



Private Infrastructure: A Rare Bright Spot in a Fractured World

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Gloomy and More Uncertain. That was the title of one of the International Monetary Fund's updates this year for the World Economic Outlook, as it took stock of the macroeconomic and geopolitical environment. For the first time in over 40 years, inflation has risen above 8% in developed markets. Central banks have responded by raising interest rates aggressively. As global economies continue to shake off the impact of more than two years of COVID-19 quarantine measures, labour and supply chain disruptions threaten to derail the recovery. War has erupted on the European continent. The international community has reacted with unprecedented sanctions on Russia. Energy has become an economic weapon, threatening to set back progress on the drive to net zero emissions, and renewing fears about energy security. And an increasingly bold China is challenging the western world order. Gloomy and more uncertain, indeed!

A rare bright spot in portfolios globally has been private infrastructure – direct investments in physical assets that provide essential services to the economy. Despite a series of economic and political shocks, infrastructure has remained resilient, with valuations and returns rising steadily throughout the year.

Four elements account for infrastructure's resilience in 2022: **inflation protection** (higher revenues, reflecting inflation-linked contracts and income); **stable discount rates** (even as interest rates more broadly have moved higher); **demand** (rising allocations to infrastructure from investors of all stripes); and **continued growth** (a massive need for ongoing investment in existing and new infrastructure).

Inflation Protection from Essential Assets

For decades, private infrastructure has positioned itself as a key hedge against rising inflation. The first real test of that claim has been 2022, and the asset class has passed with flying colours. Most private infrastructure assets provide essential services and require large upfront investments. As a result, underlying contracts typically have terms of 30 years or more, and they are often directly linked to Consumer Price Index measures, meaning that cash flows increase with rising prices. Uncontracted assets also benefit in inflationary environments, as infrastructure revenues are frequently tied to the commodities and services that are driving

price increases, such as higher power and energy prices and transportation costs.

This phenomenon led to the cancellation of a recent transaction. A £15-billion deal led by KKR and Macquarie Group to acquire Britain's biggest electricity distribution company, UK Power Networks, was called off after the seller, Li Ka-shing's CK Infrastructure Holdings, tried to raise the price at the eleventh hour to reflect the utility's rising revenues. The higher inflationary environment and resulting revenue drove the seller's expectations higher, leading to the repricing of the asset.

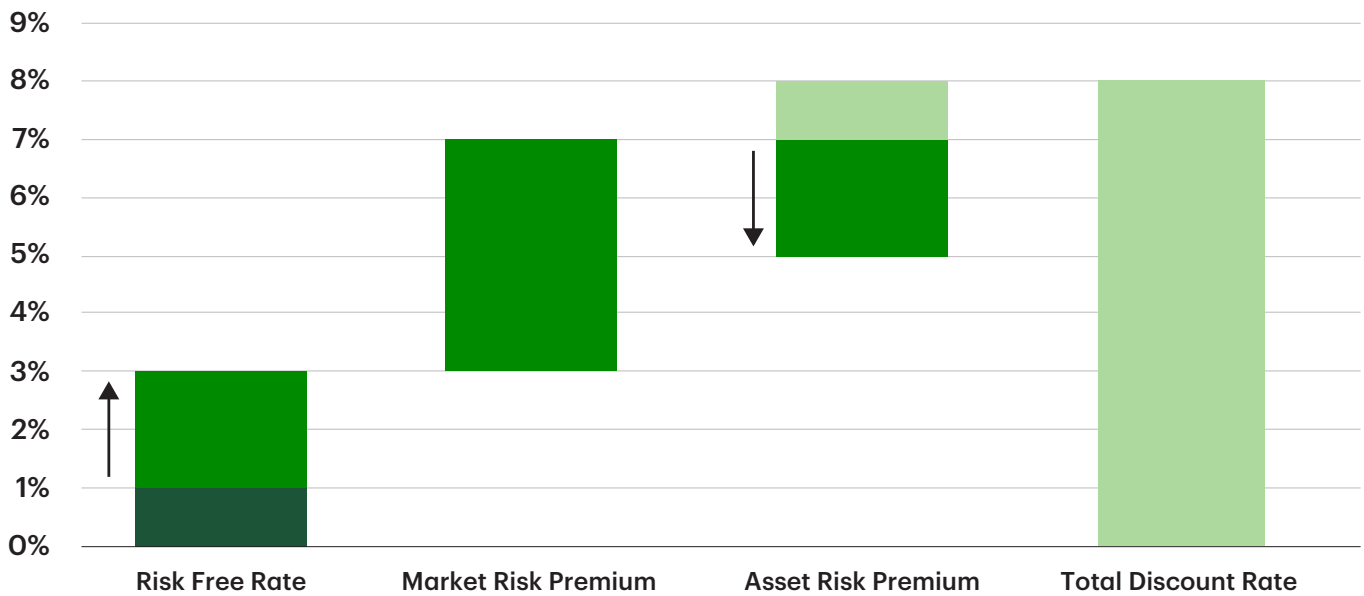
Stable Discount Rates

Private infrastructure assets are typically valued based on a discounted cash flow model. Generally, these models consist of relatively easy to forecast cash flows, discounted by an appropriate risk-adjusted discount rate, which is derived using the capital asset pricing model, or CAPM.

