



Quarterly valuation update for the energy and infrastructure sector

Q2 2023 update and spotlight on Debt

mazars

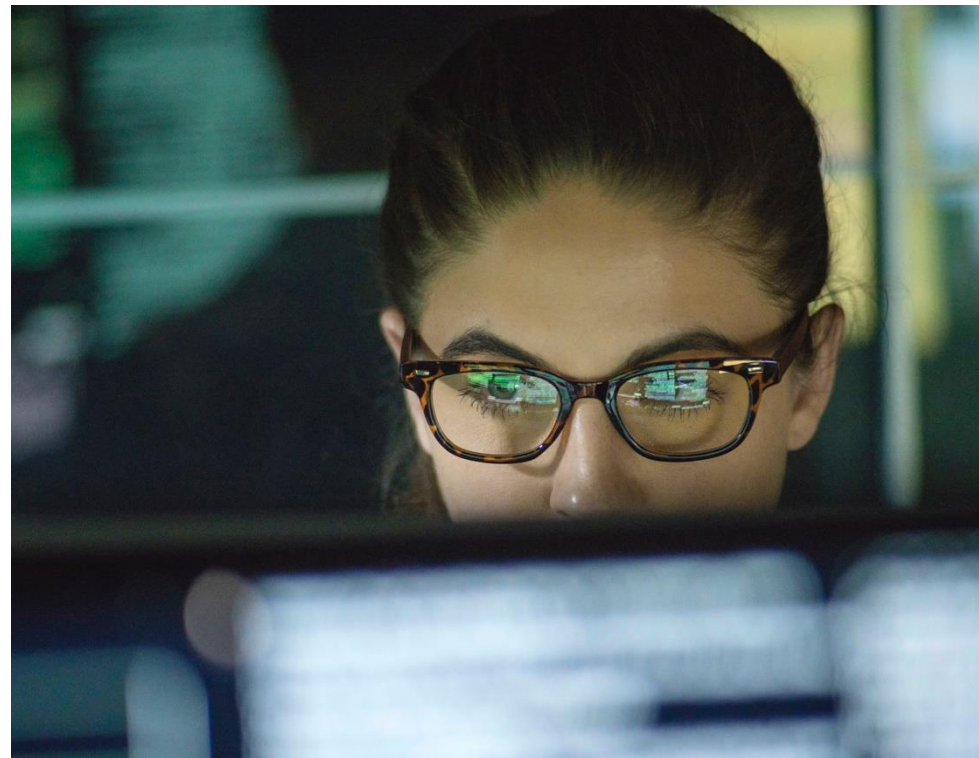
Quarterly valuation update

Introduction

Welcome to the Q2 2023 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 how debt impacts on equity valuations in the sector. Although traditional valuation theory links higher debt to more risk and therefore a higher cost of equity, the approach in infrastructure valuations needs to be more nuanced than this.



