



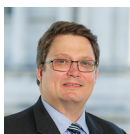
BARINGS

PRIVATE CREDIT

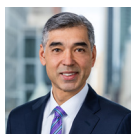
The Evolving Opportunity in Infrastructure Debt

INSIGHTS

In addition to infrastructure debt's defensive nature, diversification benefits and potential to offer compelling risk-adjusted returns, infrastructure's "essentiality" underscores its appeal throughout the economic cycle.



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Infrastructure: Essential & Evolving

In today's quickly evolving global economy, many institutional investors have turned to infrastructure debt for potential benefits ranging from an illiquidity premium over public markets to enhanced diversification, risk protection and asset-liability matching characteristics. Amid often varying definitions of infrastructure debt among managers, banks, and investors, at Barings the definition centers on the type of asset generating the cash flow, with an emphasis on essential assets that meet key social or economic needs and that have the potential to offer stable, long-term cash flows. In our view, today's evolving infrastructure universe encompasses six broad categories:



ECONOMIC INFRASTRUCTURE

Transportation-related strategic assets such as toll roads, seaports, airports, railroad rolling stock



UTILITIES AND PIPELINES

Regulated or unregulated distribution and transmission assets, which typically carry water, sewage, electricity, natural gas and other fuels



POWER GENERATION

Renewable energy generation assets (solar, wind or hydro), batteries and EV charging infrastructure



SOCIAL INFRASTRUCTURE

Government-sponsored public-private partnerships and social housing, and development of hospitals, parks, government buildings and schools



MIDSTREAM AND STORAGE FACILITIES

Commodity product storage, energy and non-energy assets



DIGITAL INFRASTRUCTURE

Towers, fiber cabling and data centers in well-understood markets or regimes





The Case for Investing in Infrastructure Debt

Investing in companies and other entities involved in infrastructure can be accomplished through a variety of equity and fixed income vehicles, both public and private. Infrastructure debt has a large, established institutional investor base for investment grade credit (typically senior secured) and a fast growing below investment grade segment (senior or junior debt).

For long-term investors, private infrastructure debt offers a number of potential benefits:

DEFENSIVE NATURE OF THE ASSET CLASS

Infrastructure assets are typically highly cash generative, essential assets with high barriers to entry or monopolistic characteristics. As a result, the asset class generally performs well during recessionary periods. Debt is typically secured, in a senior position in the capital structure, and benefits from protective covenants tied to leverage or interest cover.

LOW LOSSES/HIGH RECOVERIES

The high quality of infrastructure debt and the essential nature of the services provided has resulted in a historical record of low losses, high rates of recovery and low ratings volatility. A recent study by Moody's found that over the last 39 years, cumulative defaults in BBB-rated infrastructure issues were below those of A-rated investment grade debt, effectively giving infrastructure investors AA performance.¹

POTENTIAL ILLIQUIDITY PREMIUM

Since debt issued in the private market tends to be less liquid than public market counterparts, infrastructure debt has historically offered enhanced yields versus public market investment grade credit to compensate for that illiquidity, as well as for the complexity inherent in underwriting the credits. More specifically, long-term investors have historically captured an illiquidity premium substantially greater than 50 basis points (bps) for investment grade credit and well over 100 bps for below investment grade credit.²

1. Source: Moody's "Default and recovery rates for project finance bank loans, 1983–2021". As of April 4, 2023.

2. Source: Barings. As of July 31, 2023.

INFLATION PROTECTION

Infrastructure assets have cash flows that are usually linked to inflation, with issuers typically able to pass rising costs onto customers. Even when infrastructure companies are bound by short-term contracts that don't include pass-along provisions, they may be able to reset prices at a higher level in subsequent contracts due to the inelastic nature of the demand for their product or service.

DIVERSIFICATION

Infrastructure debt can be an effective diversifier in a portfolio that already includes more traditional, long-term fixed income assets such as sovereign and public investment grade corporate bonds, as well as direct lending. Infrastructure debt is a global asset class, and infrastructure projects span rated and unrated public and private debt, as well as a wide range of industry sectors and sub-sectors—all of which exhibit unique return profiles.

