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The Appeal of the Real: is Listed Infrastructure an inflation vaccine?

- Inflation-linked revenues help defend against effects of global stimulus policies and price rises
- Infrastructure's lag after CoVid impact is an opportunity amid improving fundamentals and attractive relative values
- The asset class opens access to renewable energy, sustainable transport, and digitalisation themes

Confronted with unexpected and potentially persistent inflation for the first time in years, investors are being advised to diversify into real assets. That catch-all term could mean anything from farms and forests to gold, gas or grain futures. So, what are the most relevant "real" asset classes? There are many investments that qualify, but in general, these assets are linked to tangible holdings with intrinsic value.

In terms of their capitalisation, the dominant share of the world's real assets are owned outright by direct investors, and so can often be illiquid and idiosyncratic. However, a substantial minority of global real assets are listed on financial exchanges. These so-called listed real assets are becoming increasingly popular with investors, in the era of suppressed interest rates and mounting inflation risks. Traditional (or naïve) commentators urge people unsure of how to preserve their future purchasing power, to buy precious metals, land, art, and even commodity futures as these investments have historical merit in hedging against inflation, gaining in value as unanticipated price increases mount in various sectors. However, these are prone to speculation and illiquidity. The judicious deployment of listed real assets in a portfolio, by contrast, can introduce inflation-proofing without multiplying such risks.

This article is the first of a pair, considering the value and mechanics of how a well-diversified set of real assets can indeed be useful, as a higher path for global cost and price inflation sets in. Global Listed Infrastructure is examined in this piece, with the second article to compare it with the better-known Global Listed Real Estate (Real Estate Investment Trust, or REIT) asset class.

At Salt, we believe introducing the defensive infrastructure option to investors, within a high-quality global fund, is a crucial plank in constructing a robust investment portfolio, and have now launched our **Sustainable Global Infrastructure Fund** accordingly, as a PIE option. We firmly consider offering a global portfolio in this asset class is desirable, minimizing national and regional regulatory risks and avoiding over-concentration in a particular type of real asset (opportunity sets vary substantially between countries.) The Sustainability dimension also drives the selection of an international portfolio, as many technologies being deployed for carbon and climate pollution, sea level-increase mitigation, or desalination, for instance, are developed in the Northern Hemisphere and tend to be deployed in our region after a time lag. The stand-out examples here come from transportation assets, which are ever-more sustainably designed in Europe and North Asia, but which are still under-invested in Australasia, South-East Asia and Latin America, due to fiscal cost and topography constraints.

Additionally, from the viewpoint of portfolio management, a global real asset fund has, in our view, less immediate vulnerability to accelerated central bank policy interest rate increases. The Reserve Bank of New Zealand looks likely to move policy interest rates upward well in advance of its global counterparts, meaning that any immediate adverse reaction by listed real assets to higher financing costs will be felt domestically first. It is difficult to foresee the US, Europe, or Japan initiating rate increase cycles until much later. Therefore, we feel both for reasons of sector diversification and cycle sensitivity, a global solution is best at present for NZ

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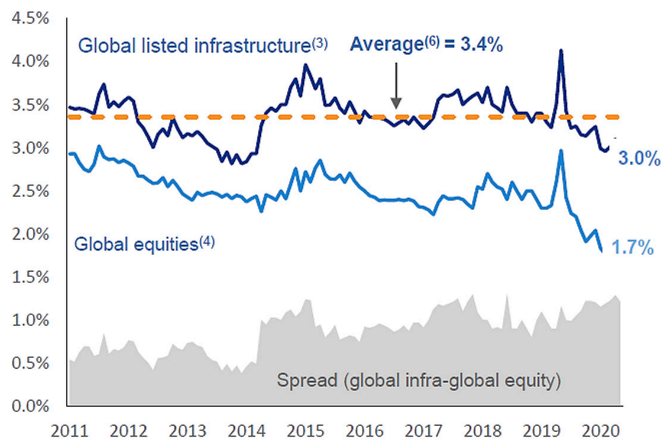
investors seeking additional infrastructure exposure. Commercial property has slightly different performance drivers and sensitivities to infrastructure, with particular yield and pooled investment features that vary between jurisdictions, and so real estate will be discussed in a follow-up article. However, generally superior dividend yields are common features of property and listed infrastructure. This is illustrated in the following chart, covering the decade to 2021.

