BARINGS PRIVATE EQUITY Real Assets 2.0: Riding the Next Wave in Infrastructure Investing **INSIGHTS** The new generation of infrastructure is creating opportunities

The new generation of infrastructure is creating opportunities with characteristics similar to those of traditional infrastructure—yet often at values the market may not fully recognize.



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The Evolution to Real Assets 2.0

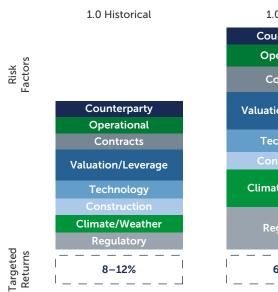
Infrastructure investing has long been characterized as involving assets that provide an essential service. These investments are typically regulated and consist of a single asset or project, with long-term contracts backed by an investment grade counterparty. Further, the majority of the return profile of these assets is driven by current yield. Given the downside protection, contracted cash flows and current yield, such investments are highly sought after by infrastructure managers and command high valuations.

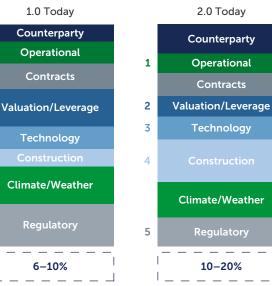
Over the past decade, however, a new range of infrastructure investments has emerged involving what we call Real Assets 2.0. Deals in this new category comprise infrastructure assets that benefit from structural and technological tailwinds, and exhibit compelling risk mitigation. Compared with deals involving the first generation of real assets, Real Assets 2.0 deals generally involve a company or project that is more distributed in nature, smaller in scale and composed of multiple assets. Such companies and projects are characterized by a conservative capital structure (often with modest or no leverage used during the expansion phase), fixed-rate debt with medium- to long-term maturities and contracted cash flows. The company or project generally has an

existing asset with an associated long-term contract, which provides the potential for downside protection, but requires additional growth capital to build out the platform. Ultimately, the goal is to scale the platform and sell the company or project up-market to a buyer with a lower cost of capital.

As the infrastructure market has evolved, the risk characteristics across Real Assets 1.0 and Real Assets 2.0 have evolved as well. Given the significant amount of capital being raised at the upper end of the market, the larger assets of Real Assets 1.0 are trading at record level valuations as managers seek to deploy everincreasing levels of dry powder. Figure 1 provides an illustrative overview of the risk profile of a current Real Assets 1.0 deal versus a Real Assets 2.0 deal. The two most prominent risks for Real Assets 1.0 are excessive valuations/leverage and regulatory risk. With large amounts of dry powder at the upper end of the infrastructure market, and a relatively small universe of scaled opportunities, prices for the leveraged "trophy assets" are elevated. Real Assets 2.0 deals will frequently benefit from substantially lower competition, with deals completed on a bilateral basis, rather than through a competitive auction process. Real Asset 2.0 deals also benefit from build versus buy characteristics, with minimal to no leverage at entry.

Figure 1: Risk Profiles: Real Assets 1.0 vs. 2.0





Risk Mitigation 1. Decentralization of Assets vs. Large Scale 2. Take Advantage of **Build vs. Buy Multiples;** Minimal to no Leverage 3. Limited Tech Risk 4. Simplified/Modular Construction 5. Favorable Regulatory **Environment Supporting DAE Themes Across its Target Sectors**

Source: Barings. As of June 30, 2023.



On the regulatory front, Real Assets 2.0 deals generally are not affected by changes in political administration and are not reliant on a regulatory body to approve contract levels or revenues, as is the case in most 1.0 deals. In addition, there are strong industry and macro tailwinds benefitting Real Assets 2.0 investments. These include the Inflation Reduction Act, which provides for tax credits for a wide range of energy transition projects; the Infrastructure Law, encouraging a wide range of infrastructure investment; and the massive amount of capital that will likely be required for federal, state and local governments, as well as businesses, other organizations and individuals to reach the decarbonization goals set for 2030–2050. Given these factors and the large entry valuation gap, we believe there is a compelling case to be made that a current investment in a lower middle market Real Assets 2.0 deal can provide higher risk-adjusted returns than a Real Assets 1.0 deal for investors willing to assume the same level of risk—albeit with a different composition of risk.

Key Drivers of Infrastructure Market Change

Notable changes affecting the infrastructure landscape are taking place in two general areas. The first involves general partners (GPs), where we are seeing managers with established platforms and successful track records raising record-level fund sizes. This is particularly evident within the infrastructure universe, where GPs tend to have "sticky" limited partner (LPs) relationships.

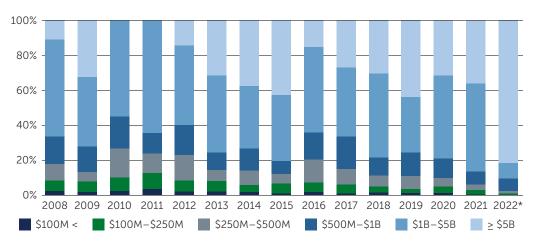


Figure 2: Record-level Fund Sizes Are Emerging

Source: Pitchbook, As of 2022.

