

The demand and opportunities in listed *infrastructure*



Upgrading the world's infrastructure will likely be a dominant theme over the coming decades; little wonder that investors are exploring ways to tap into this global growth opportunity

By Darren Spencer

Infrastructure is the backbone of the global economy, providing society with the foundation to function. It is also front and center in the evolution of several key trends across the global economy that will likely drive increased investment opportunities in what is a dynamic and rapidly evolving asset class. From the energy we consume to the transportation networks we rely on; infrastructure is well placed to provide investors with access to a global growth opportunity in the coming decades.

Interest in infrastructure investing is not a new phenomenon. Many pension plans around the world have been attracted to this asset class since the early 1990s. Back then, several significant infrastructure privatizations took place in Australia that included airport and electricity assets. It was the privatization of these assets that served as the catalyst for pension plans to begin investing in infrastructure. Fast forward to today, demand for the infrastructure asset class is as strong as ever with both institutional and private wealth investors seeking to harness growth opportunities along with the unique

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attributes that infrastructure can provide. This includes investment in assets that provide society with essential services, long-term sustainable cash flows and inflation-protected income streams. Listed infrastructure also offers a sound and immediate entry point into the asset class, while avoiding the complexities and barriers to entry associated with investing directly in infrastructure projects.

What will be the primary drivers of the global growth opportunity in infrastructure in the decades ahead?

INFRASTRUCTURE MODERNIZATION

One of the most important trends that will drive long-term investment opportunities is the theme of infrastructure modernization. Upgrading the world's infrastructure will be a dominant theme over the coming decades. In fact, per a McKinsey Global Institute estimate, a staggering \$69 trillion will need to be spent on critical infrastructure by the year 2035 to keep up with projected global demand.

Given the sheer amount of spending required for investment in infrastructure, there will also be an increasing need for private capital to fund ongoing investments in order to help close the infrastructure financing gap. This dynamic should continue to drive growth in the listed infrastructure investable universe, which has seen the market capitalization of publicly traded infrastructure companies grow from about \$500 billion in the mid-2000s to around \$2 trillion to \$4 trillion today.

Underinvestment in infrastructure over many decades has been well documented. California wildfires, the bridge collapse in Minneapolis or the impact of hurricanes in Florida have all been instances where the cost of aging infrastructure has been evident. Moreover, in their *2021 Report Card for America's Infrastructure*, the American Society for Civil Engineers gave America's Infrastructure a C– grade. Notable deficiencies include an estimated 6 billion gallons of water lost each day in the United States due to water main breaks, and 43 percent of public roadways in poor or mediocre condition highlighting the increased wear and tear on roads across the country.

Another factor at play is infrastructure-based fiscal policy. As governments and policymakers seek ways to generate a sustained economic



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recovery in light of the COVID-19 pandemic, infrastructure-related stimulus measures have been enacted or are taking shape across the European Union, the United Kingdom, Japan, Australia and the United States. This is a long-term positive for listed infrastructure as well. Private-sector capital is essential as most government balance sheets are stretched, leading to increased need for private-sector capital and, ultimately, private-sector ownership and operation of critical infrastructure assets.

DECARBONIZATION OF ELECTRICITY

Across the electricity ecosystem, there is a material push toward decarbonization and sustainability. Driven by a supportive regulatory backdrop and declining cost curves for wind and solar power, the decarbonization of electricity is under way. While renewables growth in the United States is still in its early stages, the U.S. Energy Information Administration expects that the share of renewables in the U.S. electricity generation mix will double from 21 percent in 2020 to 42 percent in 2050.

The importance of decarbonizing electricity generation in reducing carbon emissions to net zero cannot be overlooked. The electricity sector is the largest source of carbon emissions around the world, as an estimated 30 percent to 40 percent of global carbon emissions come from the consumption of fossil fuels to generate electricity.

