DWS

The new now of heightened inflation and interest rates

Why we believe the new macroeconomic paradigm will accelerate global demand for Infrastructure Debt investments

IN A NUTSHELL

- Over the last decade, global committed capital into Infrastructure Debt experienced an impressive annual growth rate of more than 30% (Dec-11: US$ 8.7 billion vs Dec-21: US$ 123.9 billion; Source: Preqin).
- Despite a strong uplift of inflation and interest rates across all major economies in 2022, Infrastructure Debt remains a sensible asset class irrespective of the direction of interest rates. Infrastructure Debt also has strong links to energy transition, digital modernisation and social transformation priorities, matching investors' and policy maker sustainability goals. The ability of debt investors to set financial, environmental and social goals for borrowers within loan covenants, is an additional factor that makes private infrastructure debt attractive compared to publicly listed infrastructure bonds.
- While the recent rise in yield levels for Investment Grade and High Yield bonds offers attractive entry points for investors, it also reflects mounting macroeconomic risks with the possibility that corporate balance sheets may soon worsen and credit quality likely to deteriorate. Thorough credit underwriting, debt structuring and asset selection will be more critical than ever to generate higher risk adjusted returns (i.e. yield post expected credit loss rates). In this new paradigm exposure to Private Markets remains sensible, but active management will play a vital role.

The Need for resilient credit

The aftermaths of the pandemic continue to weigh heavily on financial markets across the globe. In combination with 'Cold War' like geopolitical tensions and the conflict in Ukraine, it has led to a toxic macroeconomic environment with a sharp rise in cost of living, increased borrowing costs and a slowdown in GDP growth. A tight labour market prevents a gloomier economic outcome, but the question is for how long as recession risks are on the horizon. This has caught the global investor community by surprise, resulting in a decline of equity and bond market valuations since the beginning of the year. Institutional investors continue to add alternative assets to their portfolio mix in the search for enhanced returns, better diversification and to help mitigate downside risks through tailor-made debt structuring. Many of the highlighted investment objectives are associated with Private Debt markets, including Infrastructure Debt, which aim to achieve a premium against comparable public bonds over a full credit cycle.

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Heightened inflation pressures and tightening monetary policies by Central Banks are likely to weaken profit margins of businesses relying on discretionary consumer spending. Therefore, we see elevated credit risks across lower quality credit markets to cyclical industries with low EBITDA margins (e.g. retail, leisure, consumer or entertainment). Despite macroeconomic headwinds, Infrastructure Debt remains a sensible asset class irrespective of the direction of interest rates and there are key arguments why the asset class needs to be considered across a diversified investment portfolio.

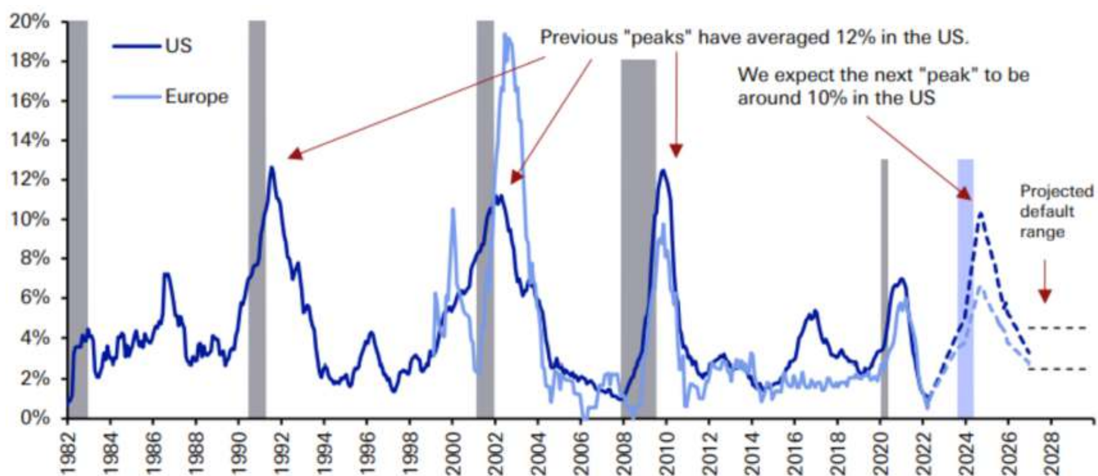
1.1 Late cycle environment

Elevated credit risks across lower quality credit

The rise in liquid market yields is a reaction to the negative market and economic sentiment in recent months due to intense inflationary pressures and mounting recession fears. When it comes to default rates during recessions, data tends to show that Infrastructure Debt outperforms corporate bonds. Below chart shows historical and expected default rates for High Yield issuers in Europe and the US. According to Deutsche Bank/S&P, expected annual default rates for European High Yield are likely to reach 3-4% in 2023 and will further increase to 6% by 2024 as the economy deteriorates. On the other hand, according to Moody's, default rates for European Senior Infrastructure Debt are expected to remain low at 0.15% for Senior Investment Grade and 0.35% for Senior Crossover Debt, consistent with historical recessionary periods.[1]

