

Infrastructure in times of rising interest rates: what (not) to fear

Tania Tsoneva
Senior Director
Infrastructure Research
Tania.tsoneva@cbreim.com

Michael Staab
Director, Quantitative Real Assets
Research

Rens Boing
Senior Associate, Quantitative Real
Assets Research

INSIGHTS
September, 2022



Executive summary

Rising interest rates are a key concern for investors in long-duration assets such as infrastructure. While analysing the historic performance of listed and unlisted infrastructure assets against interest rates and other macro factors, we find quantitative support for traditional beliefs about infrastructure: its resilience, diversity and the relative stability of infrastructure returns.

In periods of below-average economic growth and high inflation, infrastructure performs better than general equities due to the defensive, inflation-linked nature of its cash flows. The diversity of infrastructure sub-sectors works to average out the sensitivity of the asset class to macro factors, including to today's record-high commodity prices. This means that well-diversified portfolios stand a better chance of generating superior risk-adjusted returns.

Introduction

With varying degrees of resolve, central banks in major economies are tightening monetary policy in response to record high inflation. According to Infrastructure Investor's *LP Perspectives 2022 Study*, 27% of investors in infrastructure point to an increase in interest rates as their primary concern for investment performance. This tops inflation risk, likely due to the fact that investors understand and accept the benefits of infrastructure to protect against rising prices. But how much, and for what reasons, should investors in infrastructure worry when interest rates start rising rapidly?

In our first series ([Infrastructure as an inflation hedge – look no further](#)), we examined the effectiveness of infrastructure to pass through inflation in revenues and capital values. The relationship with interest rates is more complex. This is because rates are a second order variable – the impact depends heavily on what spurred the interest rate increase in the first place, and how quickly and for how long the rates moved.

In this paper, we set out to explore the historic performance of infrastructure in rising interest rate regimes, recognising that near-zero policy rates dominated the macro landscape over the period of our study. Infrastructure as a long-duration asset class is sensitive to rate changes. The listed infrastructure markets have started to pull back since the start of 2022 partly due to the rate impact. That said, infrastructure returns are less sensitive than general equities to changes in both real government bond yields and real corporate borrowing rates. This is likely explained by the predominantly investment grade credit quality of the asset class and the generally well spread, long-dated debt maturities.

A higher inflation environment with rising interest rates is not good news for economies, consumers and companies, and comes with a whole host of social and political factors that are difficult to predict. While investors adapt and adjust for the regime shift, investment in infrastructure – being countercyclical and driven by essential social needs – will continue to drive earnings growth. Our investment theses are hence focused on the pressing needs of climate change and digitalisation while we stay acutely aware of the social dimension of the associated cost.

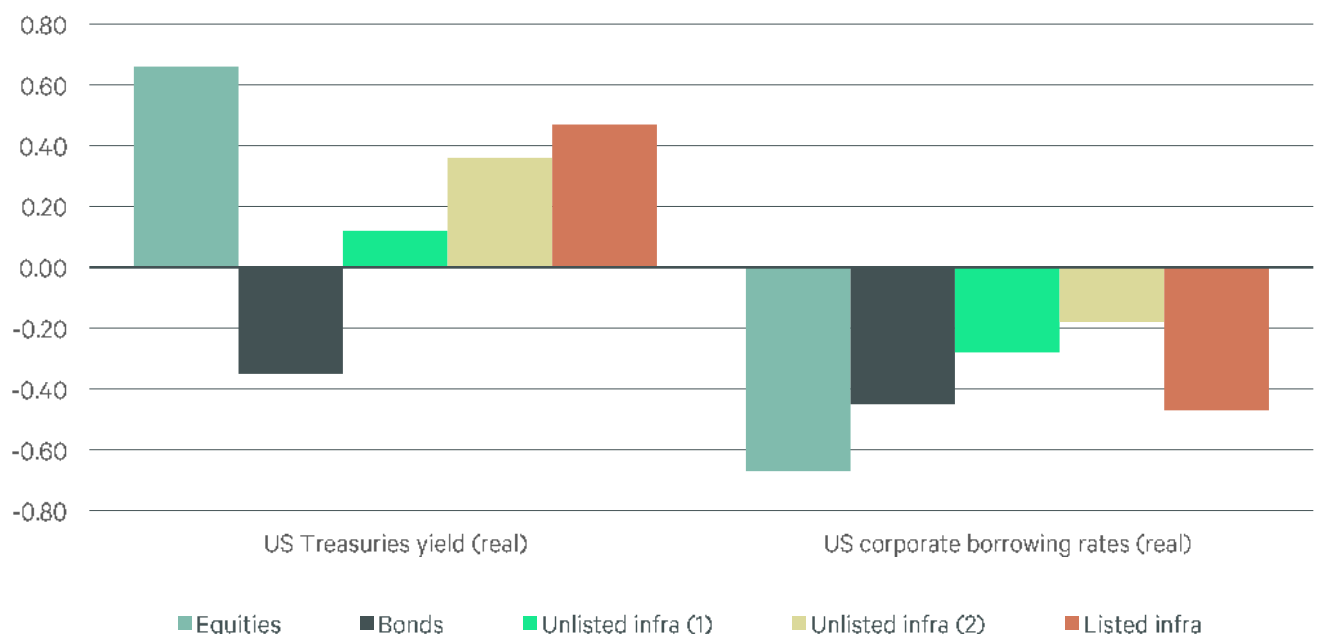
Why interest rates matter?

The two most obvious reasons are financing costs and the impact of discount rates on valuations. On both counts infrastructure should, in theory, score worse than non-financial corporates: it is able to sustain structurally elevated leverage due to its inherently more stable profile, while it also falls in the group of the so-called long duration assets. Duration measures the sensitivity to interest rates, and the present value of assets with longer term cash flows by definition is more sensitive to shifts in market discount rates.

As shown below, infrastructure returns on both the listed and unlisted markets exhibit lower correlations than general equities with both real government bond yields and corporate borrowing rates (fig. 1). Among the mitigating factors for infrastructure we note two: more robust credit quality and longer-dated, well-spread maturity ladder.

