PRIVATE CREDIT

Infrastructure Debt: The Long Game

A core asset class for insurance balance sheets throughout the economic cycle

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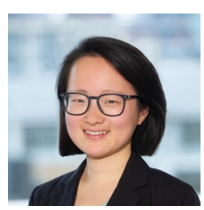

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Discipline and perspective are important during times of economic uncertainty, particularly for long-term investors such as insurers. For us, this means going back to the basics of credit investment and insurance balance sheet management. Infrastructure debt, with its defensive fundamentals and in-built stability throughout the economic cycle, presents an attractive case in the current climate.

Zooming out of recent market volatilities, we see that the broader context of global development also points toward a large opportunity set in infrastructure investment. In March 2025, the American Society of Civil Engineers (ASCE) estimated that the U.S. will have a $3.7 trillion investment gap in infrastructure over the next 10 years if current investment levels continue—out of a total €9.1 trillion of funding needed.[1] The gap is not isolated to the U.S. In Europe, for instance, the 2024 Draghi report, led by former European Central Bank chief Mario Draghi, urged for an additional annual infrastructure spending of €750-800 billion above planned levels to meet European objectives.[2]

Governments around the world are rising to the challenge. Recently, for example, Germany made headlines when it broke with fiscal conservatism and committed to setting up a €500 billion infrastructure investment fund in a bid to revitalize the German economy. However, given the scale of the need, much of infrastructure investment will need to be funded by the private sector.

While demand for capital is rising, supply is not catching up. Bank retrenchment continues on both sides of the Atlantic, and in 2024, infrastructure dry powder as a proportion of assets under management hit a new historical low of 24%.[3] This confluence of supply-demand dynamics, and the natural fit of infrastructure debt for insurance balance sheets, point to an appealing opportunity for insurers today.

Essential & Evolving

Amid often varying definitions of infrastructure debt among managers, banks, and investors, we center our definition 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. This essential nature of services provided by infrastructure assets—and the associated demand inelasticity—makes infrastructure debt particularly attractive during times of market and economic uncertainty.

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 & 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 electric vehicles (EVs)

1. Source: ASCE's 2024 Bridging the Gap study.
2. Source: European Commission. As of September 9, 2024.
3. Source: Preqin. As of 2024.

Social Infrastructure

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

Midstream & Storage Facilities

Commodity product storage, energy, and non-energy assets

Digital Infrastructure

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

A Natural Fit for Insurers

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 (IG) credit (typically senior secured) and a fast growing below IG segment (senior or junior debt). For insurers, IG credit achieves the trio of attractive return potential, capital efficiency and security of cash flows for policyholder protection. The asset class offers a number of potential benefits:

Asset-liability Matching

Due to the long-term nature of many private infrastructure debt investments (generally five to 30 years' maturity), the asset class is a natural fit for insurers, generating duration as well as steady cash flow streams to match insurance liabilities.

Predictable Cash Flows

In certain jurisdictions, insurers can add an illiquidity premium to their liability discount rates by investing in assets with steady and predictable cash flows, provided they have robust asset-liability management in place. Examples include Matching Adjustment under Solvency II, Singapore RBC 2 and Hong Kong RBC, Scenario-Based Approach under Bermuda's EBS, and illiquidity premium under the ICS regime. Under these frameworks, high-quality fixed income assets with strong prepayment protection tend to be more effective at increasing insurers' discount rates and making their balance sheets more efficient. For insurers looking to make sure of such provisions, there is a good supply of investment grade, fixed rate infrastructure deals with strong prepayment protection across the U.S., euro and sterling markets.

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Defensive Nature of the Underlying Asset

Infrastructure assets are typically highly cash generative, essential assets with high barriers to entry or monopolistic characteristics, as well as demand inelasticity compared to other services. As a result, the assets underlying infrastructure debt generally perform well during recessionary periods and periods of economic uncertainty. Debt is typically secured and in a senior position in the capital structure. It also benefits from protective covenants tied to leverage or interest cover. In particular:

INFLATION RESILIENCE

Assets underlying infrastructure debt 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. As a result, infrastructure debt tends to be more inflation-resilient than corporate credit in general.

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 IG debt, effectively giving infrastructure investors AA performance.[4]

Illiquidity Premium

Despite the defensive features of the asset class, infrastructure debt trades at a premium over public fixed income. More specifically, long-term investors have historically captured an illiquidity premium over public credit of substantially greater than 50 basis points (bps) for IG credit and well over 100 bps for below IG credit.[5]

Capital Efficiency

Higher return alone would point to increased capital efficiency. However, due to the defensive characteristics highlighted above, a number of insurance capital regimes worldwide present preferential treatment for infrastructure debt compared to other fixed income assets. This means that the capital requirement is reduced relative to other forms of fixed income. Examples include Solvency II, ICS, and most recently, Singapore RBC 2. A review is expected for Hong Kong RBC this year.[6]

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 IG corporate bonds. Infrastructure debt is a global asset class, and infrastructure projects span public and private debt, as well as a wide range of industry sectors and sub-sectors—all of which exhibit unique return profiles.