In the context of a diversified portfolio, Infrastructure Debt can therefore be seen as an established and defensive asset class that has low correlation to business cycles as well as equity market selloffs. This can generally be explained by the stability of Infrastructure Debt which benefits from several protections such as lending to borrowers with monopolistic/oligopolistic market positions, capital intensive businesses, long term contracted revenues or inelastic demand as well as the benefit from highly covenanted and secured debt instruments. It can also serve as a partial inflation hedge as many loans are floating rate. Senior loans provide a strong equity cushion to investors supporting the repayment of capital and ongoing coupon payments.

S&P speculative grade issuer default rates and db's projected path



Source: Deutsche Bank, S&P as of June 2022

[1] Source: DWS, Deutsche Bank, Moody's as of June 2022.

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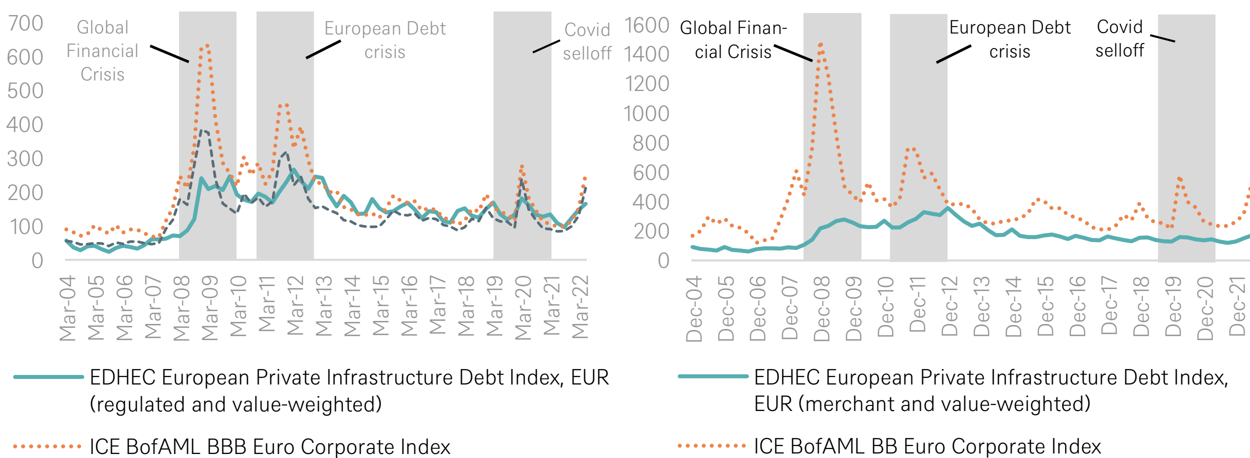
1.2 Investment horizon

Infrastructure Debt is a long-term investment

In order to obtain a yield premium in liquid bond markets, investors need to time the market, which is usually a highly opportunistic and difficult exercise. With elevated late cycle risks and increased yield levels, returns for liquid Corporate or High Yield public bonds are likely to be quite volatile over the short-term, which will make it more difficult to find the right entry or exit point as yield levels can change swiftly in the current market environment. In contrast, Infrastructure Debt has demonstrated consistent premium returns versus equivalent liquid bond markets over a full credit cycle. Below charts are testimony for this as the spread development of Private Infrastructure Debt is less volatile over a longer time period compared to liquid Euro Corporate or High Yield markets, especially during stressed market periods (highlighted in grey), underlining the resilient nature of the asset class when the economic cycle turns from expansion to recession.

Quarterly spread comparison private infrastructure debt, euro corporates and euro high yield (in BPS)



Source: DWS, EDHEC, ICE BofAML as of June 2022.