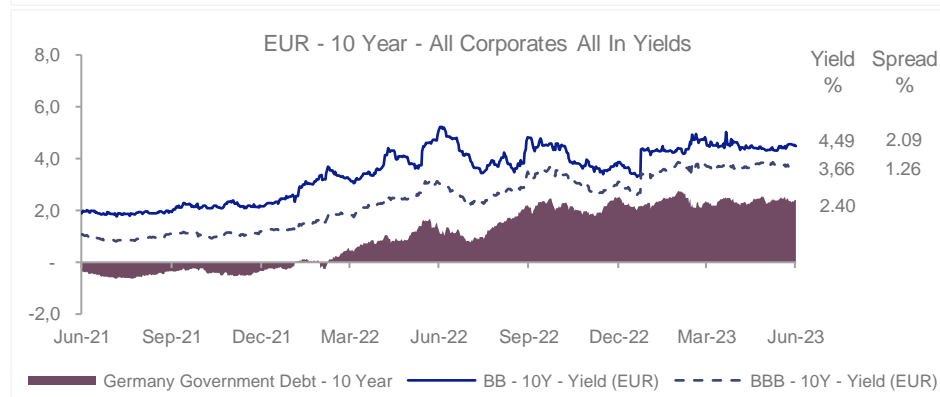
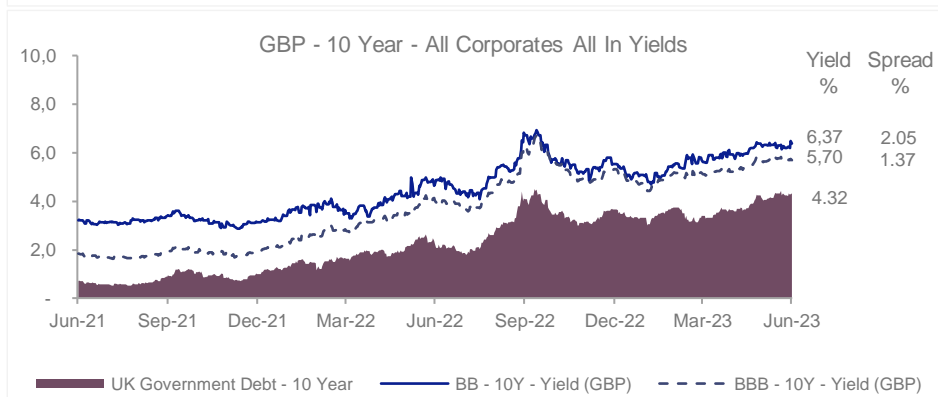
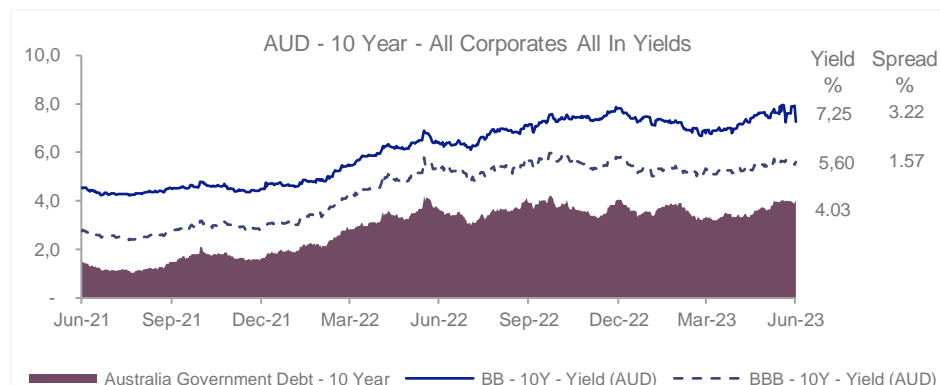
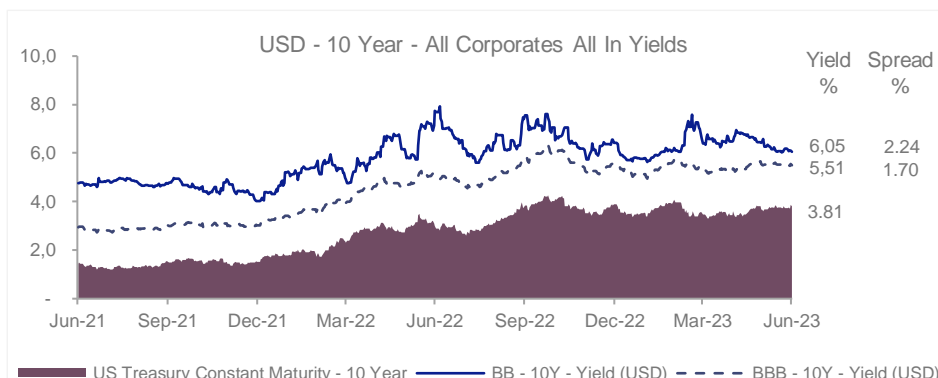
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Debt valuation trends

Although the US and Eurozone saw a stable cost of debt in Q2, renewed inflation concerns led to increases in the UK

- 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.
- The big picture is that the rise in cost of debt during 2022 has been maintained in H1 2023 – investors are now adjusting to this “new normal”.
- Other important valuation trends include reduced spreads between investment and sub-investment grade bonds and inverted yield curves in some markets.

