



5th September 2023

## Why we like Infrastructure – an ode to common sense investing

We have a number of potential new infrastructure investments forthcoming and - given the importance of infrastructure to our portfolio construction - we wanted to remind investors why Grant regards infrastructure as the “Prince of Asset Classes”.

At the end of the day, infrastructure has a lot of the upsides of equity-style investing while not having many of the downsides, and it also has a lot of the upsides of an inflation-protected bond without having many of the downsides. It is, in fact, an almost perfect investment. Even the “Oracle of Omaha” - Warren Buffett - when he was asked what a perfect investment would be, replied by saying “the only toll-bridge in town”.

Read on for a more fulsome explanation of why infrastructure is such an integral part of our portfolio design and why we are so excited at the re-ignition of the space after a period of lock-down induced doldrums.

## Essential nature of infrastructure

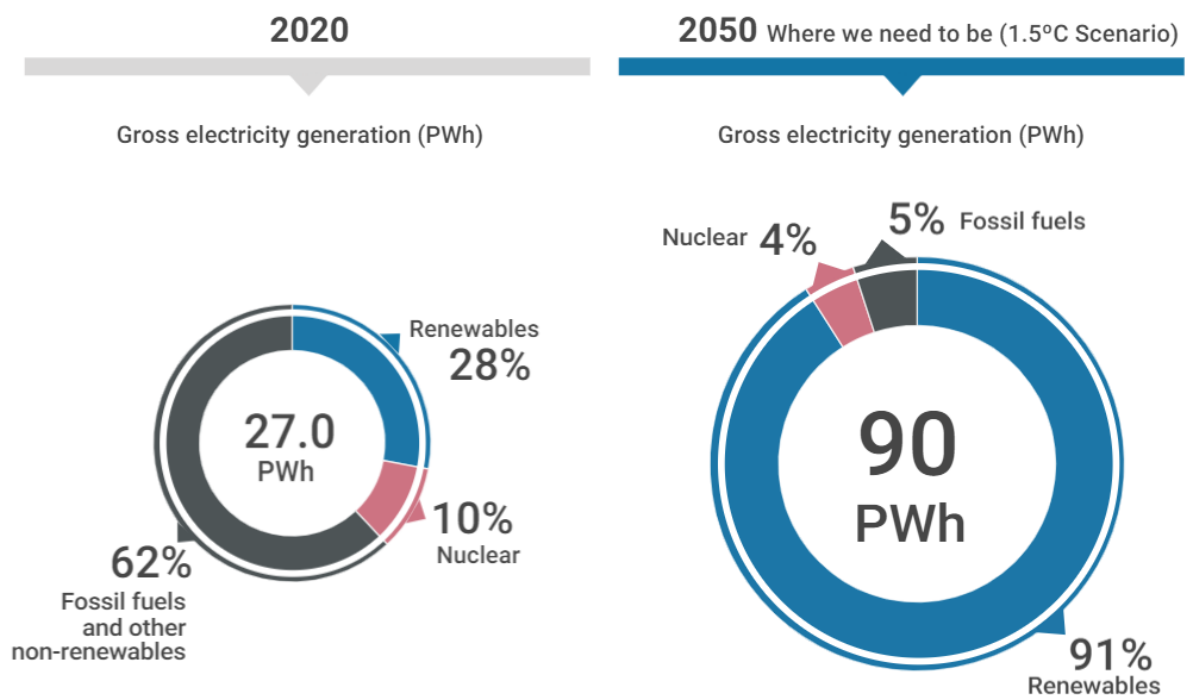
Infrastructure’s primary characteristic is the essential nature of the service. Infrastructure as an **investment class**, adds the feature that it is an area underinvested by governments, opening the way for private sector ownership. Often a third characteristic is cited, namely status as a natural monopoly, i.e. the infrastructure provides a function which requires only one provider – for example, a city only needs one airport, or a river needs only one hydroelectric dam to generate electricity; though this is not always a feature, a tolled road can run alongside a free road, for example.

Over the last three decades the investment potential for infrastructure investment has changed significantly. Privatisation or construction of patronage – aka: “pay as you go” assets (particularly airports and tolled roads) were the first broadly invested infrastructure class that emerged from cash-strapped

governments being unable to fund adequate services. Privatisation of existing energy generation and transmission assets also featured, as did the modernisation of copper phone networks and the roll-out of mobile phone infrastructure in recurrent global investment themes. Infrastructure, however, is an asset class that continues to change as the world itself changes.