Sustained yield advantage is a prime attraction



Source: Cohen & Steers Q1 2021, (3) Infrastructure represented by the FTSE Global Core Infrastructure 50/50 Index (4) Global Equities represented by the MSCI World Index

The dividend advantage which listed infrastructure tends to provide, even when equity markets are "expensive" on valuation metrics, is both a merit for the asset class in its own right, and a compelling argument for including an allocation to global infrastructure within a well-diversified Income investment fund. There is a moderate increase in portfolio volatility, but this is substantially compensated by the expected (and experienced) total returns over a 3-5 year investment horizon.

Transition to Sustainability is a key criterion

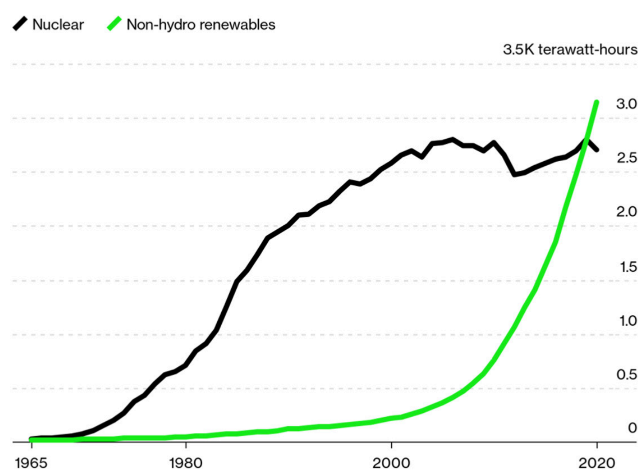
As investors' understanding of the path towards environmental protection through more renewable energy advances, a major part of the transformation needed will play out in the arena of power generation infrastructure. President Joe Biden's US$ 1 trillion Infrastructure plan makes renewables transition the showpiece for new investment. We expect much more of that focus around the world in years to come.

Progress may be glimpsed in the growing electricity output being logged by renewable energy sources compared to the nuclear industry. The growth curve of renewables is an aggregate of hundreds of geothermal plants, thousands of biomass turbines, 300,000 wind turbines, and more than a billion photovoltaic modules installed worldwide. As more and better renewable energy technologies are developed, they will be integrated into the Infrastructure investment universe.

Given that the climate and carbon crises are top of the agenda for post-pandemic global transformation, early investment in the asset class which best captures the crucial energy generation, transmission and storage dimensions of sustainability is clearly timely. Our own approach is to guide the Infrastructure portfolio in the direction of pro-transition utilities, as well as applying rigorous scrutiny to improvements in the transportation sector, which is the other large component of our fund's benchmark index and actual portfolio structure.

Policies that support renewables, such as the extension of tax credits, should benefit utilities that own and develop solar and wind generation. Most US and Paris Accord-complaint nations' utilities are in the process of transitioning away from carbon-based fuel sources, and this could solidify their growth runway as they build more renewable assets. We see this as a central portfolio strength. Nevertheless, purely monetary running costs incurred in the renewables sector are in places higher than from former generation technologies, including nuclear energy. This could well fade as recycling systems improve in efficiency, over time. As people around the world gain willingness to improve the planetary future, a long-term inflation factor in the prices paid for energy means sustainable generation stands to benefit. The cheapest solution is not always the best, where global resource sustainability is concerned.

