



# Building exposure to infrastructure

By Fraser HUGHES

In the GLIO Journal issue 4, David Bentley, ATLAS Infrastructure and Fraser Hughes, GLIO looked at the current pile of dry powder looking for investment in infrastructure assets. It seems clear that infrastructure allocations will increase going forward among asset owners like pension funds, insurance companies and SWFs. These investors need to ensure their investment toolkit includes direct, unlisted and listed vehicles if they are to gain diversified exposure to a broad range of economic infrastructure assets. If not, they significantly limit the options to achieve their long-term net target returns.

## Target allocations on the increase

Over the past ten years, infrastructure investment has gained momentum among institutional investors like pension funds, insurance companies and sovereign wealth funds. But, to a certain extent, infrastructure investment has hit a crossroads.

From one side, the global economy is crying out for more infrastructure investment, but governments still own much of their economic infrastructure directly and are struggling to grow the pipeline of investable infrastructure assets. On the other side, a large and growing number of institutional investors are competing for exposure to a relatively small pool of non-government owned core infrastructure assets. This has seen transaction multiples increase strongly over the past ten years. There is a clear supply and demand imbalance.

## Infrastructure investment trends

Institutional investors typically allocate funds to infrastructure on the basis of its defensive characteristics and inflation-linked cash flows. This trend shows no sign of abating, with 71% of public pension funds believed to be allocating more money to infrastructure within the next 12 months.

The combination of increasing allocations and fund raising combined with a limited availability of assets means that asset managers have found it increasingly difficult to deploy capital. The latest figures estimate that \$173bn of dry powder, or unspent capital commitments, is waiting on the sidelines to invest in unlisted, or 'private', infrastructure. Exacerbating this capital backlog is scarcity of core infrastructure assets in the direct market and high multiples.

Not unsurprisingly, given the strong flow

of investment, a recent investor survey found that 59% of unlisted infrastructure fund managers see high valuations as the major challenge to capital deployment, while 52% of managers believe that infrastructure assets are currently overvalued. Furthermore 81% of managers are seeing more competition for assets relative to 12 months ago.

All this points to a market in which it will become increasingly difficult to deploy capital and equally difficult to acquire fairly valued assets. Surely something has got to give?

Given the current challenges of building an unlisted infrastructure exposure efficiently, we would expect that any current allocations to infrastructure are likely to take some time to be deployed (assuming the asset manager displays a level of discipline, in terms of both pricing and infrastructure asset type). In the period

during which allocated capital is not invested (directly, or through managers) in the desired infrastructure assets, it may even be invested elsewhere in an institution's liquid assets portfolio, most likely in a combination of equities, cash and bonds.

The \$2.5tn listed infrastructure market as defined by the GLIO Coverage provides investors with a complimentary or alternative investment opportunity, which could provide a significantly better fit to their desired infrastructure exposure. This could be in the form of a long-term investment as an alternative to investing directly, or a shorter-term location to park capital until funds are drawn down to invest directly.

### So why invest in Listed Infrastructure?

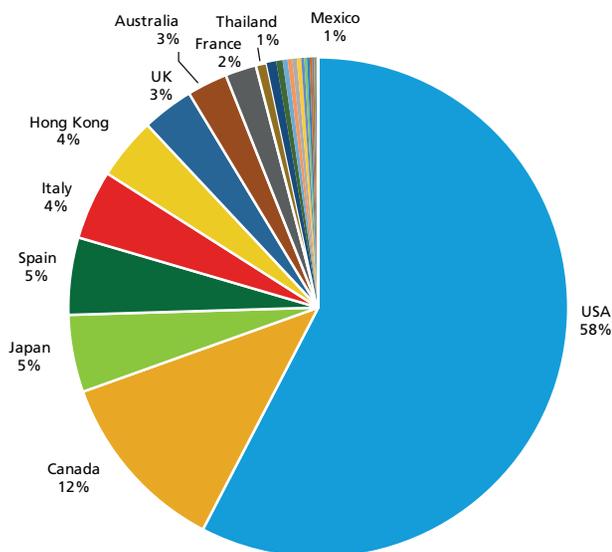
Listed infrastructure companies tend to own long-lived assets that provide essential services to society, such as utilities, energy transportation networks, communications and transportation infrastructure. These assets can offer stable and predictable cash flows supported by long-term contracts or regulation, with monopolistic characteristics and high barriers to entry. The GLIO Coverage has shown that the asset class exhibits compelling investment characteristics over the short, medium and long term.