In general, as interest rates increase, discount rates are pushed higher, which in turn lowers valuations. However, CAPM hasn't been able to account fully for the relationship between interest rates and

infrastructure discount rates over the last decade. During this period, private infrastructure assets have been valued with discount rates as high as 15%, well above what the CAPM formula would calculate. To explain the divergence, a buffer has been built into CAPM discount rates, known as an asset specific risk premium. As risk-free rates rise, this risk premium has room to compress, keeping the overall discount rate – and therefore valuations – relatively stable.

Figure 1: Illustrative Discount Rate Components



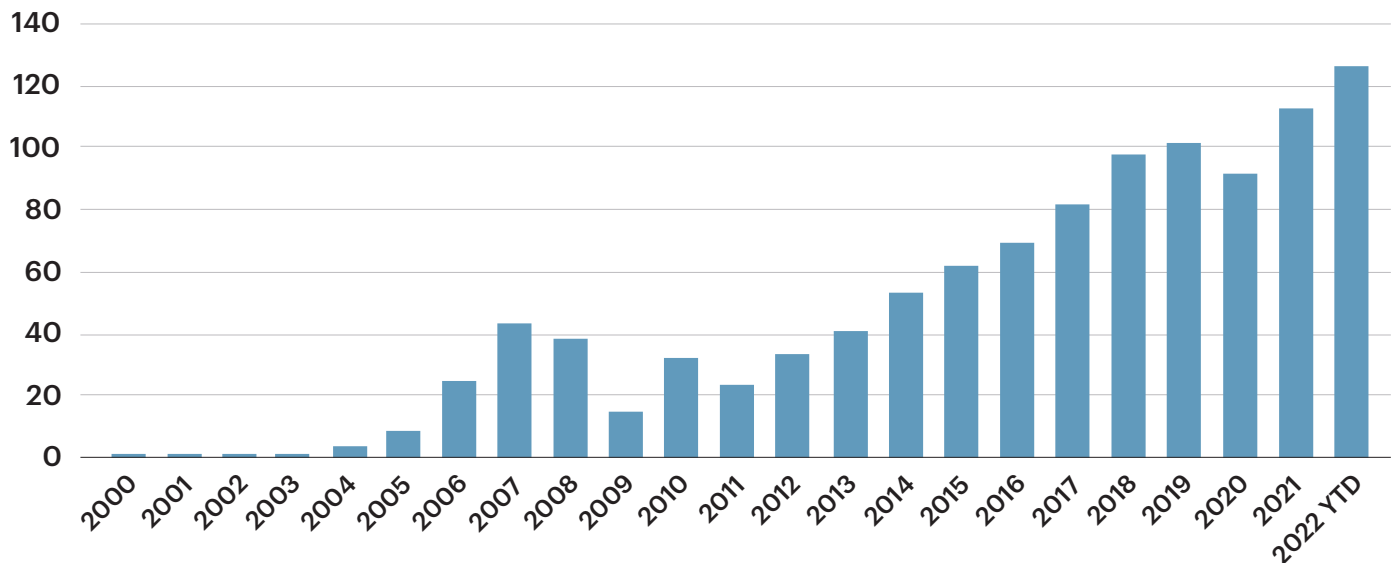
Source: TD Asset Management. As at September 30, 2022.

Demand Continues to Drive Resilience

The demand for high-quality infrastructure assets continues to set records, as investors progressively increase their allocation to the asset class. According to Preqin, private infrastructure funds raised over US\$120 billion globally in the first six months of 2022, more than any full year to date.

This influx of capital means more competition for infrastructure assets, keeping discount rates low and supporting valuations despite the rise in interest rates more generally.

Figure 2: Aggregate Capital Raised (USD BN)



Source: Preqin. As at June 30, 2022.