Following the pandemic, certain infrastructure sectors such as airports are entering the new rate regime with structurally higher debt levels. Overall, infrastructure has only moderately increased leverage while 42% of unlisted companies' debt is long-dated and matures beyond 10 years (fig. 3).

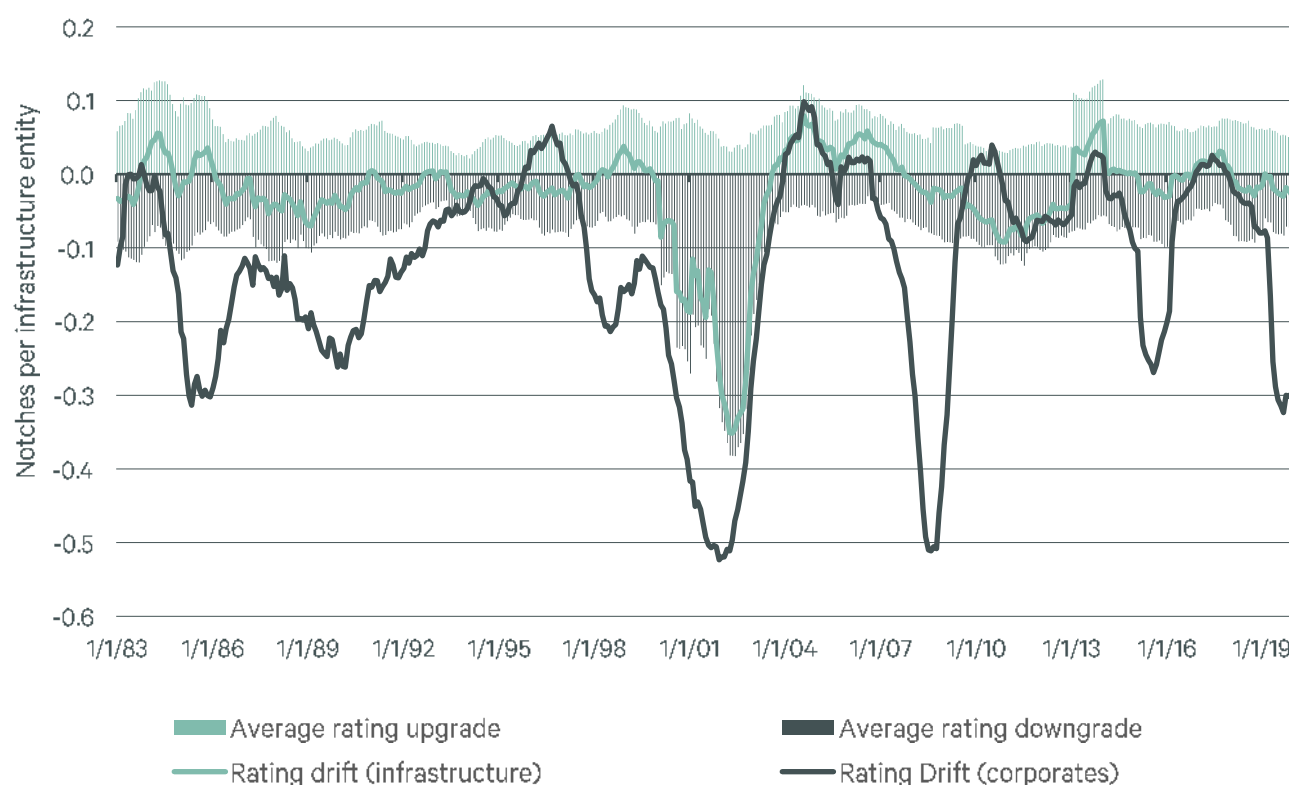
Fig. 1 – Total infrastructure returns exhibits lower correlations with real US Treasury yields and corporate borrowing rates



Source: Unlisted infrastructure (1): EDHEC Infra 300, unlisted Infrastructure 2: Cambridge Associates Infrastructure Index, listed infrastructure: FTSE 50/50 Core Infrastructure Index. General equities: MSCI World, general bonds: BoFA, 10 Year Treasuries yields and corporate bond rates: Factset. Period: Q2'2004 to Q4'2021.

As illustrated in fig. 1, the returns of all asset classes in the chart are negatively correlated with corporate borrowing rates. That said, both listed and unlisted infrastructure are less at risk from widening credit spreads than general equities. This is because the asset class' mostly investment grade profile has led to a more muted rating impact in different credit cycles (fig. 2). According to Moody's 1983-2020 Infrastructure default and recovery rates, 91% of total infrastructure securities are investment grade compared to 43% of non-financial corporates, a trend that has changed little in the last 15 years. The higher credit quality implies more cushion at times of risk re-pricing. As an example, since the start of 2022, credit spreads for companies rated BB+ increased twice as much as the credit spreads for investment grade companies rated BBB, according to our calculations and data from S&P Global Ratings.

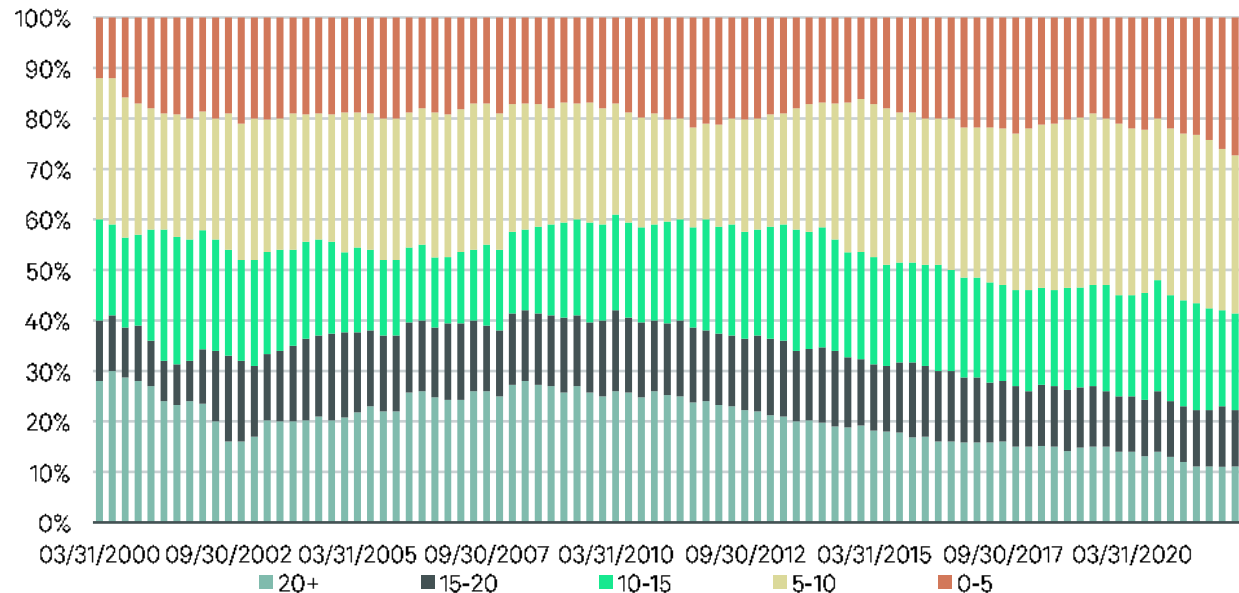
Fig. 2- Moody's rating drift (spread between average notches of rating upgrade versus average notches of rating downgrade) is lower for infrastructure entities than for non-financial corporates