"Investors are attracted not only to the well-established, defensive characteristics of the asset class, but to the multi-decade growth opportunity related to ongoing infrastructure requirements in nearly every part of the world," explains Alex Araujo of M&G Investments.

### Regional and infrastructure sector diversification

Listed infrastructure companies offer investors access to a broad and diversified portfolio of assets across three main regions: Americas, EMEA and APAC. These will include both developed markets (\$2.4tn) and emerging markets (\$100bn). In the GLIO Coverage (based on country of primary listing) the USA, Canada, Japan, Spain, Italy, Hong Kong and the UK are heavily represented. This breakdown can be slightly misleading, as some listed infrastructure companies own and operate numerous infrastructure assets which can be located in a number of countries beyond their location of listing.

Figure 1: GLIO Coverage – country breakdown (June 28, 2019)



Infrastructure assets tend to fall under four main headline sectors, which comprise of more defined sub-sectors. These are:

- **Utilities:** Electric distribution, electric transmission lines, gas distribution pipelines, renewable energy facilities, water cleaning & distribution systems.
- **Energy Transportation & Storage:** Long-haul energy pipelines, gathering and processing facilities, liquid terminals and LNG facilities.
- **Transportation:** Airports, seaports, railroads, highways & toll-roads.
- **Communications Infrastructure:** telecommunications infrastructure (wireless macro towers & small cells) and satellites.

infrastructure sub-sectors in the GLIO Coverage.

It is worth noting that global listed infrastructure can access a broad set of investment opportunities across geographies and sectors, which by comparison may not be available through direct investment. It is also worth noting that although the listed infrastructure market is large, some assets cannot be accessed – US airports are a good example. Regulatory frameworks and contract structures vary greatly from country to country and from sector to sector, as they are based on and exposed to macro variables in different ways. Diversification can help mitigate risk in concentrated exposure to regional economic conditions and regulations.

Figure 2. below highlights the range of

Figure 2: GLIO Coverage – infrastructure sector breakdown (June 28, 2019)

Company	MC \$Mn	MC Wght	FF MC \$Mn	FF Wght	Yield	Beta
Electric Utilities	830,676	33.22%	745,830	35.3%	3.6%	0.45
Ground Freight	355,071	14.20%	338,811	16.0%	1.8%	1.09
Energy Transportation	317,106	12.68%	291,534	13.8%	5.3%	1.01
Telecom Infrastructure	192,401	7.69%	172,098	8.1%	2.0%	0.68
Multi-Utilities	167,547	6.70%	139,516	6.6%	5.0%	0.62
Passenger Rail	133,906	5.35%	102,893	4.9%	1.3%	0.75
Gas Utilities	118,299	4.73%	75,920	3.6%	2.4%	0.66
Water Utilities	87,453	3.50%	73,235	3.5%	3.0%	0.70
Airports	130,838	5.23%	65,296	3.1%	3.3%	0.84
Highways & Toll-roads	95,148	3.80%	63,411	3.0%	3.7%	0.79
Diversified	22,570	0.90%	17,227	0.8%	4.5%	0.93
Marine Ports	30,104	1.20%	15,482	0.7%	4.1%	0.86
Satellites	14,258	0.57%	11,909	0.6%	4.9%	0.98
Construction & Engineering	5,367	0.21%	1,313	0.1%	3.4%	0.71
<b>Grand Total</b>	<b>2,500,744</b>	<b>100.00%</b>	<b>2,114,477</b>	<b>100.0%</b>	<b>3.3%</b>	<b>0.74</b>