On occasion, investors who have historically allocated more money to public bond markets, raise the lack of liquidity across Private Markets as a potential concern. But those who have experienced highly stressed bond market selloffs over the recent years, such as the Beta selloff in Q4 2018 or the Covid selloff in March 2020, came quickly to the conclusion that not many bids were there to sell public bond assets during these events. If redemptions were possible in these periods, investors had to accept significant bid-ask spreads where many decided to remain invested due to lack of liquidity. After all, the nature of public bond markets remains OTC. Nowadays, there is a better understanding for 'genuine' liquidity and weighing-up investments into Private Infrastructure Debt.

1.3 Enhanced liability matching

Predictable cash flows and potential for robust returns

Many asset classes are impacted by the current market environment of rising inflation and interest rates. Private Infrastructure Debt markets are certainly not immune against these macro headwinds, but are less affected compared to public bond markets. While monthly or quarterly accounting valuations are available, it is common market practice that Infrastructure loans are either held until the end of the tenor or when a borrower calls a loan. This particular feature has made Infrastructure Debt so popular among institutional investors as it is known in advance which returns and cash flows are likely to be expected from an investment. The robustness, constinency and predictability of returns from investments into Infrastructure loans are highly valuable to investors, especially for those who also have to manage liabilities in the background.

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1.4 Euribor linkage

Ability to provide an implicit inflation hedge

As inflation picks up Euribor levels should go up as well and consequently the expected yield for Private Infrastructure Debt assets. Both fixed and floating rate loans should benefit from higher yield levels when developing an Infrastructure Debt portfolio. Once invested, coupon payments of floating rate exposure will adjust in line with current interest rate levels. Floating rate exposure can therefore help to mitigate some inflationary pressures that may affect other asset classes. This can be a very attractive feature as floating rate Infrastructure loans can serve as an indirect albeit not perfect inflation hedge.

1.5 Ability to influence the loan structure

Inclusion of bespoke covenants can help mitigate downside risks and improve sustainability performance

If interest rates continue to rise further and credit quality deteriorates, credit spreads are likely to widen even more across liquid credit markets. Downside/Default risks can be mitigated across Infrastructure Debt markets through the inclusion of financial and business covenants, security packages and by negotiating a conservative debt structure tailor-made to the Infrastructure asset's cash flow profile and business model. It is also increasingly relevant to add sustainability convenants to loans to improve disclosure to lenders and to expect the borrower to improve practices and policies. This is not possible when investing in a traditional bond as the structures are standardised with no room to negotiate the prospectus.

The private nature of Infrastructure Debt markets allows for greater transparency as lenders usually have more financial information available, which goes beyond the traditional quarterly or annual financial statements applicable to public corporate credit. This includes access to the borrower's business plans, detailed technical and sustainability assessment of the assets or throughout regulatory and legal due diligence reviews with assistance from specialised consultants who have a duty of care to the lenders. This also ensures a closer engagement with borrowers and sponsors. Private lenders can ask borrowers for more granular information if needed and can expect borrowers to make improvements to their environmental policies and practices such as by setting a net zero emissions goal. This in particular empowers decision-making and enables a more exhaustive credit selection process.

When investing into publicly-held corporate bonds there is very little that a fund manager can do during a sharp market selloff, recession or economic slowdown. There are only a few options: wait and hope that credit spreads tighten again or to sell the bond with a potential loss.

One of the tasks of an Infrastructure Debt fund manager is to review the financial situation and the environmental and social policies and practices of the borrower on a regular basis. Eventually, the objective of an active manager is to identify a potential covenant breach or credit loss before they take place. Once potential financial difficulties or delays or issues in improving environmental and social policies and practices have been identified, the manager can engage in a bilateral discussion with the borrower or sponsor to help improve the financial situation and speed implementation of sustainability committments. Infrastructure Debt fund managers have enough discretionary tools to work with the borrower or sponsor to e.g. negotiate a debt restructuring, agree a remedy plan or secure additional collateral to reduce the overall likelihood of a covenant breach or credit loss.

1.6 Sustainability and impact focus

Limited accessible opportunity-set in public bond markets

In public bond markets, debt is usually issued by utilities or infrastructure companies (e.g. sectors such as oil & gas, transportation or telecommunication). On the private side investors are able to access a much broader opportunity-set, allowing for enhanced diversification. The possibility to invest in a public bond that finances a solar or wind park, social infrastructure or clean transportation is very limited as there aren't a lof of options (e.g. ETFs, active or index funds) out there in the market.