4. Source: Moody's "Default and recovery rates for project finance bank loans, 1983–2021". As of April 4, 2023.
5. Source: Barings. As of July 31, 2023.
6. Source: Hong Kong Insurance Authority. As of October 16, 2024.

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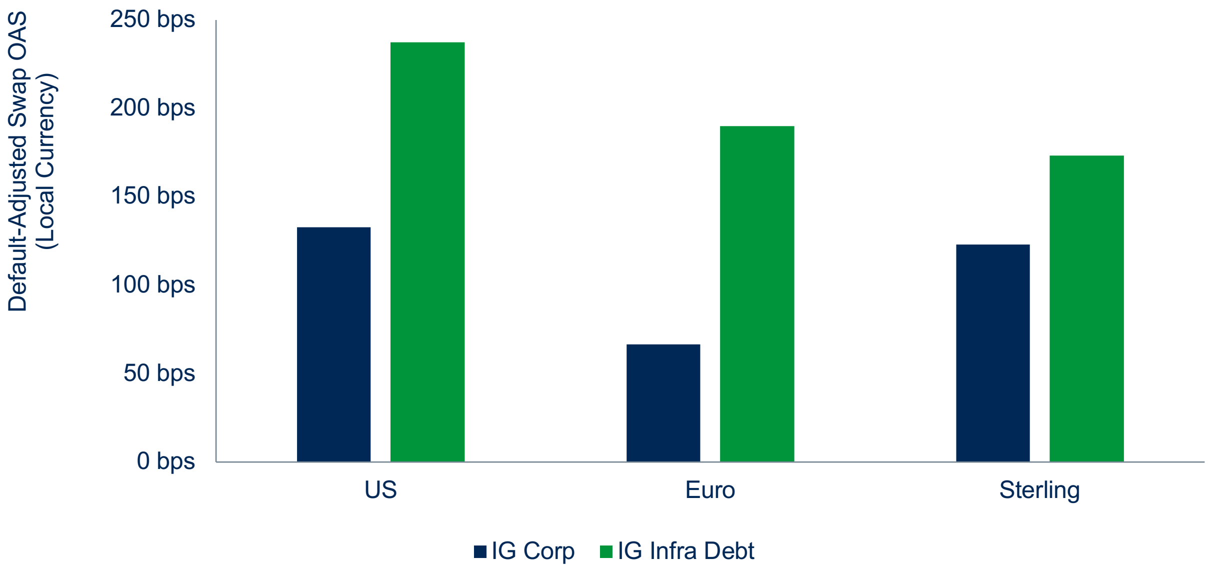
Figure 1: Key Characteristics of Infrastructure Debt

	INVESTMENT GRADE	SUB-IG
Credit Quality	A/BBB	BB/B
Yield/Spread Expectation	5.5%–7.0% / 150–300 bps	7.5%–10.0% / 350–600 bps
Tenor	5–30 years	3–7 years
Income	Primary 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	