Source: Moody's 1983-2020 Infrastructure default and recovery rates, published in September 2021.

Infrastructure companies also tend to lock in longer term debt so they are less exposed to refinancing risk at the short end of the rate curve (see fig. 3). Over time, the average maturity has shortened, likely as a result of the expanded definition of the asset class and the entrance of more service-oriented companies with lower debt tolerance. Furthermore, years of ultra-low interest rates and the pandemic-fuelled cycle in 2020 led to only a moderate spike in leverage for the asset class. According to the EDHEC*Infra* global database of over 600 unlisted infrastructure companies, the leverage of global infrastructure, measured by market value of debt to enterprise value, went up to 50% in 2021 from 46% in 2019. Likewise, net debt to EBITDA for CBRE Investment Management's portfolio of listed company investments rose to 4.7x in 2021 from 4.4x before the pandemic.

Fig. 3 - Unlisted infrastructure has well-spread, generally longer-dated maturities



Source: Years to maturity based on EDHEC*Infra*'s broadmarket private infrastructure debt, equally weighted, which includes 1,183 debt instruments with market capitalisation of \$244 billion.

Refinancing risk and covenant breaches

The areas that investors in infrastructure should watch are re-financing risk and potential covenant breaches. According to a recent study of Asia Pacific corporates by S&P Global Ratings, compressing margins and rising refinancing costs could erode the rating headroom restored in 2021. Applying a stress case of higher borrowing costs and inflation, S&P Global Ratings find that 16% of APAC corporates are likely to breach their rating triggers. Infrastructure entities with higher leverage and tighter covenants such as airports are most-at-risk while regulated utilities with stronger pass-through capacity are most resilient.

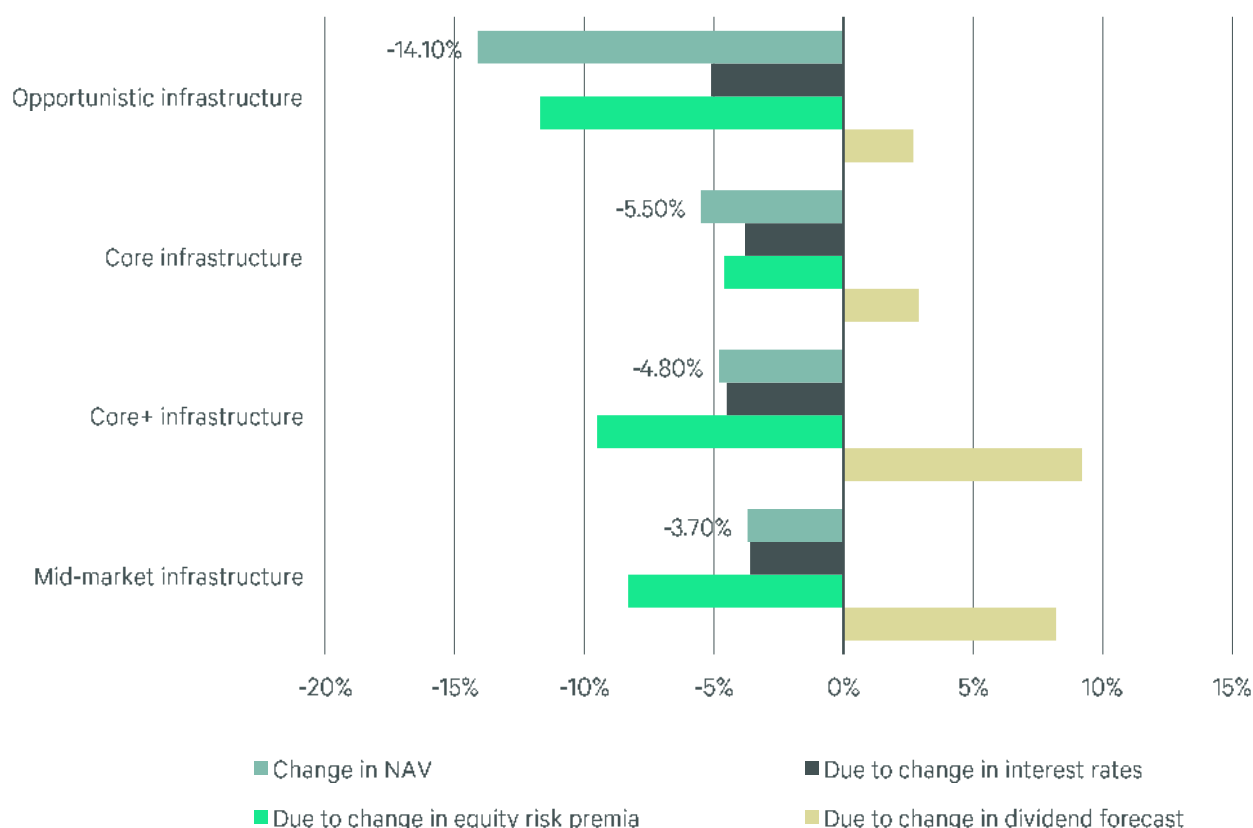
Investment strategies focused on prudent capital structure management, laddering debt maturities and proactively locking in fixed rates for longer will pay off in the current rate environment. As the market is not anywhere near consensus about the pace and peak of the rate trajectories, there is also a risk of asset mis-pricing if investors fail to swiftly factor in the steepening rate curve in valuations.