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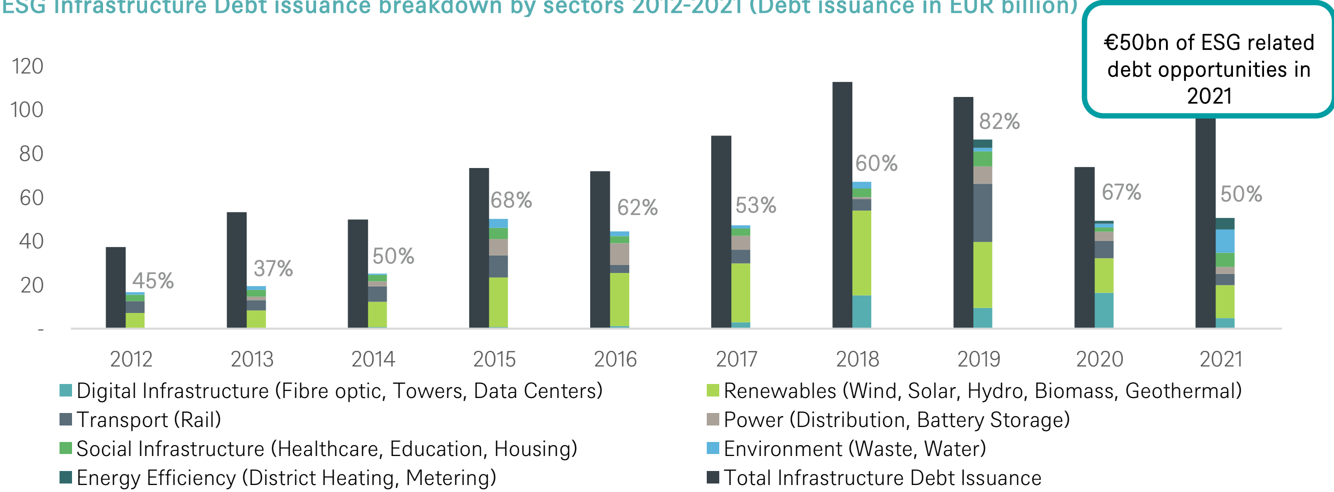
Especially in Europe there is growing supply for ESG Infrastructure loans. Since 2014, ESG Infrastructure Debt issuance accounted for close to 60% of total issuance.[2] The European Union has set quite ambitious sustainability targets, which is matched by many investors' net zero emission commitment and both complementary goals rely on the build out of sustainable Infrastructure. This transition is unlikely to occur without the deployment of private capital at a time when governments' balance sheets have deteriorated significantly over the past decade. The market in Europe is in a very robust position and debt issuance is to remain significant. Infrastructure Debt is an asset class with a strong link to energy transition, digital modernisation and social transformation underpinned by the ability to finance single asset or mid-market pure-play Infrastructure companies as opposed to large corporates hosting variety of business segments with different sustainability profiles. The way sustainability or impact can be reflected in Infrastructure Debt portfolios can't be easily replicated by investing into liquid bond markets.

ESG Infrastructure Debt issuance breakdown by sectors 2012-2021 (Debt issuance in EUR billion)



Source: Source(s): DWS, InfraDeals download, as of December, 2021.

[2] DWS, InfraDeals download, as of December, 2021.

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Risk Warning

An investment in infrastructure involves a high degree of risk, including possible loss of principal amount invested, and is suitable only for sophisticated investor who can bear such losses. Infrastructure investments will be susceptible to adverse economic, business, regulatory or other occurrences affecting infrastructure assets.

Infrastructure investments can be affected by various factors, including general or local economic conditions and political developments, general changes in market sentiment towards infrastructure assets, high interest costs in connection with capital construction and improvement programs, difficulty in raising capital, costs associated with compliance with changes in regulations, regulation or intervention by various government authorities, including government regulation of rates, inexperience with and potential losses resulting from the deregulation of a particular industry or sector, changes in tax laws, environmental problems, technological changes, surplus capacity, casualty losses, threat of terrorist attacks and changes in interest rates.

Investments in Foreign Countries - Such investments may be in countries that prove to be politically or economically unstable. Furthermore, in the case of investments in foreign securities or other assets, any fluctuations in currency exchange rates will affect the value of the investments and any restrictions imposed to prevent capital flight may make it difficult or impossible to exchange or repatriate foreign currency.