*Investors who ignore the global listed infrastructure asset class narrow their core infrastructure options considerably, which could in turn damage stakeholder returns.*

### Attractive yields

Historically, global listed infrastructure has offered an attractive income component as a portion of the overall total returns. The asset class has offered higher yields compared against global equities over a long period of time. On average since 2003, global listed infrastructure yielded approximately 3.6% versus 2.6% for global equities. Global utilities averaged 4.1% over the same period. These regular shareholder payouts are underpinned by higher sustainable cash yields that provide companies with the opportunity to raise payout ratios if required. This is particularly evident amongst the transportation-focused companies like freight rail and highways & toll-roads.

### Short-term valuation dislocation, long-term performance

Infrastructure assets with the same economic exposures will respond similarly to changes in the economic environment. However, the types of vehicle in which these assets are held can be valued using different methods. Unlisted infrastructure values are based on periodic valuations that lag current market conditions and are inherently smoothed, or even suffer from autocorrelation. Listed company valuations are subject to daily pricing and move more by nature over the short term. Of course, this can create opportunities for active global listed infrastructure managers.

Putting aside short-term differences in valuation, GLIO research highlights the fact that over the medium to long term, listed infrastructure offers a very similar

Figure 3: GLIO Coverage – historic dividend yields (June 28, 2019)



Figure 4: GLIO Coverage – performance vs. other assets (June 28, 2019)

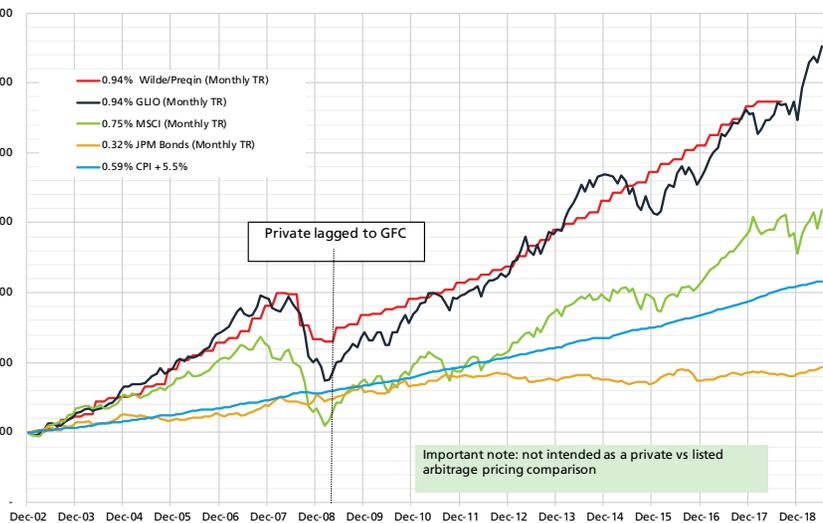
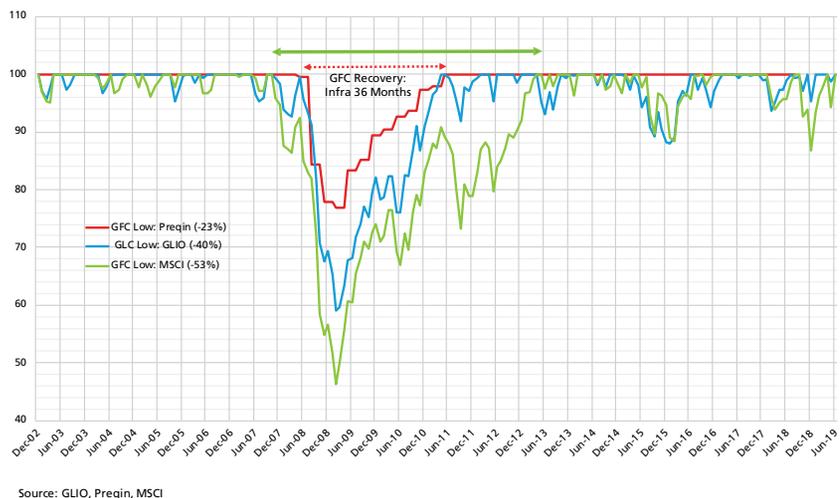