Discount rate is only one factor affecting valuations

When it comes to discount rates, while an increase in interest rates will impact discount cash flow (DCF) valuations negatively across the board, the overall impact is a function of two more variables: the change in expected dividend cash flows and the change in equity risk premiums. In fig. 4 we illustrate this point by presenting the impact on valuations (excluding past dividend payouts) on unlisted infrastructure strategies as computed by the data provider EDHEC*Infra* over the preceding five years. According to EDHEC*Infra*, core-plus and mid-market strategies experienced the least impact in valuations as changing interest rates were offset by higher expected dividends. Core-plus strategies tend to have relatively more stable cash flows than opportunistic strategies and some volume exposure. Looking forward, their cash flows are expected to benefit from the on-going pandemic rebound in certain sectors, such as transport, and the slowing, but still positive, global economic growth.

Furthermore, we need to consider market dynamics and the phenomenal growth of fund raising for infrastructure in recent years despite the pandemic. Accumulating amounts of dry powder in infrastructure, which approached \$300 billion in September 2021 according to Prequin, might support transaction multiples even if interest rates continue to move higher. This is especially true for sectors with attractive growth potential. For example, recent deals in the digital towers space approached 25x enterprise value (EV) to EBITDA notwithstanding these assets' relatively high leverage.

Fig. 4 – Average change in net asset value (NAV) for global core, core plus, opportunistic, and mid-market strategies over the last five years



Source: EDHEC*Infra* valuation metrics, accessed on 29 August 2022. This analysis shows the average change in NAV due to the change in dividend forecast, interest rates and equity risk premia, but does not include paid-out dividends. Strategies as defined by EDHEC*Infra*.

Positive infrastructure returns in rising interest rates

Infrastructure returns vary less than general equities in different interest rate periods

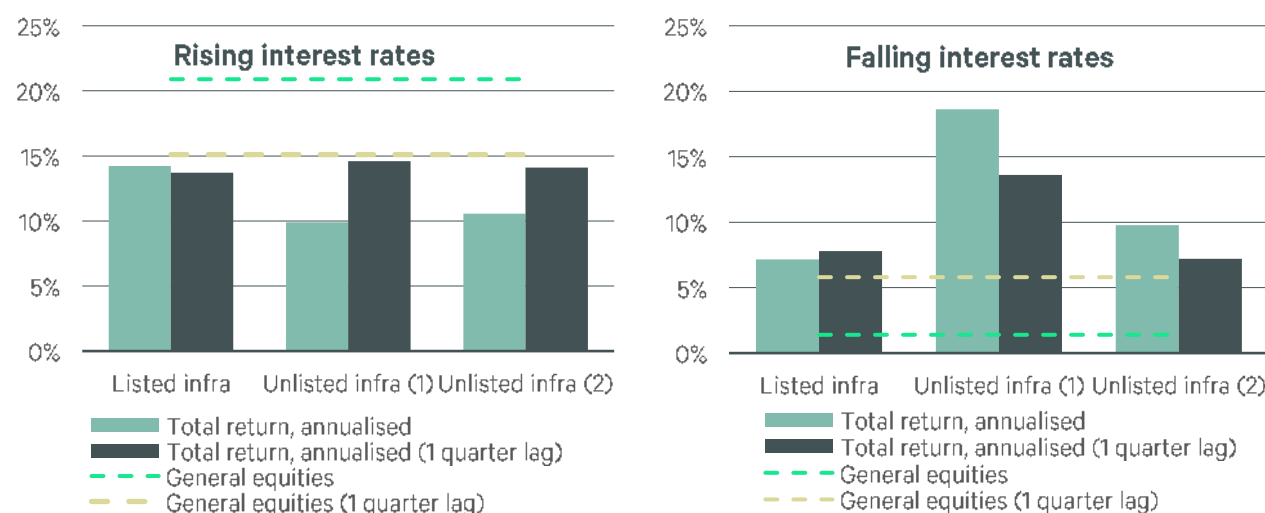
There are different approaches to define interest rate regimes, and given the relatively short period of our study, all face the same challenges. The limitations of unlisted infrastructure data are well known, and explain why our study spans no earlier than 2004 when private infrastructure markets started to take off. In our methodology (see Appendix), we use nominal Treasury yields as the determining factor and dissect periods depending on average back and forward-looking US Treasury yields. Policy rates were generally low in absolute terms and US treasuries relatively volatile, but our methodology identifies well upward and downward cycles with an average “rising rate” cycle of four quarters.

Looking back, all asset classes in the chart register positive performance during periods of rising interest rates, and in most instances, this performance is stronger than during falling interest rates. While the outcome seems counterintuitive, the explanation lies in the coincidence of rising rates with either strong economic growth and/or high inflation. Interest rates are a lever that central banks pull to prevent an economy from overheating or to tame already escalating input prices.

Infrastructure assets tend to benefit from economic growth, but not to the same extent as general equities. Therefore, it is not surprising that general equities outperform infrastructure in periods of rising interest rates. We estimate that it takes about one quarter after the start of an upward cycle for infrastructure returns to recover ground and pair up to general equities.

Conversely, infrastructure outperforms general equities during falling interest rate periods. This is because infrastructure entities provide essential services often under regulated or long-term contracted arrangements. The built-in downside protection supports their cashflows during times of slowing or contracting economic output. And last, but most important, general equities show a much wider variability of performance in rising than in falling interest rate periods (see green dash line in the two charts below) than infrastructure.

Fig. 5 – Equities outperform infrastructure in rising rate periods; infrastructure is more stable across periods



Source: Unlisted infrastructure (1): EDHEC Infra 300, unlisted Infrastructure (2): Cambridge Associates Infrastructure Index, listed infrastructure: FTSE 50/50 Core Infrastructure Index. Equities: MSCI World. Period: Q1 2004 – Q4 2021.