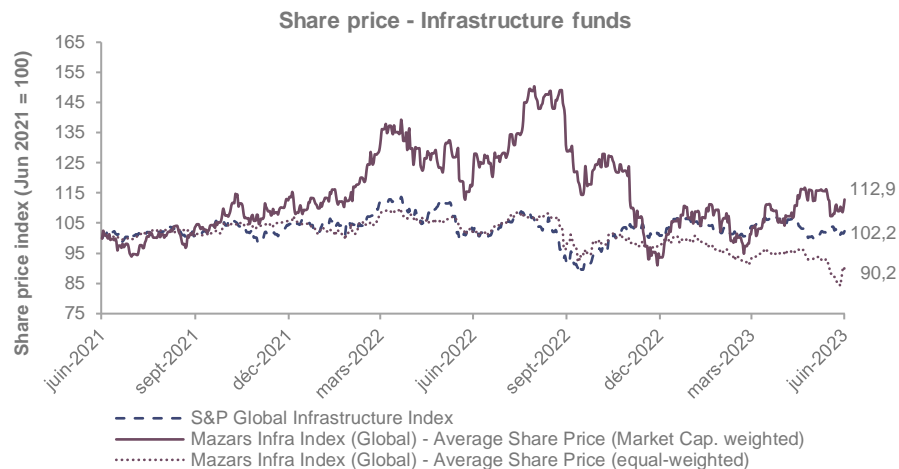


Source: Capital IQ, Mazars analysis

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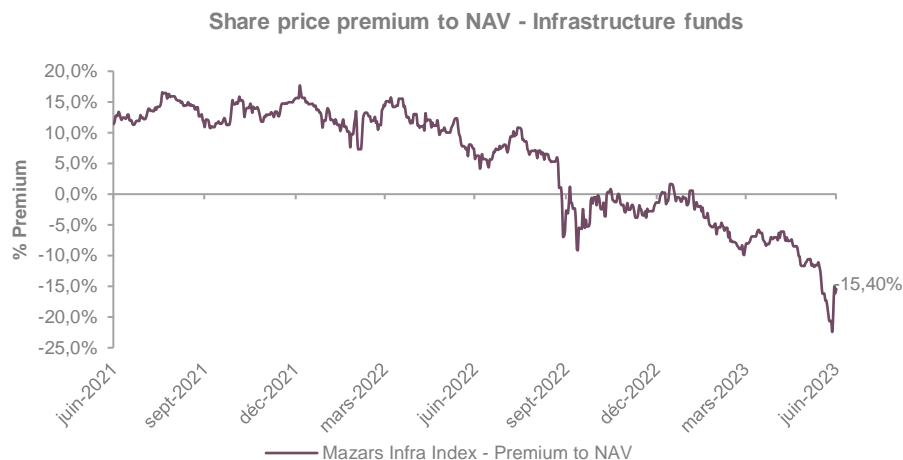
Equity valuation trends – infrastructure funds

Q2 saw a deepening trend of listed infrastructure funds trading at discounts to NAV



Source: Capital IQ, Mazars analysis

- Several funds have announced small increases to weighted average discount rates in the past two quarters. But these have typically been offset by other changes, including higher inflation assumptions.
- NAVs have therefore been increasing or stable rather than decreasing, and share prices of funds have not reflected this movement – leading to a disconnect. Historically a 10%+ premium to NAV was typical for infrastructure funds.
- HICL’s comments below point to some softening of transactional activity in the context of a period of price discovery, and we have also seen transactions taking longer to close in parts of the market.



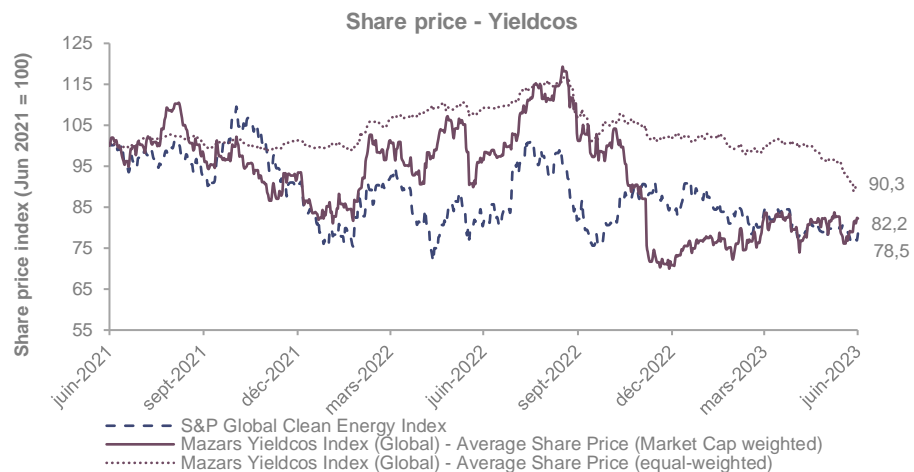
Source: Capital IQ, Reports from Funds, Mazars analysis