Coinciding with this trend is the move among LPs to reduce the overall number of fund commitments in their portfolios and increase their total commitments or dollars to fewer sponsors, usually the largest and most well-known managers. In short, LPs are putting all their eggs in fewer and bigger baskets, which managers are using to target deals in the upper end of the market. This dynamic has led to a dearth of capital being raised at the lower and middle-end of the market, complicating new and emerging managers' ability to gain traction.



The second area of change in the infrastructure landscape involves government policy, particularly the Biden Administration's two-pronged infrastructure strategy leading to passage of the Inflation Reduction Act (IRA) and the Infrastructure Law. The IRA, which was signed in August 2022, includes approximately \$400 billion in projected expenditures on energy transition and climate investments. The IRA is set to provide a strong tailwind to the investment opportunity set, such as 10-year renewable energy tax credits via investment tax credits and production tax credits. The Infrastructure Law, passed in November 2021, represents one of the most significant investments in the U.S. infrastructure landscape in recent memory. The law allocated approximately \$1 trillion for investment in transportation, broadband and utilities, encompassing roads and bridges, railroads, the power grid, water infrastructure, cybersecurity, public transport, airports and ports. According to McKinsey Global Institute, the estimated global need for infrastructure investment during the next 20 years is \$88 trillion, or \$4.4 trillion per year. While a significant portion of that investment will likely come from government and public sources, there remains a strong need for private capital to fill the void—providing an increasing opportunity set across private markets infrastructure.

The Role of Environmental & Climate Risks

Global concerns about environmental and climate risks have spurred governmental policies that are shaping infrastructure investing. We have identified seven fundamental trends supporting growth in climate infrastructure:

- · greater capital flows to achieve transition goals
- a renewed focus on energy security
- the energy transition expanding to the broader economy
- renewables such as wind and solar achieving price parity with fossil fuels
- accelerating procurement to reduce supply chain risk
- · consumer preference for sustainability
- expanded federal, state and local policy support

Our Diversified Alternative Equity Real Assets team focuses on ESG and the associated risks throughout the lifecycle of an investment, from underwriting due diligence through exit. During due diligence, we use several key methodologies to identify and properly underwrite ESG risk including a proprietary internal ESG model and an ESG survey that is completed by our sponsors. The model considers 21 factors across the environmental, safety and governance categories and then assigns a risk score to each category. Based on the industry, each of the risk scores has an assigned weighting, which is rolled up into an aggregate score. The ESG scores are then used as a comparative tool across industries and at the deal level.

Post investment, we have a history of collaborating with our GPs to establish and track decarbonization goals on a quarterly basis. Such metrics, which align with the United Nations Sustainable Development Goals, include carbon dioxide emissions avoided, renewable megawatts added to the grid, storage capacity, carbon savings equal to driving miles and equivalent number of passenger vehicles taken off the road.



Areas of Opportunity

During the past several years, we have been active with a number of high-quality co-investments completed within our targeted sub-sectors. Critically, each of these investments benefit from long-term contracts, inflation protection, limited or no leverage, substantial barriers to entry and favorable long-term secular and regulatory tailwinds. Some examples of our recently completed deals across the energy transition, digital infrastructure and circular economy include:

- Greenfield development of district heating networks across 10 U.K. cities
- Acquisition of an owner, operator and developer of dark fiber telecommunication networks that primarily serve the Chicago public school system
- Acquisition of the market leader in incinerator bottom ash recycling industry, a critical component in the energy-from-waste ecosystem
- Greenfield development of a battery storage project in New York City
- Helping to form a business to deploy high-speed EV charging stations across New York City

While we remain opportunistic across all Real Assets 2.0 sectors, we see several specific subsectors that exhibit a number of the key risk mitigation and asymmetric return properties that we find compelling. The most attractive opportunities we are exploring are in the lower middle market and microcap universe, as well as in greenfield development and value-add. We are currently focusing our origination efforts on opportunities in energy transition, digital infrastructure, transportation/mobility and circular economy sectors.

Across energy transition, we are finding the most attractive deal flow within battery storage, distributed generation and district heating. Within digital infrastructure, we are seeing strong deal flow within edge and hyperscale data centers, fiber-to-the-premises, cloud infrastructure and distributed network systems. Within the transportation and mobility vertical, there are attractive opportunities within EV charging and the electrification of essential transportation infrastructure. In our view, the most compelling opportunities within the circular economy space include waste-to-energy, battery recycling and carbon capture.

Key Takeaway

Traditional infrastructure investments have offered investors attractive risk-adjusted returns. However, technological advancements, the substantial growth of the private infrastructure industry, and the need to decarbonize the economy, are shaping a compelling opportunity for Real Assets 2.0—while at the same time the relative risk of traditional infrastructure is increasing. This new generation of infrastructure is creating a range of opportunities for investors with risk mitigation characteristics similar to those of Real Assets 1.0, yet often at values the market may not fully recognize.

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