Foreign Exchange/Currency - Such transactions involve multiple risks, including currency risk and settlement risk. Economic or financial instability, lack of timely or reliable financial information or unfavourable political or legal developments may substantially and permanently alter the conditions, terms, marketability or price of a foreign currency. Profits and losses in transactions in foreign exchange will also be affected by fluctuations in currency where there is a need to convert the product's denomination(s) to another currency. Time zone differences may cause several hours to elapse between a payment being made in one currency and an offsetting payment in another currency. Relevant movements in currencies during the settlement period may seriously erode potential profits or significantly increase any losses.

Credit - Investors in this product should be aware that the product may involve credit risk. Bonds or other debt securities involve credit risk to the issuer which may be evidenced by the issuer’s credit rating. Securities which are subordinated or have a lower credit rating are generally considered to have a higher credit risk and greater possibility of default than more highly rated securities. In the event that any issuer of bonds or other debt securities experiences financial economic difficulties, this may affect the value of the relevant securities (which may be zero) and any amounts paid on such securities (which may be zero). This may in turn affect the value of the product. Investors in any product whose performance is linked to an underlying asset should be aware that the assets for any such fund will generally include bonds or other debt instruments that include credit risk. Moreover, where such product provides for a capital protection feature, the functioning of such feature will often be dependent on the due payment of the interest and principal amounts on the bonds or other debt instruments in which the product may be invested.

Interest Rate - Investors in this product should be aware that it involves interest rate risk. Interest rates are determined factors of supply and demand in the international money markets which are influenced by macro economic factors, speculation and central bank and government intervention. Fluctuations in short term and or long-term interest rates may affect the value of the product. Fluctuations in interest rates of the currency in which the product is denominated and / or fluctuations in interest rates of the currency or currencies in which the underlying assets are denominated may affect the value of the product.

Emerging Markets - Exposure to emerging markets generally entails greater risks than exposure to well-developed markets, including potentially significant legal, economic and political risks. The prices of emerging market exchange rates, securities and other assets are often highly volatile. Movements in such prices are influenced by, among other things, interest rates,

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changing market supply and demand, external market forces (particularly in relation to major trading partners), trade, fiscal, monetary programmes, policies of governments, and international political and economic events and policies.

Various risks depending on infrastructure sector

Investors must be aware of the risk that, with regard to financings, it is possible for the Strategy to invest, at the free discretion of the Portfolio Manager, in a large number of different sectors of infrastructure projects. Thus, the Strategy may invest in financings in the industry sectors of utilities (e.g. electricity networks, water networks, district heating), power (e.g. renewable power generation, conventional power generation, smart meters, liquid bulk storage, sub-metering, battery storage and other energy related services), transportation (e.g. toll roads, bridges, tunnels, rail, seaports, airports, bus networks, rolling stock, ferry lines and other transportation related services), social institutions and facilities (e.g. education, healthcare, care homes, judicial facilities, public administration facilities, social housing, stadiums and entertainment parks, student accommodation and other public infrastructure), environment (e.g. Waste to energy, waste management, waste collection, landfill sites), and telecommunications (e.g. Communication towers and networks, fibre optic networks, data centres and other communication related infrastructure). The risk profiles of the Eligible Debt Assets may therefore be entirely different and will depend inter alia on the technology profile of the relevant infrastructure project. Projects in key technology sectors (proton therapy, satellite technology) carry other risks than, for example, road construction projects. In addition, there are projects which are exposed to a special risk due to the fact that there are only few experts available for an implementation of such projects (e.g. offshore wind projects). Public infrastructure projects, in turn, carry other risks than private infrastructure projects. In the context of tendering and contracting for infrastructure projects, infrastructure services or infrastructure-related services by public authorities or public agencies, e.g. in the field of PPP (public private partnership) projects, there are a variety of legal provisions and requirements to follow (in particular also with regard to the implementation of procurement procedures and the selection of the bidder to be awarded the contract for the infrastructure project, the infrastructure services or the infrastructure-related services). Failure to comply with or misapplication of these rules could result in significant delays in the award of an infrastructure project, infrastructure service or infrastructure-related service, or even cancellation of an award already granted, with the consequence that a planned infrastructure project, an infrastructure service or an infrastructure-related service of a Debtor can possibly only be implemented with considerable delay or an infrastructure project, infrastructure services or infrastructure-related services that have already begun must be terminated or abandoned by the Debtor. This can lead to considerable damage to the Debtor, which may not be replaced or not completely replaced. There is a risk that the costs of an infrastructure investment (e.g. energy or maintenance costs) may rise faster in the respective infrastructure asset than can be achieved in the market by increasing the fee for the respective infrastructure investment or are higher than the fixed fees with the public sector. This could have a negative effect on the Debtor holding the infrastructure asset. The inability to implement cost increases in charge increases could result in the current income for the infrastructure asset and the selling prices of the infrastructure asset falling. This would also reduce the potential sales gains of the Eligible Debt Assets, which in turn would have a negative impact on the investment performance of the Eligible Debt Assets and thus on the return of the Strategy.