A wonderful example is the biggest driver of infrastructure investment at the current time, which is the decarbonisation of electricity generation, specifically the decommissioning of coal and (to a lesser extent) gas generation. Tentative steps have also been taken towards the infrastructure necessary for decarbonisation of transport (i.e., replacing petrol and diesel engines with electric), although relatively few nationwide charging networks have been developed anywhere in the world to date.

The International Renewable Energy Agency (IRENA), the lead global intergovernmental agency for energy transformation and serves as the principal platform for international cooperation, estimates more than \$35 trillion dollars needs to be invested to modernise energy generation by 2050. This does not include the necessary updates to transmission grids or storage for renewable power.



**Power generation needs to more than triple by 2050**

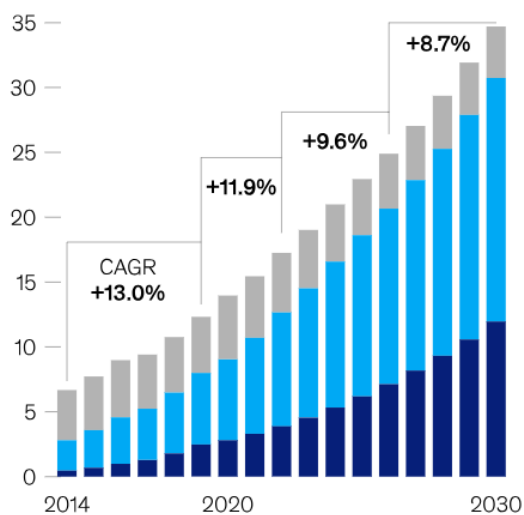
(Source: irena.org)

The other area of greatest current opportunity is in communications infrastructure –national and international fibre-optic backhaul networks have largely been built-out at this point (subject to the economics of the last mile...) so

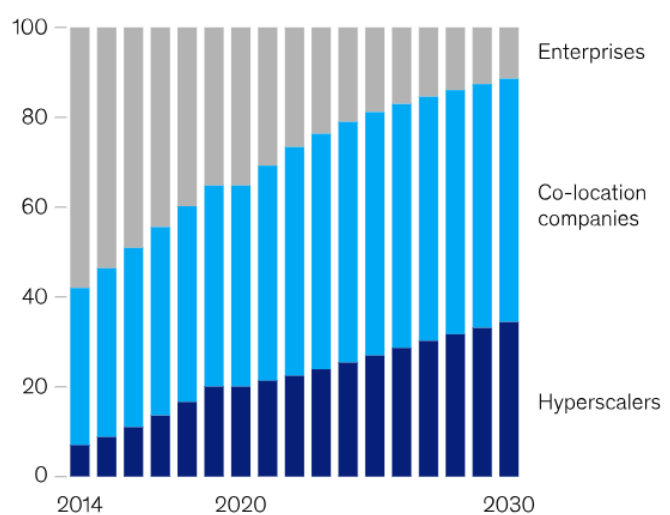
opportunities starting in the late 1990s for substituting low-grade copper (originally designed in the 1950s for voice traffic) in communications links have changed. The new need is a massive investment in data storage. As well as governments, this demand comes from some of the largest companies in the world, particularly tech giants such as Microsoft and Oracle from the '80's and '90's and the newer 21<sup>st</sup> century upstarts like Google and Amazon. There is also significant demand within the government space for dedicated communications and storage from defence departments to support new generation technologies and associated communications needs. As an example, McKinsey recently examined the trend growth in US data centre space. These are facilities that neither government or private sector users have any particular interest in owning or operating themselves.

### US data center demand is forecast to grow by some 10 percent a year until 2030.

**Data center power consumption, by providers/enterprises,<sup>1</sup> gigawatts**



**Data center power consumption, by providers/enterprises,<sup>1</sup> % share**



<sup>1</sup>Demand is measured by power consumption to reflect the number of servers a data center can house. Demand includes megawatts for storage, servers, and networks.

(Source: McKinsey & Co, January 2023)

In terms of future trends, while social infrastructure has rarely represented a large portion of the total infrastructure *investment* sector, increasing healthcare expenditure may become a much more significant source of opportunities should a model develop that is appealing to policy makers. The UK took steps in private provision of healthcare (as opposed to simple real estate transactions of leasing a hospital) with its Public-Private-Partnership scheme, but there is no widely adopted model at this time. We would suggest this is only a matter of time, however.