Figure 5: Infrastructure drawdowns vs. global equities (June 28, 2019)



performance as unlisted infrastructure, and vice-versa. Many would argue listed infrastructure can act as an excellent proxy for direct/unlisted infrastructure.

### Valuation multiples

Another method to compare the unlisted and listed infrastructure valuations is to use EV/EBITDA multiples. In this example (Figure

1. This analysis accounts for the lead/lag between listing and unlisted infrastructure – in this case 7 months.

Figures 6 & 7: GLIO Coverage – quarterly upside/downside capture vs. global equities

Quarterly	Preqin	GLIO Coverage	MSCI Equities
Average Return Quarter	2.98%	3.19%	2.48%
Average Up Quarter	3.39%	4.61%	4.48%
Average Down Quarter	-0.38%	-1.42%	-1.99%
Average if Equities Up		4.16%	4.48%
Average if Equities Down		-0.96%	-1.99%
GLI Upside Capture		93%	
GLI Downside Capture		48%	



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Alex Araujo, M&G Investments

“Even when adjusting for the implied control premium associated with some or many private infrastructure investment valuation multiples, investors are, in aggregate, massively underestimating their discount for lack of marketability and, thus, we see one of the largest arbitrage gaps in recent memory of the valuation multiples for listed infrastructure investments versus unlisted,” says James Abate, Chief Investment Officer, Centre Asset Management, part of the Sanlam Group of companies.

**Upside capture, downside protection**

Impressively, the GLIO Coverage has exhibited similar average total returns to unlisted infrastructure over the long term while offering ‘defensiveness’ or ‘down-side protection’ during equity market sell-offs. Using quarterly data, to reflect the frequency of unlisted performance dissemination, we compare listed/unlisted infrastructure versus global equities. On average, quarterly total returns for listed (+3.2%) and unlisted infrastructure (+3%) are similar. Global equities (+2.4%) lag-behind.

Interestingly, during the GFC, listed and unlisted infrastructure lost and recovered at the same rate (36 months). Global equities’ recovery was 66 months by comparison (see Figure 5).

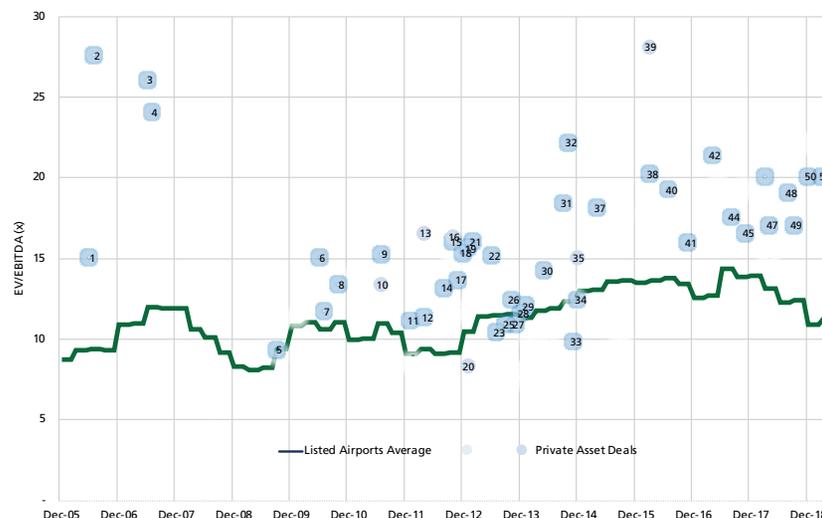
When global equities record a positive quarter, the GLIO Coverage captures 93% of the upside. Moreover, during quarters where equities are negative, the GLIO Coverage only >

8), we look at the global airports sector over a 12-year period. The blue circles represent individual airport asset deals. The green line represents the average EV/EBITDA ratio of the listed airport sector.