“As market participants continue to assess the impact of rising long-term government bond yields on asset prices, the Investment Manager has observed greater investor focus on asset quality, a wider range of bid pricing for assets, and evidence of differing views between buyers and sellers over asset pricing, which is contributing to the reduced level of transaction activity. The Investment Manager expects transaction activity to increase during 2023 as the pricing of long-term government bond yields continues to settle.” – HICL (Annual Results Report, March 2023)

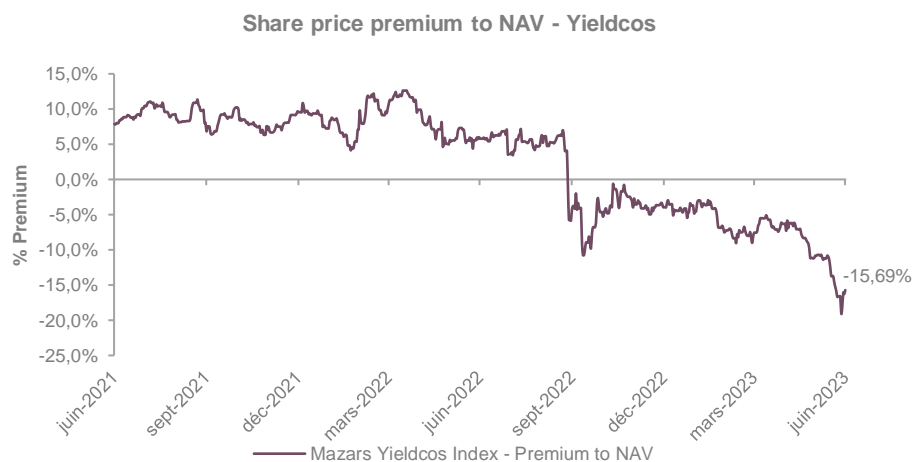
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Equity valuation trends – renewable energy funds

In the renewable energy sector, there have been similar pressures on valuations



Source: Capital IQ, Mazars analysis



Source: Capital IQ, Reports from Funds, Mazars analysis

- Similar to infrastructure funds, listed renewable energy funds have been trading at deeper discounts to NAV during the quarter as part of a broader trend. But in contrast to infrastructure funds, share prices are not at similar levels to two years ago – they average 20% lower.
- There has been stronger evidence than in the broader infrastructure sector of rising discount rates in private transactions. To some extent these are being mitigated by assumptions elsewhere. But forward power prices are no longer providing the boost to valuations seen during 2022.
- The recent decision by Vattenfall to withdraw from a large UK offshore wind project puts a spotlight on the economics of greenfield renewable projects in the context of global cost inflation (especially in the wind sector), softening power prices and a higher cost of capital.

“During the year, the UK rate of inflation increased significantly. In the context of higher interest rates in response to changes to the Bank of England (“BoE”) base rate, the yield on UK long-term gilts has also increased, putting upward pressure on discount rates.” – NESF (Annual results report, March 2023)

“Generation has been slightly below budget and achieved power prices have also been lower than forecast at 31 December 2022, mitigated by higher realised Renewable Energy Guarantees of Origin certificate (REGO) prices...” – TRIG (NAV Update, Q1 2023)

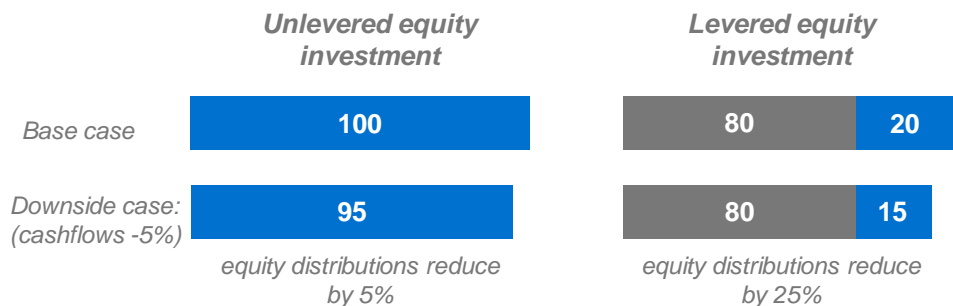
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Spotlight on: the impact of debt on valuations

Valuation methodologies typically adjust for leverage as there is a basic assumption that the introduction of debt adds risk to an equity stake

The theory...