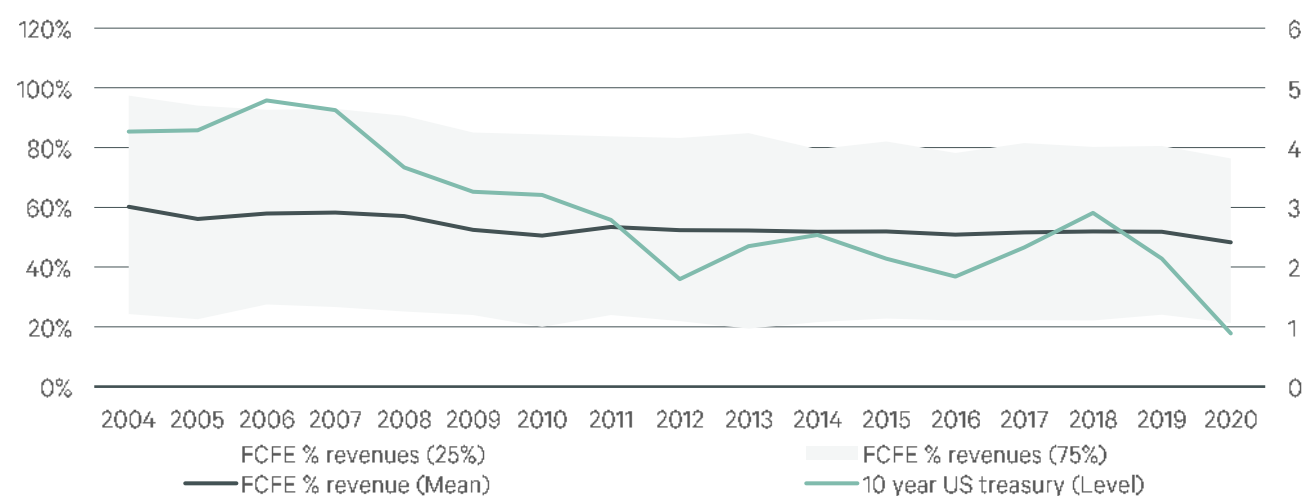
At the company level, managing interest rate exposure is mostly left to the management teams. Only in certain regulated sectors – North American regulated utilities, for one – are infrastructure companies entitled to recover rising debt costs from ratepayers, albeit with a time lag. For example, the allowed return on equity (ROE) of Florida Power and Light Company (FPL) has an authorised range of 9.7% to 11.7% with a midpoint of 10.6%, which may increase in the event of a sustained material increase in the 30-year treasury rate. In the United Kingdom, regulated water, electricity, gas, and airport sectors receive an allowance in their regulated returns for new and embedded debt, and this allowance is sometimes indexed to market prices.

As it stands, rising rates are in some regions one of a triple whammy alongside high inflation and exceptionally high and volatile power prices. While we expect the infrastructure industry to be able to pass through financing, capital and operating cost increases better than other corporate sectors, this will vary by company and jurisdiction. Affordability, political scrutiny and the tolerance by regulators for rate hikes will determine the outcome. On the other hand, strong secular trends, such as the ongoing digital transformation and consumption of data, will help infrastructure segments such as data centres, fibre networks and towers to navigate the cost impact with minimum re-adjustment of investment spending.

Income resilience despite the direction of treasury yields

So far, we have measured the performance of infrastructure from a total return perspective. However, for many investors a key purpose of an allocation to infrastructure is to receive an adequate, stable level of income. Reviewing historical data for unlisted infrastructure companies since 2004 indicates that cash flow generation is relatively stable and well insulated to changes in interest rates.

Fig. 6 - Free cash flows to equity (FCFE) as % of revenue versus the 10-year US Treasury bonds yield (% , rhs)



Source: EDHEC*Infra*, based on global infrastructure mean, 25% and 75% quarterlies. 10-year US treasuries: Oxford Economics.

Secondary impacts of rising interest rates on infrastructure companies' cash flows also tend to be marginal, although they vary significantly by sector. We expect that assets providing essential or contracted services will remain resilient in the face of reduced disposable household income (e.g. for utilities providing water, electricity or heat). On the other hand, there could be spillovers on volume-sensitive and merchant infrastructure. When interest rates rise, households divert larger amounts of their incomes to pay off mortgages, and the squeeze on disposable incomes reduces discretionary purchases such as leisure travel.

Is infrastructure a bond proxy?

Next we analyse the performance of infrastructure, both listed and unlisted, in different GDP and inflation macro-cycles over the same period as our interest rate study, that is from 2004 to 2021. We define our macro-regimes using long-term variables (z-scores over 20 years, see methodology in the Appendix) in order to discern trends over the long period of low inflation and moderate growth.

As with global bonds, infrastructure outperforms general equities in periods of low growth and high inflation (fig 7). This makes intuitive sense: many infrastructure companies have GDP-immune cash flows as their services have typically low elasticity of demand. While infrastructure exhibits some bond-like features such as dividend income resilience, we find the “bond proxy” theory to be incomplete: total returns for infrastructure indices have a positive correlation to global bonds, but they are relatively muted and not uniformly significant. What is different for infrastructure companies is their ability to capture economic growth, while protecting on the downside, and to pass through nominal price increases and changing power prices. This indicates to us a greater optionality of infrastructure in different regime cycles than either equities or bonds.

It is important to keep in perspective that macro factors explain only a portion of total returns, and that over the long-run structural trends make a larger mark. Technology, demographic shifts and the drive towards sustainability are altering the prospects of infrastructure sectors and companies. The digital revolution, as an example, saw the rise of tech companies and digital infrastructure sectors. As shown in fig. 7, listed digital infrastructure showcased its “I’ll perform in any economic climate, just give me a stage” capabilities under any macro regime since 2004.

While we are forecasting historically high inflation to moderate by the mid-2020s, given the risks of a more persistent high inflation period and economic contraction in some regions, it is worth asking which segments of infrastructure performed best under such conditions.

The winners and the losers in a high inflation/ low growth cycle

Sectors with strong inflation pass-through (unlisted social infrastructure, network utilities) or link to commodities (power generation, midstream energy) have outperformed the broad-based indices in a high-inflation low-growth periods (fig. 7). Furthermore, many regulated networks benefit from downside protection via fixed tariffs as do social infrastructure projects operating under 20- or 30-year public-private contracts.