ASSET-LIABILITY MATCHING

Due to the long-term nature of many private infrastructure debt investments (generally five to 30 years), and the highly predictable cash flows generated by the long-lived infrastructure assets being financed, insurance companies find the asset class particularly attractive—especially for purposes of matching their long-term liabilities and complementing or substituting for allocations to real estate.

Figure 1: Key Characteristics of Infrastructure Debt

	Investment Grade	Sub-IG
Credit Quality	A/BBB	BB/B
Yield/Spread Expectation	5.25%–7.0%/150–325 bps	7.25%–10%/350–600 bps
Tenor	5–40 years	2–10 years
Income	Primarily fixed	Fixed or floating
Structure	Bullet maturities or scheduled amortization	Bullet maturities, scheduled amortization, cash sweeps
Prepayment protection	Make-whole provisions for prepayment	Modified or partial make-whole provisions
Security/Priority	Senior secured	Senior secured; Mezz/HoldCo
Sectors	Economic Infrastructure; Utilities and Pipelines; Power Generation; Social Infrastructure; Midstream and Storage Facilities, Digital Infrastructure	
Geography	Global; focus on developed OECD economies for best risk/reward	
Key Features	Engaged relationship with borrowers, strong covenants, essential infrastructure assets, defensive in times of stress, stable cash flows, typically secured by assets	

Source: Barings. As of July 31, 2023.

New Drivers of Infrastructure Debt Opportunities

Investment opportunities in infrastructure debt are likely to persist well into the future given the global need to replace aging infrastructure and to add new types of infrastructure to serve evolving needs. To meet the demand for more diverse global infrastructure through 2040, the independent research firm Oxford Economics has estimated that an investment of \$94 trillion will be needed through 2040, or an average of \$3.7 trillion a year, which is 19% above prevailing trend investment spending.³

3. Source: Oxford Economics. As of 2016.

Since government entities alone cannot meet the demand for infrastructure investment, private investment—often in conjunction with government—will be increasingly necessary. Bank loans, however, may be harder to come by as banks cope with tighter credit conditions. This has created opportunities for institutional lenders, many of whom have ties to the private equity owners of a diverse group of growing infrastructure assets. Institutional managers provide a more flexible and bespoke source of capital for these companies, as well as a conduit for debt investors to access potentially more attractive investments.

Providing opportunities for investors by propelling demand for infrastructure investment are four major and interrelated trends:

1. A TRANSITION TO CLEANER, RENEWABLE ENERGY SOURCES

Based on environmental and climate change considerations, as well as geopolitical concerns, a massive shift is underway from coal and oil to cleaner sources of power such as solar, wind, biomass, hydrogen, and hydro. Natural gas, often in liquefied form, also acts as a transition fuel until renewable energy sources can fill the gap. Even nuclear-powered electrical generation is attracting renewed attention, with research underway to expand on the advanced techniques used in nuclear submarines, for example.

2. GREATER ELECTRIFICATION

Efforts at decarbonization coincide with the movement to an all-electric economy, which is affecting power generation, transmission, and storage. Just as the popularity of electric vehicles (EVs) is creating demand for charging stations and upgrades to distribution grids, other electricity-related demand for infrastructure investment is coming from the need for electric storage facilities and transmission lines from wind farms and solar farms, for example.



Greater Electrification & Energy Management

Electrification of the grid is a complex engineering challenge with demands that are varied and diverse. In support, Barings has participated in a range of projects focused on electrification and resilience of grid infrastructure including pumped storage hydro and solar co-located battery storage—all of which are increasingly necessary in the transition to an all-electric economy. In addition to grid-scale and supply-side efforts, we are also seeing increased interest in projects targeting energy efficiency and demand-side reduction. For example, Barings participated in a project involving a public/private partnership whereby a U.S. university entered into an energy management agreement with a private operator with the aim to reduce the energy intensity by 35%, and achieve 100% renewable power by 2035.⁴