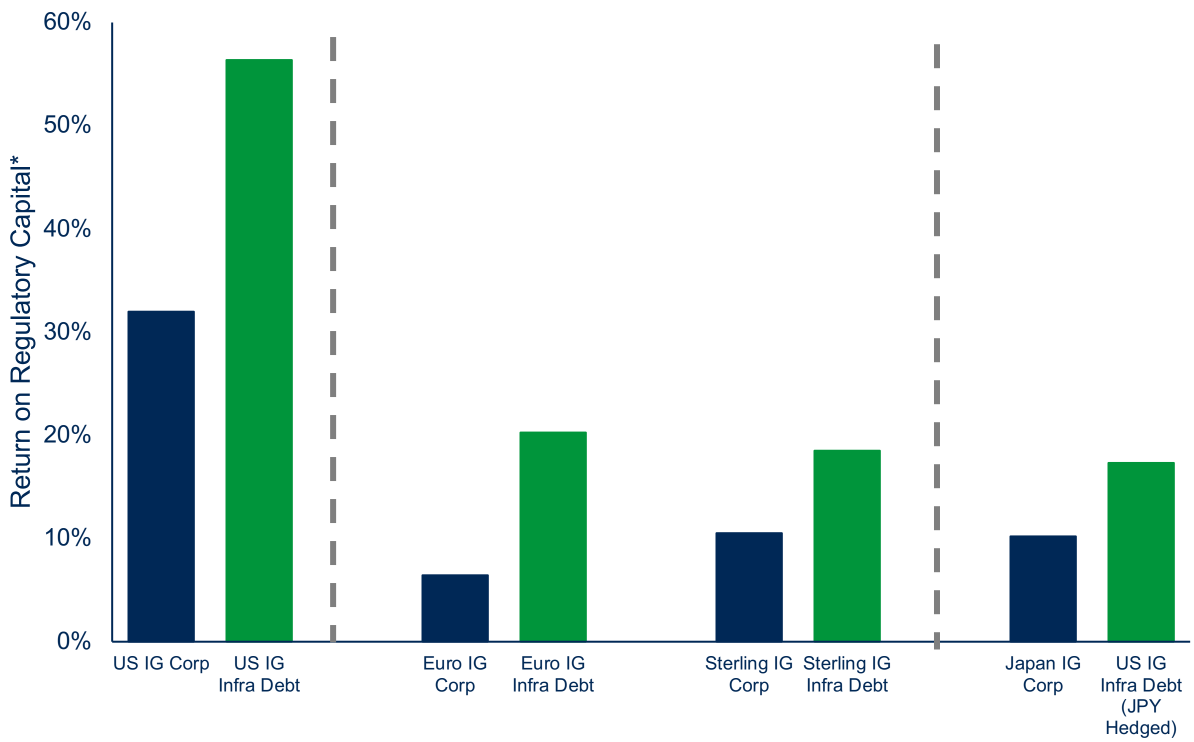
Sources: Barings, Refinitiv DataStream. As of September 30, 2024.

Figure 2: Infra Debt Offers Significant Spreads Over Comparable Corporates



Source: Barings, Aladdin, Moody's. As of April 15, 2025. Based on 1-10 year investment grade corporates, and 1-10 year investment grade infrastructure debt.

Figure 3: Taking Regulatory Capital Into Account, Infra Debt Significantly Outperforms Corporate Equivalents on Return on Regulatory Capital



Source: Barings, Aladdin, Moody's, NAIC, PRA, EIOPA, IAIS. As of April 15, 2025. *Return expressed in local currency terms unless otherwise indicated. Based on 1-10 year investment grade corporates, and 1-10 year investment grade infrastructure debt. Based on Barings' interpretation of U.S. RBC, Solvency II and ICS rules. Solvency II Standard Formula charges assume infrastructure debt is rated qualifying infrastructure corporate debt. Return on regulatory capital is calculated as return over regulatory capital held, where (1) return is default-adjusted spread over local currency swaps, with the exception of U.S. IG infrastructure debt in the ICS comparison, which is assumed to be hedged to JPY and spread is expressed in JPY terms; (2) regulatory capital held is fixed income (NAIC), spread (Solvency II) or non-default spread and credit (ICS) risk charges adjusted for diversification benefit (assumed to be 20%) and target solvency ratio (assumed to be 450% for U.S. life insurers and 200% for Solvency II and ICS insurers).

New Drivers of Global 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. 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 by retrenching from the market. The departure of banks has widened 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 compelling investments.

There are four major and interrelated trends that are propelling demand for infrastructure investment and shaping opportunities for investors:

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. These include natural gas, often in liquefied form, as a transition fuel until quickly growing alternative energy sources such as solar, wind, biomass, hydrogen, and hydro 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 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.

3. Supportive Government Policy

As mentioned earlier, infrastructure will be a key engine for economic growth across the U.S., U.K. and rest of Europe. Government policy across these three markets has seen significant commitments to spending on infrastructure. While the new Trump administration will potentially prioritize new sectors, we still see a significant set of investment opportunities. In addition, the European Commission has announced that the European Fund for Sustainable Development will make up to €135 billion available for guaranteed investments for infrastructure projects. 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.

CASE STUDY

2024 data showed a clear distinction and the emergence of a "two speed transition" where 'mature' technologies including renewables, energy storage, electric vehicles, and power grids accounting for 93% of the $2.1 trillion of investment grew 14.7% year-over-year—which compares with a 23% decline in 'emerging' sectors which include clean industry, electrified heat, hydrogen, clean shipping, nuclear and carbon capture and storage.7 We continue to view clear governmental policy objectives and supportive incentive schemes as critical to scaling this important, if nascent, opportunity set. For example, the January 2025 award by the Swedish Energy Agency of $1.8 billion in subsidies to Stockholm-based district heating company Stockholm Exergi, for the construction and operation of a biogenic carbon capture and storage project, will help further develop industry supply chains and contractual arrangements.