Global nuclear and non-hydro renewable power generation



Source: BP Statistical Abstract of World Energy 2021, Bloomberg

Business cycle affects Infrastructure's behaviour

We consider that following the recovery from the Covid-19 recession, and with periodic interruptions due to the still-threatening pandemic's development, the international business cycle in an early-mid cycle phase. This is typically a period during which listed infrastructure lags the broader equity market. However, active funds managers focus on investing for the next developments in the global economy. As resurgent

global activity increases, pushing up capacity and cost pressures, extraordinary monetary stimulus will gradually be reduced. Corporate profit growth will continue, but at a diminished rate of gain. The periods to come, based on historical precedent, are the late cycle and recession stages. According to analysis by Cohen & Steers using global market data from 1973-2019, late-cycle and contraction phases have delivered the largest quantum of outperformance by listed infrastructure stocks, versus the market.

Infrastructure historically outperforms the broader equity markets through sustained (not fleeting) risk-averse environments, characterised by business cycle downturns and ultimate troughs, widening credit spreads, decelerating growth and falling bond yields. On the other hand, Infrastructure underperforms the broad market in more risk-seeking phases, characterised by business cycle recoveries and overheating, tightening credit spreads, accelerating economic growth. The exception to this latter pattern can be during risk-tolerant market phases when bond yields are simultaneously falling alongside equity market advances (as occurred in 2016.) In that climate, listed infrastructure can do well, as funds are redirected into "bond-proxy" defensive equities, due to their superior yield characteristics compared to risk-free sovereign debt.

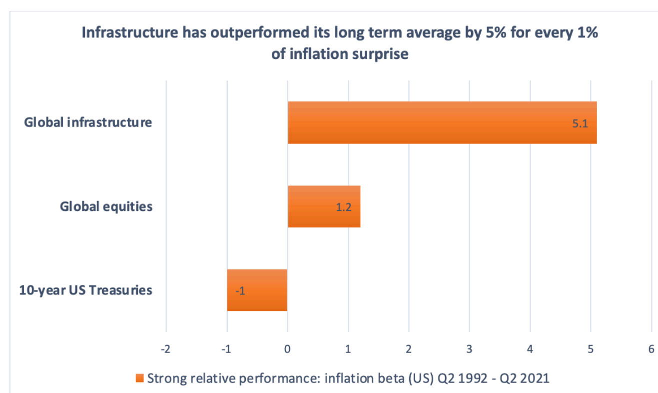
Inflation-friendly policies can drive a virtuous circle

Turning to 2021, after a long period during which purchasing portfolio inflation protection was akin to buying pet insurance in a zoo, the new international practice of offsetting major economic shocks through money-printing and state underwriting of risk has reactivated key strategies to insulate against inflation. There is no doubt that central banks, in attempting to lower the depth and duration of recessions, are now prepared to both manipulate interest rates not only at the official, short-term signalling maturities, but right out along the yield curve, buying bonds with maturities stretching out over years and decades. The sporadic suppression of long-maturity interest rates as a tool of managing economic cycles has marked consequences for asset pools that are financed over multi-decade time horizons. Think about mortgaged residential real estate, to give a crude but obvious example. Pushing down the long-term cost of credit (whether real or nominal) clearly drives up the prices investors are willing to pay in the present.

The proviso is, that if inflation moves persistently from a low level (say, 0-2%) to a moderate level (3-5%) there must be a commensurate upward adjustment in the income streams of infrastructure operators. While such a sustained lift in the inflation level has not occurred in developed markets for several decades, there is good reason to believe that current global forces may see a revival in price increases of that magnitude. However, the new factor is that the behaviour of bond markets has become detached in recent years from fully reflecting future inflation risk. Consequently, many economies are now saddled with record levels of debt, due to its recent servicing affordability.

If in fact bond yields continue to be manipulated by governments on the grounds of financial stability, one traditional threat to real assets – inflation leading to sharply higher interest rates and debt servicing costs – may prove less assured than in the past. However, in the unlikely event that developed world inflation overshoots and remains at an elevated level (5-6%+) the impact of existing indebtedness would begin to weigh on all asset owners, creating tensions with governments about the share of additional interest costs that can be passed on to infrastructure customers. This scenario remains lower-probability at present.