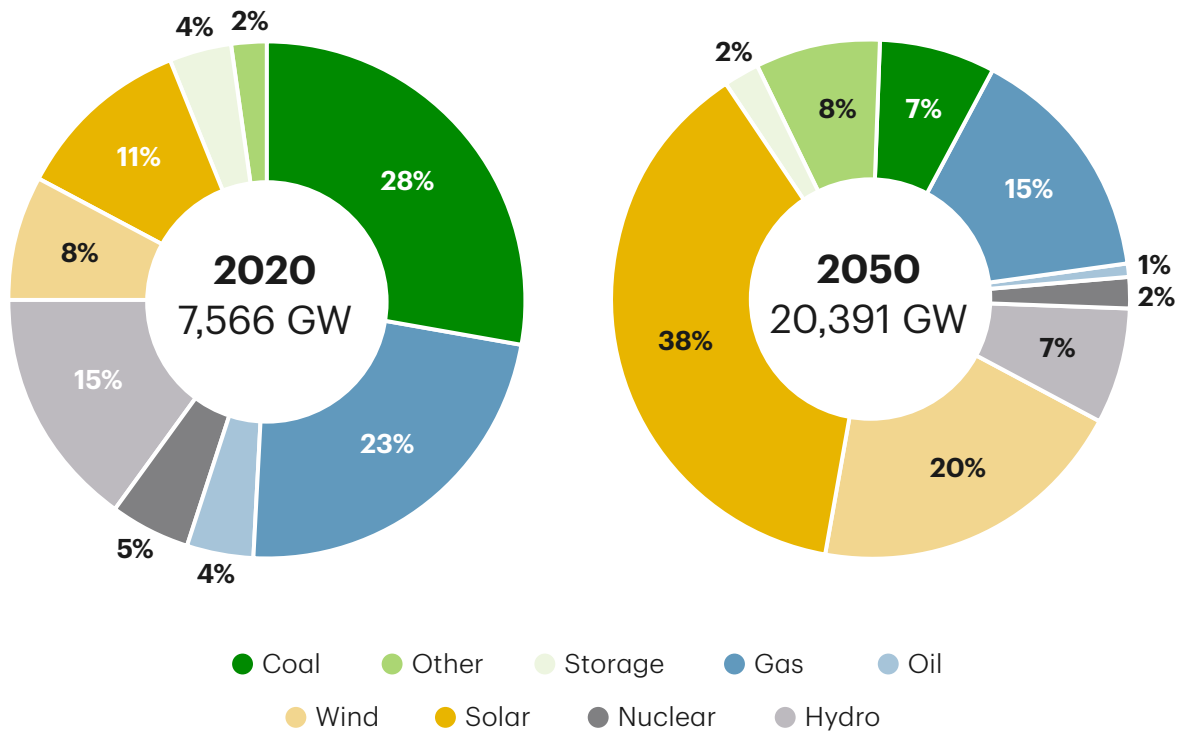
Continued Growth in Physical Infrastructure Assets

Another factor pushing valuations higher is the immense need for new infrastructure.

The supply of new projects remains robust, driven by population growth, renewal of aging infrastructure, and the global shift to cleaner energy. Worldwide, over US\$150 trillion in new infrastructure investment is expected to be needed to address these pressures, according to the International Energy Agency.

Energy is at the epicentre of this phenomenon. Electricity demand is expected to triple in the coming years, as countries around the world seek to reduce their reliance on fossil fuels, while responding to renewed calls to strengthen energy security. Global electricity capacity is expected to increase from 7.6 TW to 20.4 TW by 2050, with 80% of that growth coming from traditional wind and solar.

Figure 3: Expected Global Power Capacity by Type



Source: Bloomberg. As at December 31, 2020.