4. Source: Barings. As of July 31, 2023.

3. SUPPORTIVE GOVERNMENT POLICY

Government policy across the U.S. and the E.U. has seen significant commitments to spending on infrastructure. In the U.S., through the enactment of the Bipartisan Infrastructure Law and the complementary Inflation Reduction Act, the government has committed massive spending on infrastructure over the next five years—including \$110 billion on road and bridge repairs, \$65 billion to upgrade the nation’s power grid, \$65 billion on broadband infrastructure deployment, and \$55 billion on clean-water infrastructure.⁵ Meanwhile, the European Fund for Sustainable Development will make up to €135 billion available for guaranteed investments for infrastructure projects between 2021 and 2027.⁶ These government programs create a wide variety of opportunities for investors to leverage federal spending in ways that are likely to produce attractive returns within a range of acceptable levels of risk.

“Despite the increasing prevalence of digital investments within the infrastructure market, appropriate asset selection is more fundamental than ever given the breadth of risk profiles inherent to the asset class.”

4. EVER-INCREASING DIGITIZATION

The accelerated pace of digitization throughout the economy is driving demand for investments in data centers, cell towers, fiber optic cabling and other necessary building blocks of digital infrastructure. This acceleration has resulted in the share of telecom-related deal volume growing from 4% in 2015 to 16% as of 2022.⁷ In addition, a recent BCG study provided results of a survey of institutional investors which showed that data-related infrastructure was the highest-ranking subsector in terms of increasing deployment over the next three to five years.⁸ Despite the increasing prevalence of digital investments within the infrastructure market, appropriate asset selection is more fundamental than ever given the breadth of risk profiles inherent to the asset class.



5. Source: The White House Fact Sheet: The Bipartisan Infrastructure Deal. As of November 6, 2021.

6. Source: European Commission.

7. Source: Inframation analytics. As of December 2022.

8. Source: Boston Consulting Group. As of March 2022.

Accessing the Opportunity

Infrastructure debt offers a number of potential benefits, and we expect the opportunity to persist going forward. While energy transition and digital infrastructure continue to be key investment themes as renewables, data centers and fiber have all seen an increase in activity, we also expect to see a significant amount of opportunities in liquified natural gas as governments around the globe refocus on national energy security. At the same time, given the defensive characteristics of the asset class, we believe it is well-positioned to outperform in today's more challenging economic environment—and particularly in the event of an economic downturn.

Because an increasing number of infrastructure deals are being directly originated and privately negotiated, selecting the right manager is critical to accessing the opportunity. In selecting a manager, key characteristics to look for include:

A STRONG ORIGINATION PLATFORM

Managers that have strong, established relationships with market participants are often better positioned to access the strongest pipeline of opportunities and to source the highest-quality deals for investors.

EXPERIENCE IN THE MARKET

Given the illiquid and often opaque nature of the asset class, long-term relationships with large well-respected equity sponsors and experienced origination teams add significant value for investors. Teams for whom infrastructure deals are not merely an add-on, but a core business staffed with experienced professionals, better understand how to structure deals such that covenants provide optimal protections for investors. Experienced managers also develop a better sense of market direction, which is helpful in determining appropriate pricing.

GLOBAL PRESENCE

Infrastructure opportunities now exist around the world, yet each geographic region poses unique challenges. Managers with a full-time presence and experience in U.S. and European markets, and not merely an outpost, have the potential to source the most attractive deals and identify the best opportunities for clients.

Our Strategy

In 2013, Barings created Global Infrastructure Debt as a standalone strategy with dedicated teams located in London and New York. The key benefits of this strategy include the clear and simple investment thesis for the sector, which focuses on the six core sub-sectors we have identified, the alignment of interest with our parent MassMutual, and our long and stable track record having invested more than \$18 billion across 376 investments since inception.⁹

9. Source: Barings. As of March 31, 2023.

Barings is a \$351+ billion global investment manager sourcing differentiated opportunities and building long-term portfolios across public and private fixed income, real estate and specialist equity markets. With investment professionals based in North America, Europe and Asia Pacific, the firm, a subsidiary of MassMutual, aims to serve its clients, communities and employees, and is committed to sustainable practices and responsible investment.*

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