AMP CAPITAL

What is infrastructure and why invest?

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With governments around the world increasingly looking to the private sector to fund new infrastructure investment, infrastructure is presenting attractive opportunities for investors. Here we explain some of the characteristics of the asset class.

What is infrastructure?

Infrastructure offers investors the opportunity to own the utilities and facilities that provide essential services and help drive economic growth and productivity.

Infrastructure can be divided into three major sectors:

1. **Utilities**: electricity, gas, communications and water
2. **Transport**: airports, roads, seaports and rail
3. **Social**: education facilities, hospitals and other community facilities

Over the last few decades governments around the world have faced increasing budgetary constraints. With greater knowledge of the world's capital markets, and realising that policy outcomes can be achieved without owning or operating key infrastructure assets, governments have crystallised some of their massive investments in infrastructure through ongoing privatisation and partnerships with the private sector.

Nowadays, policy development has seen a growing reliance on private sector funds and public markets to fund the core infrastructure that countries need to support and sustain economic growth.

Key characteristics of infrastructure

Infrastructure assets can offer investors a strongly differentiated set of characteristics compared to other asset classes.

These characteristics may include:

- the provision of essential services;
- significant barriers to entry and a generally dominant market position;
- long duration assets, often with a life of 30+ years;
- have high upfront costs, but low ongoing operational costs;
- long-term, stable cash flows, generally with low volatility compared to other asset classes;
- inflation-linked contracts and pricing that protects investors from the effects of inflation on long-term cash flows

Key benefits for investors

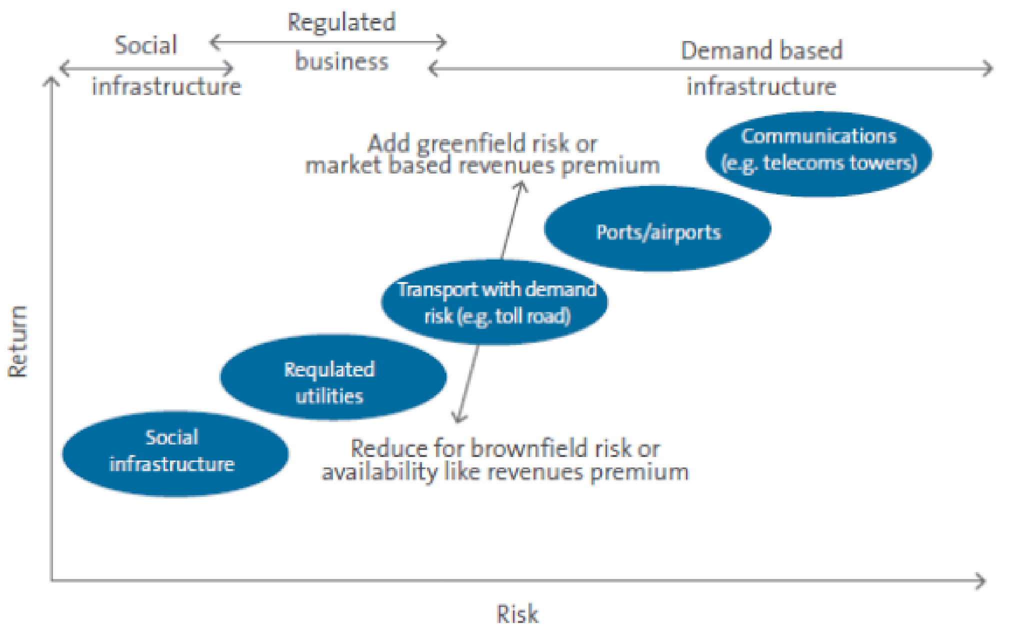
Volatile and uncertain markets are highlighting the benefits infrastructure investment can bring to an investor’s portfolio. In addition to the potential for smoother and more predictable performance, by including infrastructure in a portfolio, investors can benefit from:

- attractive risk-adjusted returns, complementing a diversified portfolio;
- reliable inflation-linked returns;
- low correlation and volatility compared with traditional asset classes;
- stable long-term yields, with the potential for capital growth;
- defensive characteristics emanating from the provision of essential services;
- potential for value enhancement through active management of the assets.

Risk and return profiles by sector

Whilst the infrastructure asset class is generally defensive in nature, there are still differences in the risk and return profile of assets across the infrastructure spectrum.

Illustration of indicative risk and return profile by infrastructure sector



Social infrastructure

Social infrastructure assets, which include hospitals, schools and education infrastructure, tend to generate extremely stable long-term cash flows on the basis that they are provided on an availability basis.

Regulated utilities

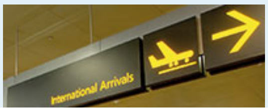
Regulated utilities are businesses which provide essential services such as water supply, sewerage, electricity or other types of energy. These types of utilities tend to be regulated across most jurisdictions because of their essential importance to daily commerce and life and pricing is often set by the regulator. Performance of regulated utilities tends to be relatively resilient, regardless of the ups and downs of the economy, due to the essential nature of the services they provide.

Transport

Transport infrastructure includes toll roads, and is classed as a patronage asset. This means its performance depends on how much the service is used. Patronage can be impacted positively and negatively by many factors, so the risk associated with transport infrastructure tends to be higher compared to that of regulated utilities and social infrastructure. For this reason, investors expect a higher relative return for investing in transport infrastructure.

Ports and airports

Ports and airports are predominantly patronage assets. The more that people use them, the



better they perform. Ports and airports by their nature are linked to the strength of the economy. Strong trade and a strong economy translates into greater usage and greater revenue. Of course, when the economy falters and contracts, these assets experience contraction in usageand ultimately revenue. So for ports and airports, investors expect a higher return because of this higher patronage risk, and the greater volatility in earnings this implies.

Communications

Communications infrastructure, such as telecommunications and towers, mixes availability with patronage in a technology and communications environment where usage patterns can vary. Communications infrastructure is exposed to greater competition than other patronage assets such as ports and airports. Moreover, communications infrastructure dates rapidly compared to other infrastructure because of the pace at which technology develops and changes. For this reason, there are additional risks that investors require greater returns to cover.

Risk and return by asset lifestage

Infrastructure assets also exhibit different risk and return characteristics depending on their life cycle stage. Infrastructure assets can be categorised into a three stage life cycle as shown below, with each stage offering different levels of return and risk:

- **Greenfield assets**
  New projects which are approaching or under construction. These projects typically include a number of risks including design, development and construction risks.

- **Development assets**
  Development assets tend to be existing assets which are undergoing enhancement or redevelopment. The risks are generally lower than for greenfield assets, but higher than for mature assets.

- **Mature assets**
  Mature assets are assets that are in full operational mode and earning revenues. Once an asset becomes fully operations, it has been significantly de-risked. This means returns are lower than are typical in the greenfield and development stages.

For more information on investing in infrastructure, download our detailed Understanding Infrastructure guide.