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 21% as of 2024.[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.

Infrastructure debt offers a number of potential benefits to insurance investors and we expect the opportunity to persist going forward. While the 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.

Accessing the Opportunities

With the increasing number of infrastructure deals being directly originated and privately negotiated, selecting the right manager is critical to accessing the opportunity. For insurers, particularly those taking on long-dated pension liabilities, it is also important to partner with a manager that has a deep understanding and experience in managing insurance assets. In selecting a manager, key characteristics to look for include:

Strong Origination Platform

Managers that have strong, established relationships with market participants across multiple geographies are often better positioned to access the strongest pipeline of opportunities and to source the highest-quality deals for investors. In an increasingly competitive marketplace, with more institutional investors looking for exposure to the asset class, managers with long-standing market presence and broad origination platforms including direct access to sponsors will be best-placed to access compelling risk-adjusted spreads. They will also be best positioned to ensure capital is deployed in a timely manner and across a diversified portfolio of assets.

7. Source: BloombergNEF. As of January 2025.
8. Source: Inframation analytics. As of December 2024.

Track Record

Managers with a long history of successfully investing in the asset class through different economic cycles have the ability to navigate future challenges and opportunities that emerge. This is particularly important during periods of economic uncertainty. Key metrics to investigate include historic loss rates and spread premia to public benchmarks.

Experience & Established Relationships

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 debt opportunities now exist around the world, yet each geographic region poses unique challenges. Managers with on-the ground investment presence and experience in U.S., U.K. and continental Europe markets, and not merely an outpost, have the potential to source the most attractive deals and identify the best opportunities for clients.

Experience Managing Insurance Assets

For insurers, strong investment teams are a prerequisite, but it is not the whole story. Due to the complex competitive, regulatory and accounting landscape which insurers navigate, and the bespoke and long-term nature of private asset investment, insurers could benefit from working with asset managers that take a long-term partnership approach—one which focuses on optimizing, adapting and changing strategies to continually meet insurers' evolving needs.

Insurance asset managers that have a good understanding of insurers' needs and demonstrable experience in investing for insurance balance sheets can be invaluable in helping insurers capitalize on opportunities in this asset class, as they will have a finger on the pulse of both the investment and insurance worlds. In particular:

RATING

Understanding and being able to work to insurers' rating requirements from regulatory and operational perspectives is essential. For many insurers, this means the ability to have assets externally rated in a scalable and economic way. For Solvency II and APAC insurers with approved internal rating methodologies, and U.S. insurers who have unrated securities assessed by the NAIC SVO, managers that have the flexibility and resources to work with insurers' or SVO methodologies are well-positioned to structure assets in a way which is within risk appetite and capital-efficient in the insurer's jurisdiction.

INSURANCE-SPECIFIC GUIDELINES

An insurance asset manager's role is not just to build portfolios from the bottom up—it is also to work with the insurer's Strategic Asset Allocation (SAA) from the top down, to ensure that the asset class delivers on its role in the SAA. Similarly, where appropriate, it is important for managers to understand and deliver to insurers' IFRS 9 SPPI definitions and/or Matching Adjustment (or equivalent) eligibility criteria. In such instances, insurance-specific expertise needs to be supported by a strong market position, enabling the team to maintain consistent deal flow which meets these requirements, and structure loans in the best interest of the insurer through effective negotiation.

FINGER ON THE PULSE

Asset strategies are playing an increasingly pivotal role in insurers' profitability and long-term success. Asset managers that have insurance at the core of their business are well-positioned to have the knowledge base and framework set up to add value to insurers dynamically and proactively. What this looks like in practice will range from partnership to partnership. On a day-to-day basis, this may mean supporting insurers' new business bids and asset allocation through up-to-date market intelligence. At a more strategic level, this can mean sharing insights and trends across public and private markets and across geographic regions.

Infrastructure debt's predictable, defensive fundamentals and favorable capital treatment have long earned it a natural home in an insurer's investment portfolio. Today, in particular, the confluence of near-term market uncertainty and long-term global megatrends creates conducive conditions for insurers to allocate to infrastructure debt. With the right approach and the right partner, infrastructure investment has the potential to unlock value for policyholders, shareholders and wider society.

Barings’ Global Infrastructure Debt Platform

EXPERIENCE & SCALE

30+ years’ experience, ~$22B invested across 400+ investments

BROAD COVERAGE

Investments in 32 countries across the Americas, Europe and APAC

ALIGNED INTEREST

Investing alongside our parent company

INSURANCE SOLUTIONS

Working to insurance clients’ specific ALM, rating and regulatory requirements

REPORTING

Customized reporting to meet our insurers’ needs

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