Aside from these broad global trends, old and new infrastructure projects in many other areas continue to present themselves. Port infrastructure, ferries and bridges, pipelines and water assets, and other assets supporting day-to-day life continually come to the private market where governments (and even corporate owners) continue to dispose of high value mature assets as pressure builds on their balance sheets. (The just completed sale of Auckland International Airport (AIA.NZX) shares are a prime example of this.) Commonly referred to as **Core** (*aka: traditional infrastructure*) and **Core Plus** (*i.e. newer, non-government or non-monopoly infrastructure*), these types of infrastructure investment are typically seen in newer versions of infrastructure funds, whilst the older single-asset class models (such as toll road or airport funds) have largely fallen out of favour with the decline of privatisation.

## Infrastructure as a financial investment

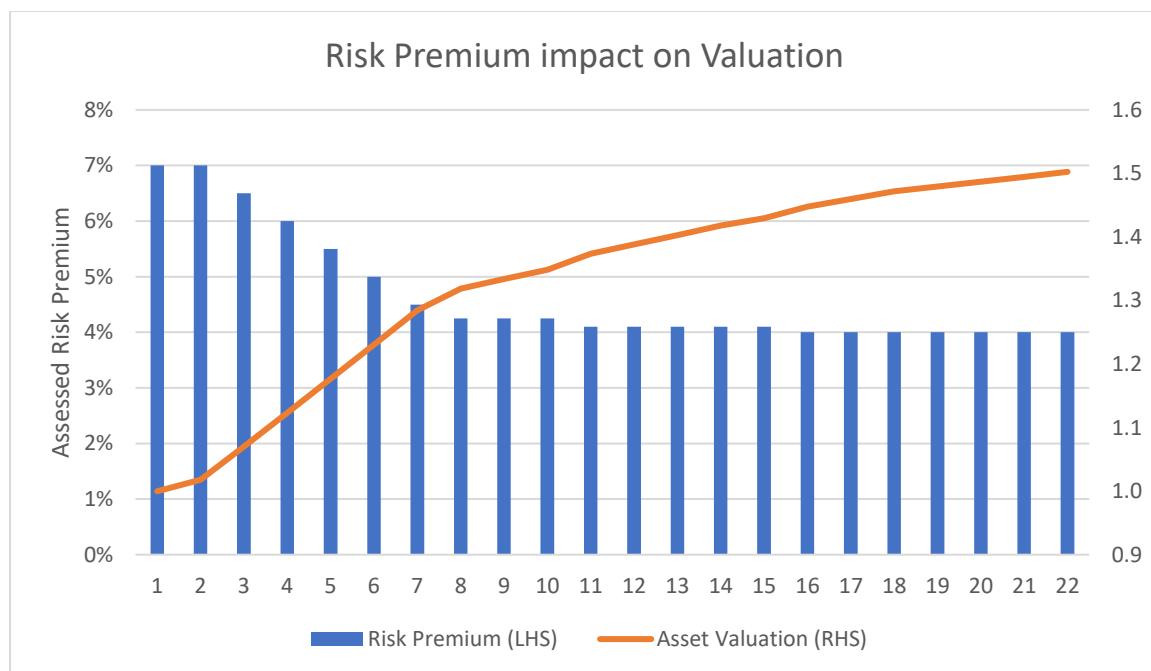
Infrastructure is not simply different from other equity investments because of the function it performs, but also in its risk profile and its valuation methodologies. These differences are the key to its attractiveness as an investment class, and the principal reason the class is so attractive to Cleary Wealth Management.

The defining characteristic of infrastructure investments is long-term, predictable and stable cashflows. While we may be confident other businesses will continue to exist for several decades (for example: major agricultural producers, large miners, commercial property owners, or telephone companies are all likely to still be with us in thirty years), it is impossible to say anything about the cashflows or the profitability of these businesses that far in the future. The very high capital cost associated with infrastructure also influences this stability – a toll road might have a gross margin exceeding 85%, where a food retailer would likely have less than 5%. Changes in labour or input costs can drastically swing the profitability of the retailer but have negligible impacts on toll revenues.

This in turn leads to the other defining characteristic of infrastructure as an investment class: debt leverage. It is not a coincidence that some of the largest infrastructure developers and owners in the world are also banks, fund managers, and other financial service organisations. The financial structuring (and restructuring) of infrastructure is a key element of the appeal of infrastructure investment. Rather than a one-off step change in valuation that you might see in a successful private equity take private or an office tower refurbishment, the changing risk profile in an infrastructure investment provides for repeated extensions of debt financing which brings forward the cashflows to investors. Infrastructure takes the principle of “*a dollar today beats a dollar tomorrow*” to its extreme.