On the other hand, many transport companies are volume sensitive and depend on pricing power to pass through rising costs to consumers. The performance of the unlisted markets is more uniform across segments, likely explained by the constituents in the data set and partly, the starting point of the data. Almost 50% of the transport companies in EDHEC*Infra*’s Transport index are operating under contracted or regulated models, as are over 90% of the renewable generation projects. These entities have less exposure to economic conditions, although the strength of their protection against inflation varies.

Fig. 7 - Average total returns, annualised during inflation/growth regimes (%)

	Unlisted infrastructure (CA)	Unlisted infrastructure (EDHEC)*	Unlisted US real estate (ODCE)	Listed global infrastructure (FTSE 50/50 Core)	Listed real estate (FTSE EPRA NAREIT Global Developed)	Global equities	Global bonds
High inflation High growth	12.4	11.8	17.8	23.4	26.4	17.3	1.1
High inflation Low growth	11.7	16.1	11.9	5.0	0.9	0.4	4.8
Low inflation High growth	9.2	2.2	13.6	3.5	5.4	5.2	-0.7
Low inflation Low growth	8.8	13.0	2.0	12.1	11.1	14.6	4.6

	EDHEC - Social infra	EDHEC - Power generation x renewables	EDHEC - Energy and water resources	EDHEC - Network utilities	EDHEC - Transport	EDHEC - Renewable power	Unlisted infrastructure (EDHEC)*
High Inflation High Growth	8.6	17.6	1.7	13.6	12.5	0.4	11.8
High Inflation Low Growth	23.8	22.6	20.5	19.5	15.7	16.0	16.1
Low Inflation High Growth	6.2	12.9	2.0	7.7	3.3	9.4	2.2
Low inflation Low growth	11.2	18.4	16.4	13.9	17.9	14.4	13.0

	Listed digital infra	Listed midstream	Listed utilities	Listed transport	Listed global infrastructure	Global equities	Global bonds
High inflation High growth	40.9	46.8	24.5	15.3	23.4	17.3	1.1
High inflation Low growth	17.7	10.4	5.0	2.1	5.0	0.4	4.8
Low inflation High growth	27.6	-1.6	2.4	6.1	3.5	5.2	-0.7
Low inflation Low growth	20.1	19.2	12.0	14.8	12.1	14.6	4.6

Source: Unlisted Infrastructure: Cambridge Associates, EDHEC Infra 300, equally weighted, in USD, net of fees (assumed 200 bps p.a.). Listed index FTSE 50/50 Core infrastructure. All as of Q4 2021 in USD with the exception of EDHEC Renewables (InfraGreen) starting in Q1 2006 and EDHEC Renewable Wind Power starting in Q1 2010. Global bonds: BoFA, global equities: MSCI World from Factset as of December 2021. Analysis evaluates average quarterly total returns during inflation/growth regimes from Q2 2004 to Q4 2021.

Infrastructure is a heterogeneous asset class

The fact that infrastructure is a heterogeneous asset class works to average out the sensitivity to certain factors at the asset class level and brings home the importance of portfolio analytics. During periods of exceptionally high and volatile energy prices the different sensitivity to macro factors, including commodities, will create a wider short-term dispersion in investment performance. The drivers of cash flows for a pipeline company in the US, for example, are very different from the drivers of performance for a solar project in Spain. While midstream assets are by definition cyclical and commodity plays, operating renewable energy projects have very little link to macro factors or commodities. As private investors grow their exposure to brownfield renewable energy over time, unlisted infrastructure has become less sensitive to natural gas and oil prices compared to listed infrastructure or general equities. Adding digital infrastructure also lowers an average infrastructure portfolio's sensitivity to commodities as illustrated in the charts below.

Fig.8: Sensitivity to natural gas prices (correlations of total returns and Henry Hub gas prices)

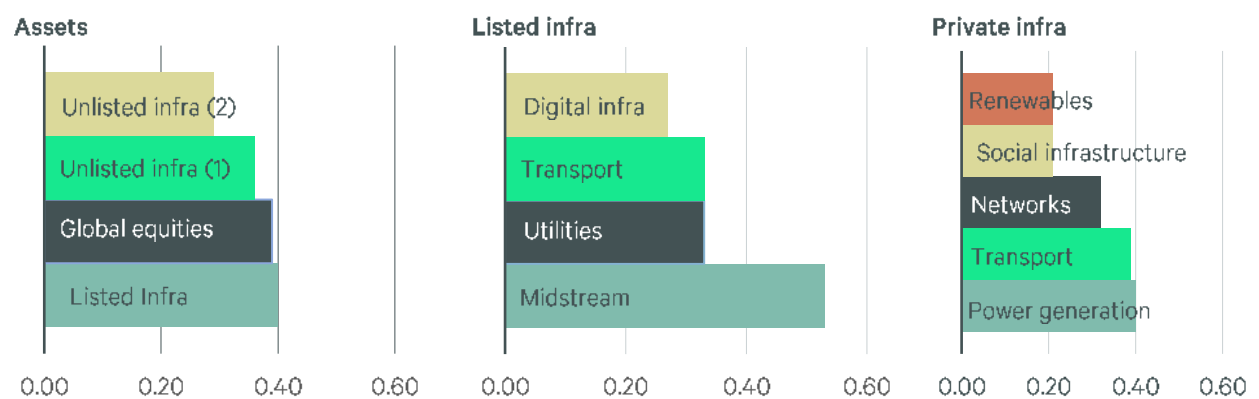
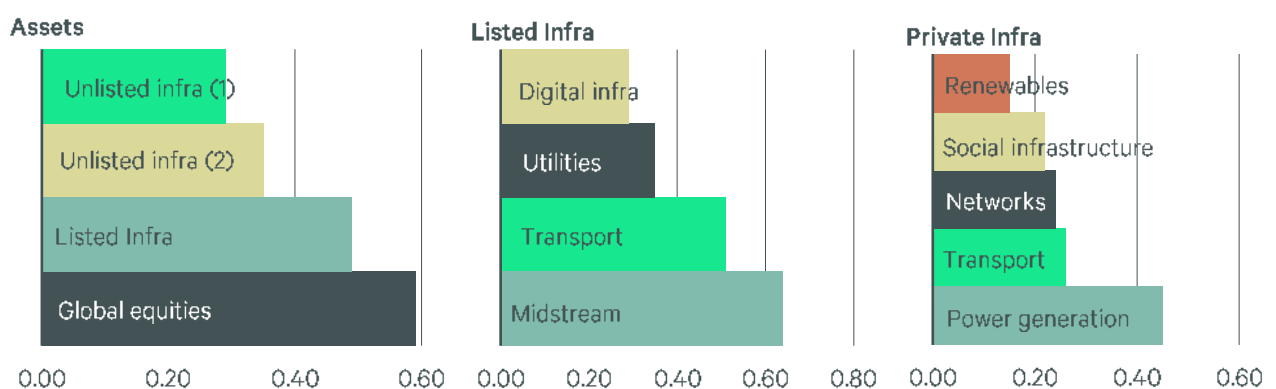