Security

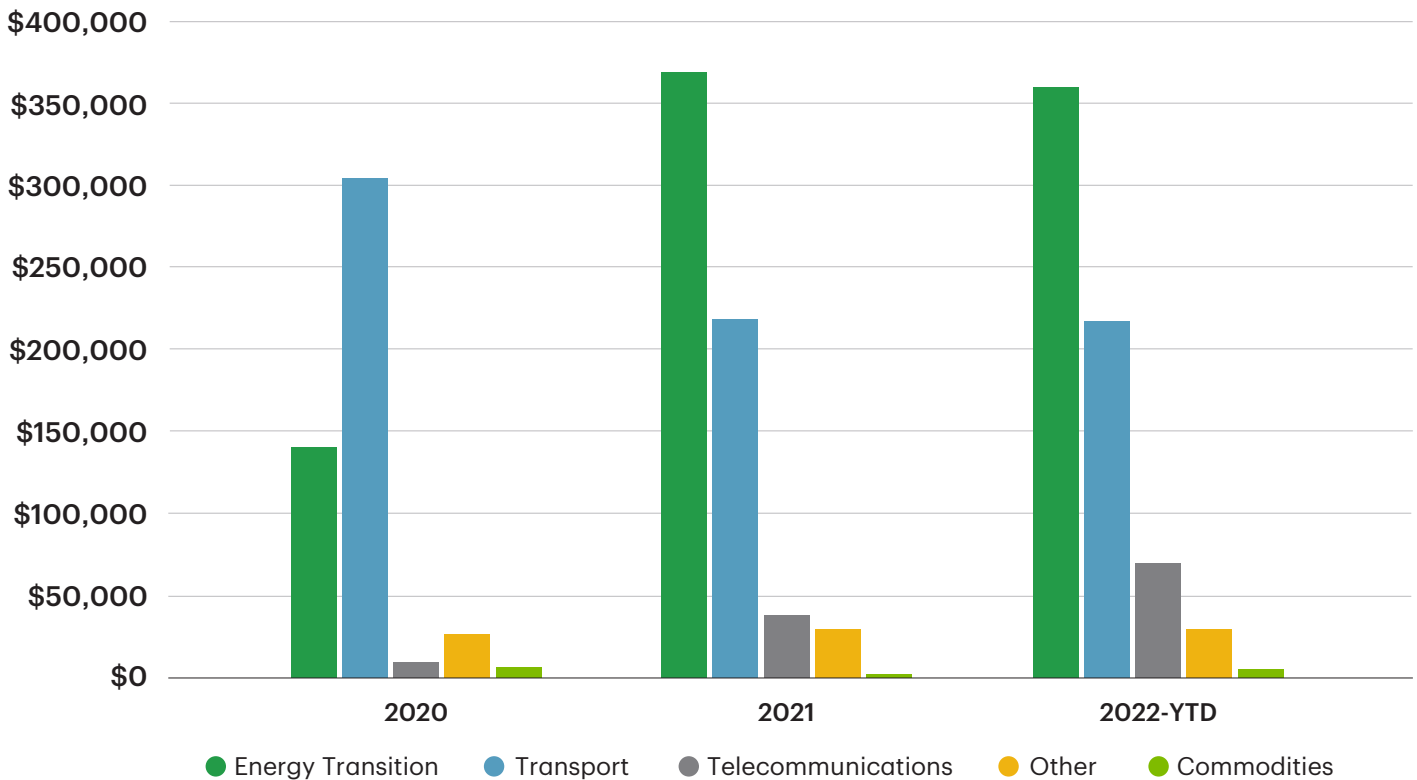
Geopolitical Dislocation Is Driving New Opportunities

As Russia's war on Ukraine drags on, the pre-war world order is unlikely to emerge unscathed. Western countries' decision to impose sanctions on Russia, and growing fears of aggression from other authoritarian states are reshaping trade and diplomatic relations around the globe, creating uncertainty for many jurisdictions and industry sectors.

Transportation is a prime example, beset by supply chain pressures that have disrupted port and rail businesses, as well as a shift in capital toward

renewable energy and other technologies to support the world's transition to net zero. As the chart below illustrates, energy has overtaken transportation as the top sector for infrastructure investment – with energy-transition-related investments rising globally from under US\$150 billion in 2020 to over US\$350 billion in 2022, while transportation-related investments declined from US\$300 billion to approximately US\$220 billion over the same period.

Figure 4: Transaction Value by Sector Since 2017 (USD M)



Source: Inframation News. As at July 31, 2022.

Two very public examples of this dynamic over the past year were Brookfield Asset Management's decision to pull the sale of PD Ports, a UK ports company, from the market due to a lack of interest, and Oaktree Capital Management's agreement to sell Ports America, the largest U.S. terminal operator, to the Canada Pension Plan Investment Board for US\$4 billion, after initially seeking US\$6 billion.

In the coming years, these trends – of geopolitical and supply chain concerns depressing valuations, and mega infrastructure managers chasing renewable energy assets – could create opportunities to build allocations in the comparatively neglected transportation sector at attractive prices.

Where Do We Go From Here?

Private infrastructure has proved a comparatively safe port in a world roiled by many storms. Most physical infrastructure assets today are difficult to replicate and provide services that are valuable, if not essential, irrespective of the broader macro-economic environment. Roads and railways provide access to transportation corridors that are critical to the flow of people and goods; sea ports perform a similar function, having operated from geographically important locations for centuries.

It's characteristics like these that drive the inherent value of infrastructure and should continue to do so for generations to come. Portfolios that can capitalize on disruptive opportunities through open-ended timelines and participate in the growth of new infrastructure will be best positioned to provide safety and growth – and serve as a beacon in a gloomy and uncertain world. ■

Growth

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