The regulatory environment for renewable

energy is also very supportive, hence accelerating the transition to renewables in the electricity generation mix. Most of the utilities in the United States are actively expanding their renewable energy assets. Thirty states, Washington, D.C., and some U.S. territories have regulations that require utilities to supply a minimum percentage of their electricity demands from clean energy. Moreover, 74 percent of U.S. electricity generation is in states with green energy initiatives.

The growth in renewables in the electricity generation mix is also helped by declining cost curves in solar and wind energy to the point that their price (without subsidies) is now lower than traditional fossil fuels. It is also expected that costs for solar and wind will continue to decline hence further entrenching them as low-cost energy providers.

All in all, the decarbonization of electricity will lead to meaningful capital expenditures and ultimately earnings growth potential for electric utilities in the future. Regulated utilities are typically allowed to earn a return on capital expenditures (through the asset base from which the utility provides service) hence investment in renewables over the coming years should help drive earnings growth for companies shifting from carbon-based fuels to solar and wind.

DATA

Cell tower and data center companies are poised to continue to benefit from long-term

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structural growth trends.

Global growth in the demand for wireless data continues at a seemingly insatiable pace. Contributing factors include increased smartphone usage, data-intensive applications that utilize live streaming and/or video along with the rise in social media and mobile banking. Consider that Ericsson estimates total mobile data traffic will increase by about 4.5-times from the end of 2020 through 2026.

Furthermore, the global rollout of 5G cellular networks in the coming years will have profound implications for wireless usage as speeds are enhanced, along with a significant increase in connection possibilities that will drive a diverse range of commercial applications, including The Internet of Things, robotics, autonomous vehicles, manufacturing and smart cities.

In addition, expansion of the independent-tower model beyond the United States should allow cell-tower companies to generate higher margins and the potential for value creation through capital market activities. Unlike the United States, where cell towers are typically owned by independent companies, the rest of the world generally operates on a model whereby cellular phone companies (carriers) are the owners of these cell towers. Unlike the independent-tower model where operators can drive margin expansion by hosting more tenants on any given tower, carrier-owned towers are beholden to one tenant per tower. As

a result, we have seen more carriers outside of the United States assess the ownership of their tower assets, which lead to increased opportunities for independent tower companies to grow their footprint beyond U.S. borders.

POPULATION GROWTH

The demand for infrastructure should also be driven by an increase in the world's population and continued urbanization. The continuing urbanization and overall growth of the world's population is projected to add 2.5 billion people to the urban population by 2050. Simultaneously, the proportion of the world's population living in urban areas is expected to increase, reaching 68 percent by 2050. These dynamics will have important implications for transportation infrastructure including toll roads and airports given the increased need for investment in transportation networks.

Toll roads play a key role in reducing traffic congestion in densely populated urban areas and get people where they want to go as quickly and safely as possible. Investment in these urbanized markets with large, growing populations as well as existing traffic-congestion issues create significant opportunity for growth for publicly traded toll-road operators where governments are supportive of private sector infrastructure financing.

Also, commercial air travel has witnessed significant growth over recent decades, with total passengers per year increasing from 1.5 billion

in the late 1990s to nearly 4 billion in the late 2010s. Despite the negative impact associated with the COVID-19 pandemic on passenger numbers, the long-term growth trend remains intact. The International Air Transport Association expects a 3.7 percent average annual growth in global air passenger journeys from 2019 through 2039 which translates to over two-times the number of global air passenger journeys in 2039 compared with today. Population growth and the rise of the middle class across Asia, the Middle East, Africa and Latin America should continue to help drive the demand for air travel globally along with the need for modern airport infrastructure.

CONCLUSION

Over the coming decades, the need for investment across the infrastructure ecosystem across both developed and emerging countries is immense. Moreover, listed infrastructure companies are well placed to take advantage of the structural trends around infrastructure modernization, decarbonization of electricity, data, and population growth. Listed infrastructure also provides investors with ease of access into an asset class that can be difficult for all but the largest institutional investors to participate in. ■

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