Fig.9: Sensitivity to Brent crude prices (correlations of total returns and Brent oil prices)



Source: Source: Unlisted infrastructure (1): EDHEC Infra 300, unlisted Infrastructure (2): Cambridge Associates Infrastructure Index, listed infrastructure: FTSE 50/50 Core Infrastructure Index. General equities: MSCI World.

Countercyclical investments in infrastructure to keep the asset class afloat

A relevant question is whether rising interest rates will deter infrastructure companies from investing and hence, put a lid on earnings growth. Business sentiment has reached new lows: according to Oxford Economics, the Global Business Sentiment Index for August was at its lowest level since the beginning of 2021. Growth expectations have weakened, worries regarding downside risks have increased, and businesses' mean expectation is for world GDP in 12 months' time to lie 3% below the level forecast pre-pandemic. Greenfield investment in renewable energy in the first half of 2022 fell by 38% year-on-year according to Infralogic, so we see two signs that private investment in some infrastructure sectors may be slowing. Part of the reduction maybe a deferral, rather than cancellation, of construction projects due to rising prices for materials such as steel, copper and nickel, and supply chain dislocations aggravated by China's zero-Covid policy.

As economist and Nobel Prize laureate Paul Krugman wrote: “any direct effect [of changes in interest rates] on business investment is so small that it's hard even to see it in the data. What drives such investment is, instead, perceptions about market demand”. This seems to be the case for infrastructure investment, when one looks at the aggregate trends over past crisis. According to data from the Global Infrastructure Hub – a G20 initiative – global infrastructure investment increased in 2009 and 2010 in both absolute and relative terms exceeding slightly \$2 trillion and 3.3% of GDP. Moreover, the economic multiplier of infrastructure – found by the same initiative to be 1.5 times greater than the initial investment compared to 1.0 times for other forms of public spending – makes it a “go-to” solution when economies need a boost.

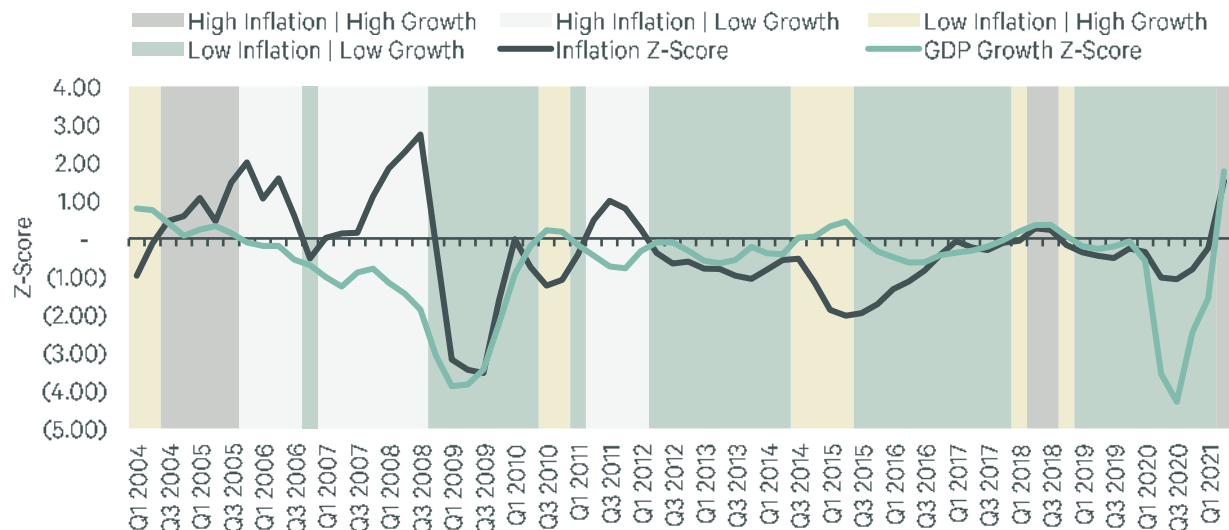
While straying away from the debate on whether infrastructure spending is an effective fiscal stimulus to stabilise economies, there are other reasons for why infrastructure capex is less discretionary. Governments set long-term (20-30 year) strategic plans for their energy and transport sectors in order to achieve certain policy objectives, be it to protect against climate and other physical risks or adapt to demographic trends. Regulated utilities are then mandated to achieve the plans after negotiating and agreeing the amount of investments with their regulators.

Structurally, infrastructure stands to benefit from the accelerated energy transition, decarbonisation and digitalisation as well as general government stimulus and post-pandemic support. Some examples of plans include the EU Next Generation funds, the \$1.2 trillion US Infrastructure Jobs Act and \$3.2 trillion of pandemic support allocated to infrastructure by G20 governments. In addition, the pursuit of independent, cost-efficient energy supply increases the appeal of renewable energy. The International Energy Agency (IEA) forecasts 8% growth of new renewable capacity in 2022 and stable capacity additions in 2023 notwithstanding newly announced policies in the European Union and the US.

In conclusion, the secular tailwinds and long-term essential needs underpinning infrastructure investment lead us to believe that higher funding costs will not change materially the investment growth outlook. Macro factors will determine only partly the performance of infrastructure which historically has been better than equities in periods of high inflation and low growth. The impact of rising interest rates will depend on the degree to which infrastructure companies are able to pass through persistent price increases and take advantage of economic and industry growth.