The recent spike in inflation has been largely the result of supply constraints and year-over-year comparisons to 2020's low price levels. Infrastructure assets such as freight rails and marine ports are playing a crucial role in helping to ease these supply chain issues, benefiting from the need to transport goods and re-normalise logistics during the recovery period. According to international research, Infrastructure returns have historically demonstrated a positive relationship with unexpected inflation, contrasting with less significant performance impacts of inflation surprises on stocks and bonds.



Source: Cohen & Steers. Inflation beta is the linear regression beta of 1-year real returns to the difference between the y/y realized inflation rate (U.S. CPI) and lagged 1-year-ahead expected inflation (median inflation expectation from Univ. of Michigan Survey of 1-year-ahead inflation expectations), including the level of the lagged expected inflation rate

Infrastructure assets' special contractual features

The world is currently at a point of engagement with numerous novel challenges. In order to address them, in the years ahead we must expect far less strict adherence

to goals of fiscal surpluses and debt reduction targets on behalf of governments. The inefficiencies arising from three decades in which public infrastructure spending was kept low, in some cases barely at maintenance level, are now apparent. Poor infrastructure distorts a wide range of social and economic decisions and can lead to malinvestment. However, infrastructure capacity building has now become politically popular, and economically useful at a time of global adaptation to disruptive pandemics and climate threats.

As infrastructure requires long-term planning, often drawn-out construction, and continuing operating and maintenance costs, the owners of infrastructure assets have successfully defined some unusual features in their contractual and operating models. Multi-year operating concessions from national or state authorities, regulatory protection and inflation or cost-adjusted revenue guarantees, and price-supportive forms of either partnership or subsidy have proliferated. Regulated infrastructure assets are governed by a wide array of profitability, dividend, debt, re-investment and many other codes, making it critical that a specialist funds manager with deep and long-standing sector experience and understanding be employed. In periods of elevated inflation specifically, the investor must have a strong grasp of the extent of inflation-linkages in an infrastructure company's revenues; its operating cost structure and input price sensitivity along with margin or pricing power; and its capital structure. On the latter point alone, recent years' huge capital inflows to proliferating infrastructure debt vehicles have allowed operators that may previously been vulnerable to floating-rate debt obligations to switch into fixed-rate long debt profiles. These companies thereby achieve some insulation from short-term exposure to inflation pushing up interest rates.

Concession-based infrastructure assets (like toll-road or rail operating companies) characteristically work on a model where their tariffs may escalate in line with an agreed formula, while contracted assets (like cellular tower networks) rely on periodically renegotiated price adjustments built into their leases or contracts. This unusual ability of certain infrastructure enterprises to achieve quasi-automatic compensation for periodic inflation works, because their operating lives are extended, their annual profitability and Return on Equity may be capped, yet at the same time, the government agencies licensing these companies must ultimately guarantee security of supply and thus, protect them from insolvency.

Revenue model	Sectors	Inflation linkage
Regulated	Utilities	Periodic rate cases allow companies to pass on higher costs to customers
Concession-based	Toll roads, airports	Companies allowed toll or fee increases based on consumer price index increases
Contracted, GDP-sensitive	Freight rail, marine ports, midstream	Business-dependent indirect or direct linkage of revenue escalators to inflation; in the short term, these businesses have the least formal inflation linkage, but they may still perform well, as unexpected inflation often accompanies a strong economy
Contracted, other	Towers, data centres	Typical annual revenue escalators of 3–4%

Source: Cohen & Steers

An asset class (mostly) secured from cyclical downturns

The last several serious crises in the global economy have removed some of the economic stigma for assets which may have a heavier regulatory component to their returns streams than is normal in free-market economies. In fact, the varied shocks of the last fifteen years have arguably reduced the extent to which developed countries are still operating strictly "free markets," as waves of interventions have prolonged expansionary periods but limited scope for radical transformation of industry. The recessions currently occurring in most investable countries are typically sharp, but short-lived. Crucially, such recessions are easily navigated by infrastructure companies, as their earnings tend to be less cyclical and their target returns are usually set without reference to short-term market or economic circumstance.