- For equity investors in an infrastructure or energy project, debt will often be part of an optimal capital structure that allows for higher equity returns by introducing lower cost funding (as well as often providing a “tax shield”).
- For valuers of an equity stake in a project, the introduction of debt means more financial risk attached to that stake – therefore the required equity discount rate needs to be higher. The simplified diagram below shows why debt adds to the volatility of an equity investment even if a project is a long way off default or lock-up thresholds. If the below represents one year of cashflows and is repeated, the potential impact on net present value (NPV) can be very significant.
- Valuers relying on the Capital Asset Pricing Model (“CAPM”) will also make a direct link between leverage and discount rate, by applying a levered beta. Under CAPM, that should be based on typical target leverage in the relevant market.



...whilst recognising the need for some nuance

Whilst debt can introduce risk, it can also reflect risk.

In the energy and infrastructure sector, high leverage is often a sign of low risk, not the opposite.



Some common examples:

- Availability-based PPP assets typically achieve leverage of well above 85%, sometimes above 90%. The reason that this is possible is that lenders assess the projects as having low operational risk and high levels of cash flow certainty.
- Projects which are heavily reliant on merchant cashflows typically achieve much lower leverage, and in some sectors this can be below 50%. Cover ratios would correspondingly be higher for these projects.

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Assessing the risks and adopting a market approach

A valuer needs to be specific about the impact of debt on an equity investment in this sector

Increased volatility – potential lock-up and default risk

- At the heart of any valuation exercise in the sector is understanding and modelling plausible downside scenarios. The introduction of debt is likely to mean that the equity returns are more variable under these scenarios.
- A valuer also needs to look specifically at the potential for covenant breaches. In extremis, default can destroy equity value completely. But periods of distribution lock-up could also have a significant impact on equity valuations, reducing NPVs.

Interest rate risk

- Not always a central valuation issue in the sector as interest rates are usually mostly or wholly hedged.
- But valuers do need to understand if the hedge in place is perfect or if there are potential risks of misalignment.
- Index-linked debt provides a topical example: how far are underlying cashflows contractually linked to that index? If this is more of a long-term valuation assumption, there may prove to be a significant risk in periods of inflation volatility.

Refinancing risk

- Many infrastructure assets have long-term amortising debt in place. But this is not always true, and in some sectors not the norm.
 - Assets with shorter-term debt with bullet repayment structures may be modelled with assumptions around the ease and cost of refinancing. The valuer needs to take a view of those assumptions.
 - Refinancing assumptions can also be used to enhance the base case (e.g. capturing an assumed lower long-term cost of debt or accelerated equity distributions at the point of refinancing). Again, the valuer needs to assess these in light of market conditions and also look at any potential restrictions on refinancing – for instance, gain share arrangements in PPP projects.
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- Typically these risks amongst others would need to be captured through the discount rate, judged through a comparison to benchmarks in the same sub-sector.
 - The gearing ratio may be a convenient point of comparison but it is the underlying risk profile that really matters.
 - It is also possible for different discount rates to be required in relation to the same asset, for instance if Midco / Bidco debt changes the risk profile of equity in one investment vehicle vs another.

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Conclusions

Three key themes from Q2 2023:

The cost of debt has settled in a new range, and asset owners are having to adapt to this

Long-dated gilt yields indicated a relatively stable trend over the past quarter, which therefore crystallises the rising yields experienced in H2 2022. Private debt transactions are still taking place, but asset owners are having to accept the higher cost.

This is starting to feed into the cost of equity despite continuing high competition for assets

Strong competition for energy and infrastructure assets has limited the extent of increases on asset discount rates to date. But the capital markets are expecting more to come and transactional trends are starting to bear this out.

When analysing the impact of debt on equity valuations, a nuanced approach is essential

The introduction of debt is likely to increase risks to equity investors and therefore the required equity discount rates. But these risks need to be analysed as part of a broader market benchmarking exercise.

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 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 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.

Contacts

Ben Morris

Partner
ben.morris@gif.mazars.com

Julian Macmillan

Director
julian.macmillan@gif.mazars.com

Karishma Merchant

Director
Karishma.merchant@gif.mazars.com

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