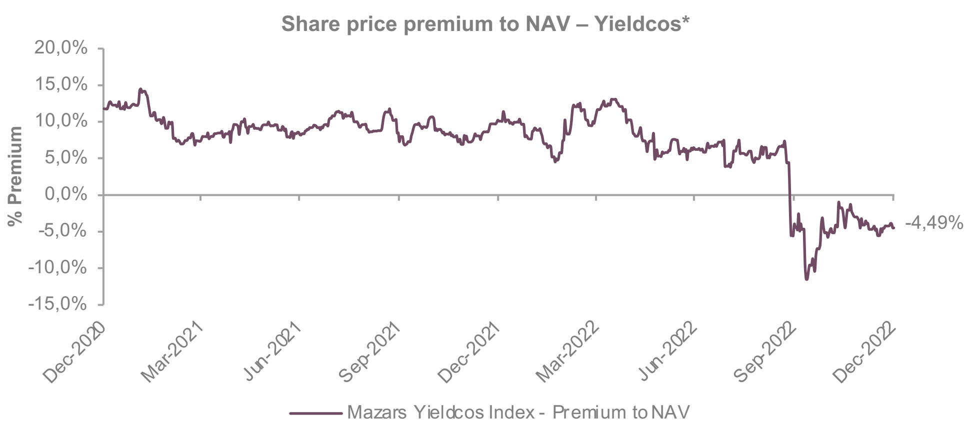
"Market activity has been muted over the last few months as transaction volumes are typically reduced over the northern hemisphere summer. As a result, relevant data points, reflective of the current market environment, to support core infrastructure discount rates are very limited. The Company (HICL) has therefore considered the significant increase in long-term government bond yields and the corresponding reduction in the implied equity risk premium over the last six months, and has increased the portfolio's weighted average discount rate from 6.6% to 7.1%." – HICL (Interim results report 2022)

Quarterly valuation update
Equity valuation trends – renewable energy funds

Discount rates have been rising in the sector over the last three to six months and expectations are of lower asset values



Source: Capital IQ, Mazars analysis



Source: Capital IQ, Reports from Funds, Mazars analysis

**The NAVs for New Energy Solar Ltd (ASX: NEW) include share capital return from 28 Nov 2022 onwards*

- Share prices in listed YieldCos were generally flat over the quarter (on an equal weighting basis). Sentiment across the broader sector remained positive, reflecting a positive climate for renewed greenfield activity in multiple markets.
- In relation to YieldCos, the market reacted positively to getting greater certainty around price caps and windfall taxes. But YieldCos are trading at a discount to NAV, weighed down by the expectation of valuation reductions as discount rates react to the higher cost of funding, potentially without the tailwind of continuing increases in power prices.
- How much further do discount rates have to go? Market appetite for assets remains healthy, with continuing competition for assets. This appears to be putting a brake on discount rate rises, although processes have stalled in some cases where sellers are holding onto price expectations that buyers can no longer meet.

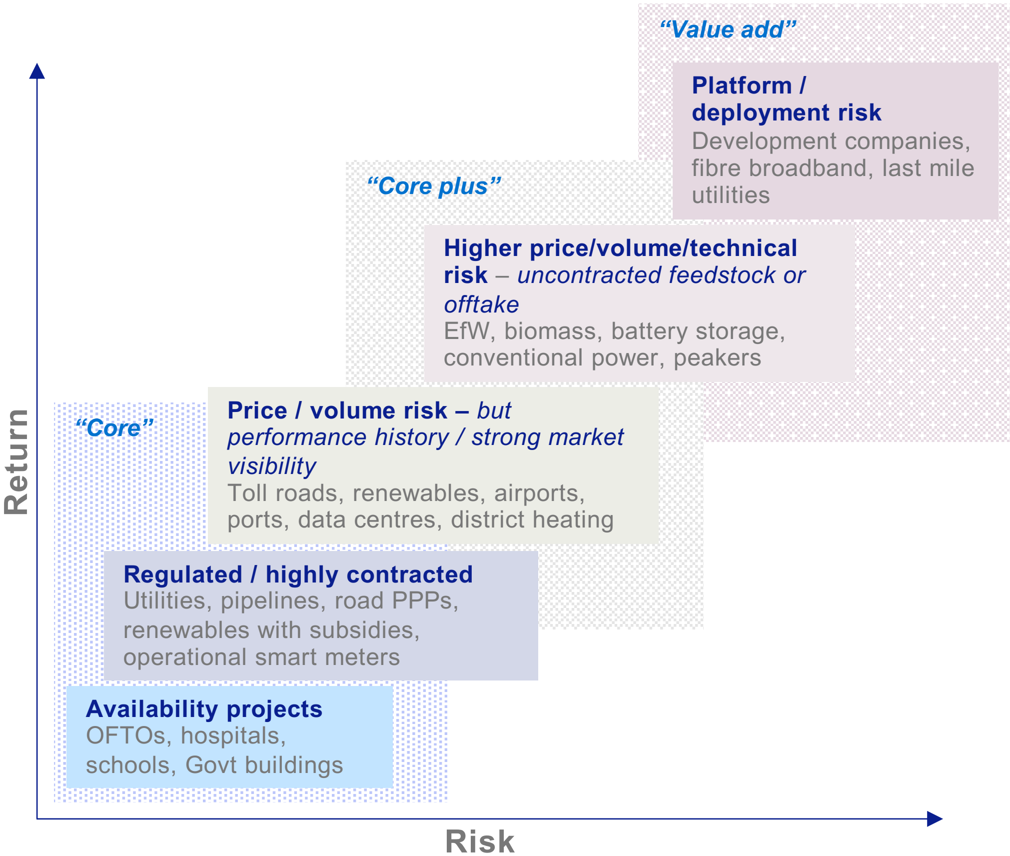
"Long-term government borrowing rates increased to a lesser degree in North America and Europe compared to the UK and therefore increases in unlevered discount rates in these geographies tended to be lower than the UK ." – SEEIT (Interim results report 2022)