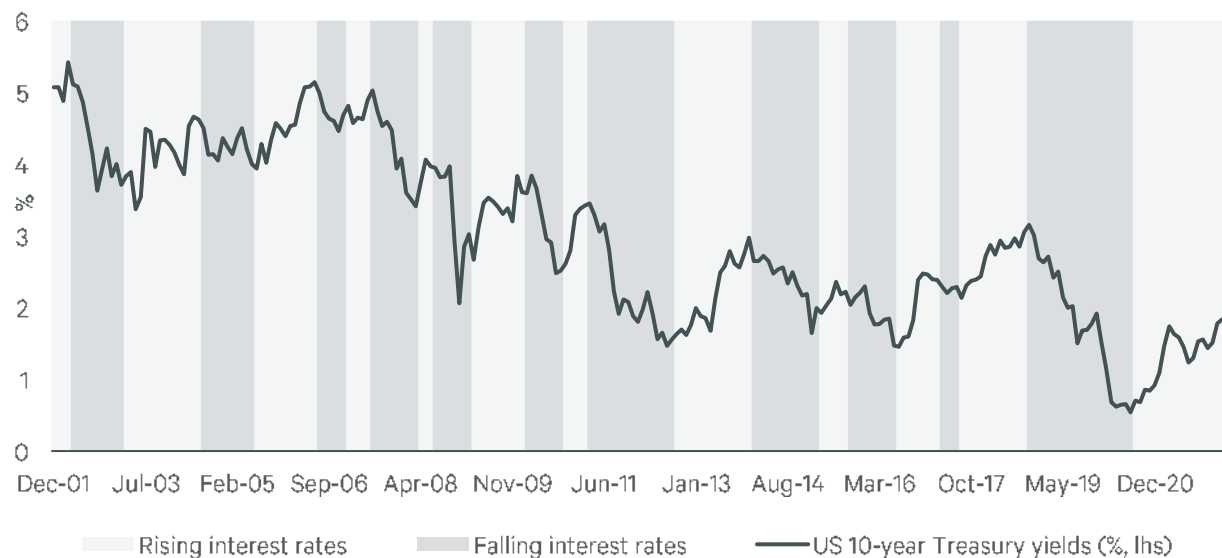
Appendix

Macro regime definition



Source: CBRE Investment Management, Factset as of December 2021. Inflation and growth regimes based on the year-on-year change in US CPI and US real GDP growth, normalising the 20-year history of each series using a z-score, and tracking the two-quarter moving average of that z-score. Regimes are determined by the absolute level of each indicator on quarter ends.

Interest rate regime definition (US 10-year Treasury yields, monthly, %)



Source: CBRE Investment Management, Factset as of December 2021. Interest rate regimes were constructed to identify periods of rising and falling interest rates, based on the 10-year US Treasury Yield. Regimes are determined by using the difference between the average six month forward treasury yield and the average six month trailing treasury yield, where a positive difference implies rising interest rates and a negative difference implies falling interest rates.

Sources

- Infrastructure Investor. *LP Perspectives 2022 Study*, February 2022.
- S&P Global Ratings. *APAC Corporates: Inflation, rate strains set in*. 21 June 2022.
- S&P Global Ratings. *Credit trends: U.S. Corporate bond yields as of July 27, 2022*. Calculations based on 5-year maturities.
- Moody's Default Reports. *Infrastructure default and recovery rates – 1983-2020* Excel supplement. Includes 2,734 infrastructure securities as of year-end 2020.
- S&P Global Ratings. *How Would North American Utilities Cope with Higher Interest Rates, Steeper Commodity Prices, and Inflation?* March 8, 2022. Analysis of the frequency of US rate filing cases, based on S&P Capital IQ.
- Moody's Investor Service (2021), *Florida Power & Light Company, Update to credit analysis*.
- Paul Krugman, *Arguing with Zombies, Economics, Politics, and the fight for a better future*. Published by W.W. Norton & Company 2020.
- Global Infrastructure Hub, *Global Infrastructure Outlook, forecasting infrastructure investment needs and gaps*. Available online at <https://outlook.gihub.org/>.
- IEA, *Renewable Energy Market Update – May 2022*, IEA, Paris. Available online: <https://www.iea.org/reports/renewable-energy-market-update-may-2022>.
- UKRN, *2022 Cost of Capital – Annual Update Report*, published July 2022. Available online at <https://www.ukrn.org.uk/wp-content/uploads/2022/07/2022-UKRN-Annual-Cost-of-Capital-Report.pdf>.

Disclaimer

This presentation (the “Presentation”) is being furnished on a confidential basis to a limited number of accredited investors on a “one-on-one” basis for information and discussion purposes only and does not constitute an offer to sell or a solicitation of an offer to purchase any security. Any such offer or solicitation shall be made only pursuant to a confidential private placement memorandum (as amended, restated, supplemented or otherwise modified from time to time, the “Memorandum”) of the corresponding fund, which describes risks related to an investment in such fund as well as other important information about the fund and its sponsor. Offers and sales of interests in any fund may not be registered under the laws of any jurisdiction and will be made solely to qualified investors under all applicable laws. By accepting the Presentation, you agree to keep it confidential and to not disclose it to anyone except to (i) your legal, tax and financial advisors who agree to maintain these materials in confidence, or (ii) a governmental official upon request, if entitled to such information pursuant to a judicial or governmental order. The information set forth herein does not purport to be complete and is subject to change. This Presentation is qualified in its entirety by all of the information set forth in a Memorandum, including, without limitation, all disclaimers, risk factors and conflicts of interest. A Memorandum and a partnership agreement and subscription documents of a fund must be read carefully in their entirety prior to investing in a fund. This Presentation does not constitute a part of a Memorandum and all capitalized terms used in this Presentation are defined in the Memorandum. Prior to investing in a fund, prospective investors should consult with their own investment, accounting, regulatory, tax and other advisors as to the consequences of an investment in the fund.

Contact

Tania Tsoneva
tania.tsoneva@cbreim.com

Michael Staab
michael.staab@cbreim.com

Rens Boing
rens.boing@cbreim.com