Many of the listed airports own some of the world’s best performing assets in terms of passenger volumes and customer experience/quality.

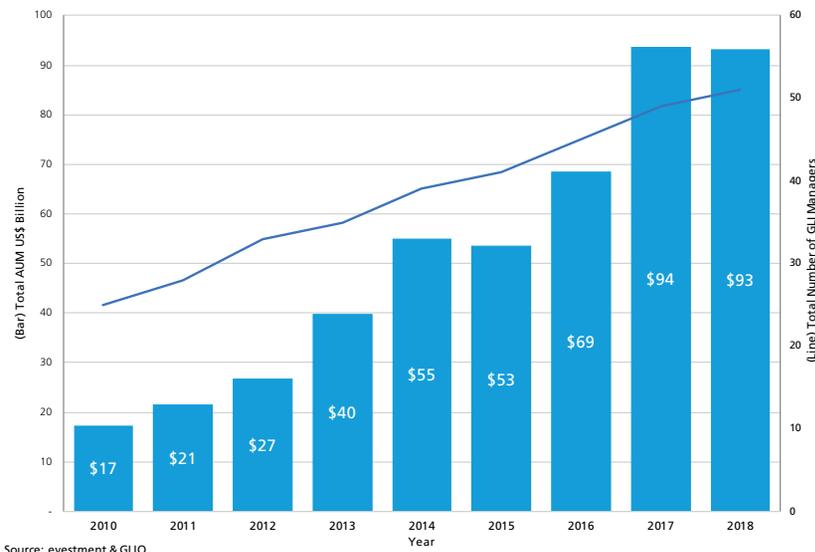
It is clear from the example, listed airports offer ‘better value for money’ compared against transacting individual airport assets. The question of diversification (one asset versus a diverse exposure across a number of assets) and management quality and experience can also be raised here.

Figure 8: GLIO Coverage – airports vs. asset transactions



Source: GLIO/Inframotion

Figure 9: GLI \$bn funds-under-management growth to December 2018



'captures' 48% of the downside. In other words, 52% downside protection.

"Capital preservation is one of the key attributes that investors have come to expect from listed infrastructure. These are stable businesses, providing essential services and backed by long-term contracts. As a result, these can be very disconnected from the economic cycle, and thus should hold up better in a more volatile equity backdrop," says Jim Lydotes, Managing Director, Bank of New York Mellon. "These attributes were most recently put to the test in Q4, and the asset class solidly delivered on the defensive characteristics that investors have come to expect."

### Inflation hedge

Generally speaking, core infrastructure assets will offer investors predictable

cash flows. Cash flows are driven by price and volume. Firstly, companies which operate assets in regulatory or concession frameworks often have periodic inflation-linked adjustments, or annual escalators built into contracts. Secondly, economic conditions in a country or region will drive demand for an infrastructure asset. Of course, these revenue drivers will vary across infrastructure sectors. The case study presented by Ferrovial in the March edition of this magazine is a good example in the highways and toll-roads sector.

### Liquidity

Effectively, listed infrastructure companies offer liquid access to illiquid assets. The dry powder from unlisted infrastructure funds is now at a record high, and the issue is compounded by a scarcity of

core infrastructure assets. In contrast, the liquidity of listed infrastructure enables new allocations to be deployed with a high degree of efficiency. Importantly, liquidity enables active managers to adjust portfolios according to their convictions.