An unusual counterexample was of course, the CoVid-driven shutdowns of major transportation infrastructure systems in 2020. Going against the major demographic driver of ever-growing mobility, the mothballing of airports, roadways and ports for months led to sharp capital losses in those most-affected infrastructure sectors. However, governments were very quick to provide backstops and over time, many transportation infrastructure operators will emerge strengthened, with less burdensome debt loads or having enjoyed sizeable

capital injections from shareholders during the pandemic period.

We see all these features as coinciding with a burgeoning adoption of real asset classes into diversified investor portfolios. There is currently enormous investor demand for vehicles offering exposure to infrastructure's features. Relatively predictable, often inflation-linked cash flows, combined with semi- or fully regulated businesses with very high barriers to entry are becoming attractive for investors reacting rationally to low bond yields and leery of the riskier, momentum-driven elements in equity markets. It is emerging that well-chosen infrastructure assets are very well adapted to a prolonged period of low real (inflation-adjusted) interest rates, and while the associated investment securities are not likely to beat the broader market over years during a sustained bull market, they can prevail in the longer run, due to lower overall loss of value, continued dividend streams, and the consequent benefit to compounding investment returns. As some are aware, re-invested dividends account for the bulk of total returns from equity market investments, when these are measured across multi-decade timeframes.

Weak real returns from bonds are not fading quickly

Real interest rates can be pushed down to their prevailing level (below 0% throughout the developed world) for a variety of reasons. The lower return now available from traditional interest-bearing securities motivates the widespread and multi-faceted global "hunt for yield." In an indebted world that is prone to waves of collapse in sentiment and economic activity, as we have seen recently, nominal interest rates are still likely to be kept fairly low, even after central banks have removed some of the CoVid-19 emergency stimulus. Yield-hungry international investors, particularly institutions with long-dated liabilities like insurers and pension funds, are ever-more prepared to accept listed equity volatility levels, to gain the required medium-term returns for their portfolios. With such suppressed interest rates being probable for some time, a higher-inflation period should also favour listed infrastructure, both in its absolute returns and when compared with the broader world equity markets'.

For the last several years, listed infrastructure opportunities have thus attracted substantial inflows. According to specialist consultancy Preqin and others, the dollar value of global investor assets under management in the infrastructure sector has since 2014 been growing at 16% per annum, compared to global managed asset growth of around 7% p.a. Additionally, private pools of capital seeking infrastructure opportunities are estimated by Preqin, Goldman Sachs and our own fund's manager Cohen & Steers to be currently in excess of NZD 400 billion. This flood of private capital is lowering expected returns from directly-held infrastructure projects, which have recently been sold at significant premia to similar assets represented on the listed infrastructure market.

Conferring some immunity to inflation and recession? Patience and agility required.

Historical data show that infrastructure has performed better than listed equities and bonds during periods when inflation is high, when it is rising, and when it surprises on the upside. These qualities, however, have not been fully tested in the new macroeconomic regime since the introduction and expansion of Quantitative Easing and of the Portfolio Reallocation channel of stimulus, whereby central banks use interest rate repression to encourage investors to accept more volatile "Growth" assets into their portfolios. Global Listed Infrastructure is not an equity class that is immune to periodic shocks, and may at times lag the broader stock markets by a wide margin, due either to its idiosyncratic risk factors or to bouts of outsized returns in growth-oriented industries such as Information Technology. All the same, it is our view that an actively managed selection of high-quality international infrastructure assets has very desirable characteristics over the medium- and long-term. At an uncertain juncture in markets about both the scale and the persistence of higher inflation, Sustainable Global Infrastructure investment, which supports renewables in energy, efficiency in transportation, and carbon footprint reduction in other parts of industry and society is a valuable addition to the diversified investor's all-weather portfolio.

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