Health and safety are major areas of risk when operating many infrastructure assets. Costs arising from failures to protect the health and safety of workers and users of infrastructure may adversely affect infrastructure assets and therefore the performance of Eligible Debt Assets.

These risks, individually or in combination, may result in a reduction in the income generated by an infrastructure project company or an increase in the operating costs and other costs of an asset, which, together or individually, may have a material adverse effect on the financial position of the Debtor and consequently on its ability to meet its obligations with respect to an Eligible Debt Asset held by the Strategy.

The realisation of these risks at the level of the infrastructure assets may mean that the expected return for the Strategy is not achieved, or that no return at all is achieved by investing in the Strategy. There is a risk that investors may lose all or part of

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their investment in the Strategy. Therefore, the actual risk profile of the relevant Strategy depends materially on the types of infrastructure projects in which the Strategy has invested. The composition of the Strategy's portfolio with regard to the specific Eligible Debt Assets is uncertain and unpredictable and there is a risk that the relevant Strategy will predominantly or exclusively invest in Eligible Debt Assets connected with higher risks.

Infrastructure market risk

The value of infrastructure is subject to market conditions, and adverse changes in the local infrastructure market may lower the value that may be derived from a liquidation. The markets where infrastructure investments are traded are not transparent and therefore generally not efficient. As a result, the price to be paid in the case of acquisition of an Eligible Debt Asset may be higher (or lower) than the market value established by a valuer using accepted and standard valuation techniques. Likewise, the price obtained on the sale of an Eligible Debt Asset may also be lower (or higher) than the market value established by a valuer using accepted and standard valuation techniques.

Other risks incident to the ownership and operation of economic and social infrastructure include (i) dependence on cash flow, (ii) changes in users' or clients' usage habits, (iii) technological disruption, (iv) changes in supply of, or demand for, alternative or competing infrastructure assets in a catchment area, (v) changes in the financial conditions of customers, buyers and sellers of infrastructure assets, (vi) changes in the availability of debt financing, (vii) energy and supply shortages, (ix) laws assigning liability to the owners of infrastructure assets for environmental hazards relating to such infrastructure assets, (x) changes in tax, infrastructure, environmental and zoning laws and regulations, (xi) various uninsured or uninsurable risks, (xii) natural disasters and (xiii) challenges inherent in developing and managing infrastructure assets.

The indirect infrastructure market risk relates to the macroeconomic market risk (country gross domestic product, inflation, unemployment, etc.) and especially also to the microeconomic market risk of the particular infrastructure asset (local market, city specifics, customers specifics, industry specifics, etc.). Therefore, the remaining equity takes the first loss position and the value of the loan would be affected if the value of the underlying economic or social infrastructure will decrease by more than the buffer provided by the equity within the capital structure.

Adverse changes in infrastructure markets increase the probability of default on infrastructure loans, as the incentive of the Debtor to retain equity in the infrastructure asset declines. Loans may become non-performing for a wide variety of reasons, including, without limitation, because the infrastructure asset is too highly leveraged and therefore unable to generate sufficient income to cover its debt service, because of poor management or physical condition, or because local economic conditions adversely affect the potential of the infrastructure asset to generate income. Non-performing infrastructure loans often require workout negotiations and/or restructuring, which may entail, among other things, a write-down of the principal of the loan and/or reduction of the interest rate. In addition, in the event that foreclosure of an infrastructure loan is required, the foreclosure process is often lengthy and expensive, sometimes taking several years. Furthermore, the foreclosure process can itself disrupt the use of the infrastructure asset, thereby reducing the economic returns.

The market price may also be affected by risks from environmental, social or corporate governance aspects. For example, market prices can change if companies do not act sustainably and do not invest in sustainable transformations. Similarly, strategic orientations of companies that do not take sustainability into account can have a negative impact on value. The reputational risk arising from unsustainable corporate actions can also have a negative impact. Additionally, physical damage caused by climate change or measures to transition to a low-carbon economy can also have a negative impact on the market price.

The realisation of these risks may mean that the expected return for the Strategy is not achieved or that no return at all is achieved by investing in the Strategy. There is a risk that investors may lose all or part of their investment in the Strategy.

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