### Leverage

On average, listed infrastructure companies are more conservatively leveraged compared against other types of infrastructure investment, which can leverage up to chase excess returns. Of course, extreme levels of debt can alter the characteristics of equity. On average, the listed infrastructure companies leverage in the GLIO coverage lies at under 50%.

"Being a highly capital-intensive asset class, prudent use of leverage for infrastructure is imperative when thinking about investing through a full economic cycle. Not only does this allow for more flexibility in managing an overall balance sheet, but also can provide the potential to acquire assets during periods of distress." says Darin Turner of Invesco.

### Active GLI manager growth

Global listed infrastructure is a relatively young asset class, but there is a growing recognition that the asset class can deliver significant benefits to multi-asset portfolios, and targeted infrastructure allocations. Given the debate around definition, the asset class lends itself to active management.

Figure 9. shows the growth of the active global listed infrastructure active management community over the past eight years. We have seen an impressive growth in assets under management over that period. Looking forward, as the challenges of building a direct infrastructure allocation intensify, more investors will look to listed infrastructure as an alternative route to deploy capital into the quality core infrastructure assets they crave. Ten years from now this total AUM could easily surpass \$300bn.

### Future drivers

The need for infrastructure investment is a never-ending cycle. Looking to the future, Governments will need to offer incentives for infrastructure investment to provide the backbone to boost economic growth. For example, the poor

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state of US infrastructure is well documented. The latest American Society of Civil Engineers (ASCE) scorecard makes depressing reading across the range of infrastructure sectors. The overall grade for US infrastructure was D+. The story is similar across the globe as the percentage of infrastructure investment relative to GDP has declined over recent decades. Subsequently, the infrastructure investment gap has widened with an estimated shortfall of \$15tn to 2040 according to GI Hub.

Current and new forms of infrastructure investment vehicles will need to develop and evolve to help address this critical issue. In recent years, the US has seen Yieldcos, MLPs and REITs offer investors exposure to infrastructure with a focus on income. Belgium recently expanded its REIT structure to include infrastructure, India introduced an Infrastructure Trust and Mexico introduced the FIBRA-E. The opportunity to create a clearly defined Infrastructure Investment Trust (IIT) for economic critical infrastructure could look attractive for governments wishing to attract both domestic and international capital to fill the investment gap.



“The US needs to be aware its competitive positioning concerning infrastructure investment,” says Ted Brooks of CentreSquare. “As other countries are moving forward with vehicles that incentivize capital formation for infrastructure assets and investment, an IIT would lower the cost of capital, improve the return structure, and help attract much-needed capital to US infrastructure.”

### A compelling argument

Listed infrastructure is a compelling way to gain exposure growing part of the global economy, combining the attributes of direct infrastructure investments coupled with the benefits of listed markets: broad global \$2.5tn market, liquidity, daily pricing and transparency. Ultimately, a carefully defined core listed infrastructure market is made up of a large number of high-quality infrastructure assets, covering regulated utilities, energy transportation, transportation and communication infrastructure. These assets are mission-critical to the needs of the global economy.

We should not forget that most institutions would gladly include these assets within their direct infrastructure portfolios if they were available in unlisted form, so why view them differently because they are listed? The companies which comprise the GLIO \$2.5tn listed infrastructure coverage have demonstrated desirable investment characteristics over many years. These companies can and should play a valuable long-term strategic and tactical role within an institution’s infrastructure allocation. Investors who ignore the global listed infrastructure asset class narrow their core infrastructure options considerably, which could in turn damage stakeholder returns. 



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Fraser Hughes is founder and CEO of the Global Listed Infrastructure Organisation (GLIO). He founded GLIO in July 2016. Previously, he was Deputy CEO at EPRA. EPRA successfully increased investor awareness in the global listed real estate sector and helped lobby national governments in Europe to introduce REIT legislation. Previously, he worked in a variety of investment positions in the City of London, including a period developing FTSE’s global index range. Hughes holds a MSc Investment Management from CASS Business School London.

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