"The valuation discount rates applied to investments in the UK have been increased by more than those in the EU (by approximately twice as much) reflecting the higher long-term government bond yields in the UK." – TRIG (Q3 2022 Net asset value update)

Quarterly valuation update
Spotlight on valuing new sectors (1)

New sectors can be hard to value – but comparing risk profile to established sectors is a key place to start

This heavily simplified graphic shows how required returns increase with key dimensions of risk across the infrastructure sector



Some key starting questions we ask when looking at an asset in a new sector:

1. **Does this look and feel like an infrastructure asset?**
   - Based on proven technology (even if new elements)?
   - Natural barriers to entry / monopolistic characteristics / downside protections?
   - Solid basis for long term revenue and cost assumptions (even if there is uncertainty attached to these)?

2. **Which existing sector does it most closely compare to?**
   - Broad risk profile? (identifying key risks in common)
   - Key points of difference? (And quantifying these: what happens to returns in realistic upside and downside cases?)

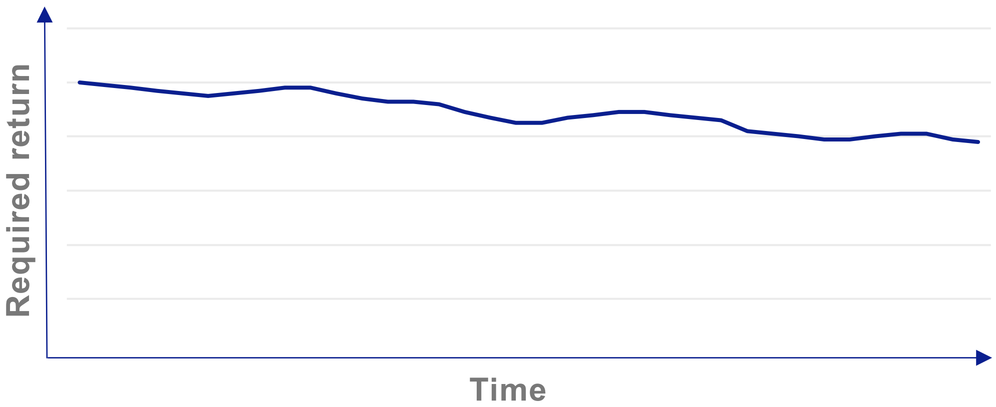
3. **What other adjustments are likely to be needed?**
   - Lack of market, debt unavailability?
   - Size / liquidity?
   - ESG story?
   - First of many or one off? (likely market interest in securing first-mover advantage?)

Assets in new sectors are not inherently more risky than analogous sectors, and indeed may be less risky. But newness can itself create a dynamic that means a risk premium is appropriate. We explore this on the next slide.

Quarterly valuation update
Spotlight on valuing new sectors (2)

Market dynamics change with sector maturity which, in turn, drives sector risk and return expectations

Project risk in a sector can objectively change over time as the market matures



Examples of project risk changes in a sector

Revenue
- Increasing data and experience means greater price certainty
- Also increases potential to contract longer-term, driving further revenue certainty

Counterparty Risk
- More choice and track record of contractors, suppliers and offtakers
- Greater ability to mitigate revenue and cost risks

Technology Maturity
- Track record generates confidence
- Investors able to learn from experience – greater confidence around key assumptions and lower alpha required on discount rate

But there can also be changes to returns expectations driven by market activity rather than changes to project risk

Typical market developments as a sector matures

1. **Increased transactional activity:**
   - More precedents and data for historical transactions, increasing valuation certainty
   - Higher confidence of successful exit for closed-end / PE funds

2. **Higher chance of successful debt raising activity:**
   - Investor confidence around sector risk profile
   - More access to capital

3. **Encourages more market entrants and M&A activity:**
   - Increased competition, which drives up prices
   - Larger deal sizes, generating economies of scale and attracting investors with a lower cost of capital

These characteristics are complementary, driving interest and investment into the sector.

Quarterly valuation update
Conclusions

Three key themes from Q4 2022:

Slight reduction in the gilt rates in Q4	Following significant rises earlier in 2022, the cost of debt remained at elevated levels in Q4 2022. But the trajectory was more stable, with signs that interest rates and inflation rates may have peaked or be close to peaking in a number of markets.
Market appetite remains positive; Increased discount rates across energy and infrastructure sector	The demand for quality infrastructure and energy assets remained strong in Q4. But the higher cost of debt had started to feed into higher reported equity discount rates across sectors. In some transactions, there were gaps emerging between buyer and seller expectations.
Projects in new sectors can be valued by comparison with more established sectors, while accounting for relative risk and market maturity	New sectors can be challenging to value. We have noted that risks can often be compared in practice to more established sectors and this is a key valuation approach. As a sector becomes more established, discount rates often reduce: this is both because project risks reduce but also because of changing market dynamics.

Appendix 1

Information about the 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 8 funds with activities across 15 countries
- An index of renewable energy funds, currently including 20 funds with activities across 20 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 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.

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