The risks of infrastructure investment, as with the capital costs, tend to be largely front ended. There is much greater risk in (say) a port facility under construction than for a port with ten or twenty years of operating history. In the former case, there is not only construction-related risks, but also customer-acquisition related risks, operating cost unknowns, maintenance unknowns and regulatory considerations. Within a few years, these unknowns have been resolved – shipping logistics have been adjusted, throughput volumes have been established and the facility has been incorporated into the global logistics infrastructure. With the risks gone, the risk premiums diminish and the valuation increases. *(Those who have been with us for some time will recall exactly this process with the Polish greenfields port DCT Gdansk which resulted in a net IRR of 18% pa or a return of 8 times money over the 12 years we owned it from an empty beach through to its completion as the Baltic's biggest port.)*

The impact of such a declining risk profile, common in infrastructure assets, is demonstrated in the graph below. The declining risk premium leads to a significant valuation rise, which can occur even if the risks in question are borne out. A patronage asset such as a toll road or a port which underperforms expectations in terms of traffic throughput may still see a significant uplift in valuation because of the reduced discount rate applying to the future cashflows.



What does all this mean for the investor? Low-growth but stable cashflows (inflation-linked bond like in their nature but valued at a significant discount to an actual bond because of the unknowns rapidly becoming known as each risk factor is removed) the valuation jumps in a fashion almost unseen in bond investing. An infrastructure investment that generates revenue growth of only 3% or 4% can easily translate into 15% return or greater to the investor purely through risk-reduction revaluation. An asset that permits debt refinancing could

generate significantly more by delivering some of the future cashflows back to the investor immediately.

## **Core Plus – the new infrastructure**

Core infrastructure (toll roads, airports, ports and similar) investment has slowed with the decrease in government asset sales and deregulation. The decline of economic rationalism as a political trend has further diminished the appetites of governments for the sale of major assets that could be taken off the balance sheet. Further, a significant portion of global core infrastructure resides with pension funds who are not short-term sellers and are only interested in maintaining buying power over generational periods of time; it is these financial behemoths that are often derided as *yield agnostic investors* as they are happy to buy assets with low – even negative – yields if they are certain of getting cashflows at some point in the future as certainty of cash in the future is obviously vital for institutions like pension schemes and life insurance companies. Rather than shrinking however, the infrastructure market has continued to expand the range of opportunities, and the other forms of infrastructure (which do not have a legislated monopoly) continues to expand. This is true both in government and private space and again, it is the nature of the risks and the cashflows that lead the appeal.

One excellent example of this is the rise of the **data centre** space. Tech companies who trade at eye-watering revenue multiples have no desire to tie up billions of dollars in their back-end storage infrastructure, nor manage the construction and rollout of these centres. Instead, they turn to infrastructure managers who are more able to manage such assets, and (compared to simply treating the investment as a commercial property or factory as would be done in the property space) are able to take on the risks to build, operate, manage, power and maintain such facilities for years, in a nearly identical fashion as they do for government buyers.

The other key class emerging in Core Plus infrastructure is embraced by both governments and large corporates infrastructure users, and that is being the key purchaser of an infrastructure asset rather than the sole purchaser. In such cases, the client entity (public or private) will guarantee enough revenue to allow the infrastructure to be built and operated, but then leave the owner able to supplement these revenues with sales to other parties. This is an extension beyond (say) an airport having regulated air revenues but also collecting and keeping shopping and carparking revenues for being able to sell the core product to other parties.

We are seeing this model develop in public-anchored infrastructure (even including assets in space) through to private industry players effectively creating their own shared infrastructure through their sharing of co-located facilities.

## **Infrastructure fund opportunities**

We are currently reviewing several infrastructure opportunities, ranging from billion-dollar-plus funds from some of the world's largest investors in the infrastructure space through to more niche plays. These include both European and US specialist funds as well as funds from Asia, Australia, and the new world.

It is no accident that the biggest investors in infrastructure funds are pension funds who are investing member contributions today that they know they will not be called on to return for several decades hence. They value the continuity and predictability as well as the inflation-protection that is found in no other investment class with a decades' long timeframe.

Infrastructure has represented up to 25% of the Cleary Wealth Management portfolio in the past because of the unparalleled long-term risk-return profile it offers, though changing fund manager dynamics, the rapidly increasing interest rate environment of late, and the availability of some (quite literally) once in a lifetime opportunities in the Covid and post Covid environments has meant this has shrunk in recent years. This was exacerbated by zero interest rates during the pandemic meaning there was almost literally no upside in acquiring most core infrastructure at market prices. However, with inflation peaking globally over the next year or two and interest rates likely to follow the economy downwards, the stars have again aligned for us to lean in again to our once favourite investment class.

Should you have any questions, please do not hesitate to contact us.

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