

Infrastructure investment at the crossroads

By Georg INDERST

This imbalance between infrastructure demand and supply has become more pronounced in recent years. How will asset owners, fund managers and the industry respond to this in future?

Infrastructure investing is reaching an important juncture. Institutional investors allocate more and more capital to infrastructure but find it harder and harder to deploy. At the same time, most governments seek to promote stronger private sector participation but struggle to grow the pipeline of investable infrastructure assets. There's a clear supply-demand imbalance.

Looking first at the demand side: Unlisted/private infrastructure assets under management have grown to almost \$500bn globally (according to data by Preqin; Willis Towers Watson). Even when including other direct investments, they still constitute only about 1% of institutional portfolios (that amounts to over \$100tn globally). This order of magnitude is also confirmed by OECD figures that show an average allocation of just over 1% for large pension funds worldwide.

Furthermore, there is an enormous dispersion: While some investors, especially in Australia and Canada have shifted asset allocations targets to over 10%, a majority of smaller ones is still out of unlisted infrastructure. Now, players of all sorts have joined the race into infrastructure, hoping to repeat past results

that have – to a large extent – achieved yield and return expectations.

Low interest rates have, of course, been fueling the drive into real assets for the last ten years. In a classical cyclical pattern, many managers have also started to stretch definitions of infrastructure and move into more risky assets. Nearly 40% of capital committed to infrastructure is 'dry powder' waiting to be invested. Keep in mind, the financial crisis had produced some surprises – the next recession will provide a much broader, real-life stress test.

Realistic allocation targets?

As investment boards revamp their long-term investment strategies, they keep setting much higher strategic allocation targets for infrastructure – but how can they be achieved?

Looking at the big picture, and in a simple calculation, a move across the board from 1% to 3-5% would create an enormous fresh demand for infrastructure assets of \$20-40tn globally, this arguably over a longer period of time. Spread out over ten years, e.g. this could result in an annual infrastructure investment of \$2-4tn. These are substantial amounts, equal to 0.3-

0.5% of world's GDP. They could also help fill roughly one third to one half of the (conservatively) estimated global financing gap of 1% of GDP for economic infrastructure¹. However, expectations need to remain realistic – especially given the significant supply side constraints in the real world.

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Insufficient pipeline of investable projects

Institutional investors' interest in infrastructure soon caught the eyes of the politicians. Post financial crisis, governments one-by-one come out with grandiose new infrastructure plans, institutions and initiatives, not least to 'mobilize' institutional assets especially for new greenfield projects. Unfortunately, these efforts have not been very effective, at least so far. In practice, >



1. Estimated financing needs and gaps are higher, to achieve climate-change targets and the UN SDG goals – even more so in emerging markets. For more detail on infrastructure investment flows and requirements, see e.g.:

– Inderst, G. (2013). Private Infrastructure Finance and Investment in Europe. EIB Working Papers 2013/02.
– Inderst, G. and Stewart, F. (2014). Institutional Investment in Infrastructure in Emerging Markets and Developing Economies. PPIAF, World Bank Group.
– McKinsey (2016). Bridging Global Infrastructure Investment Gaps. McKinsey Global Institute.
– GIH (2017). Global Infrastructure Outlook. Global Infrastructure Hub and Oxford Economics.

Table 1: Infrastructure investment vehicles

	Direct	Indirect
Equity	Listed <ul style="list-style-type: none"> • Shares of transport, energy, water, utility, etc. companies • MLPs, YieldCos • Indices, ETFs, Derivatives 	<ul style="list-style-type: none"> • Listed infrastructure fund • Investment trust, REITs
	Unlisted <ul style="list-style-type: none"> • Direct investment in private companies / projects • Co-investment • Investor platforms, alliances 	<ul style="list-style-type: none"> • Unlisted infrastructure fund -closed-end, open-end • PPP fund • Fund-of-fund
Debt	Bonds <ul style="list-style-type: none"> • Corporate bond, green bond • Project bond, PPP bond Government bond, Sukuk, green • Sub-sovereign, municipal bond 	<ul style="list-style-type: none"> • Infrastructure bond fund • Trust structure • Bond indices, ETFs
	Loans <ul style="list-style-type: none"> • Private infrastructure debt • Project loan, PPP loan • Syndicated loan 	<ul style="list-style-type: none"> • Infrastructure debt fund • Hybrid / mezzanine fund

Source: OECD and Georg Inderst

investors face a shortage of appropriate investable assets, leading to strong competition and rising valuations. This is particularly true for lower-risk, brownfield assets that are popular with liability-driven asset owners in search for stable yields, such as insurance companies and mature pension funds.

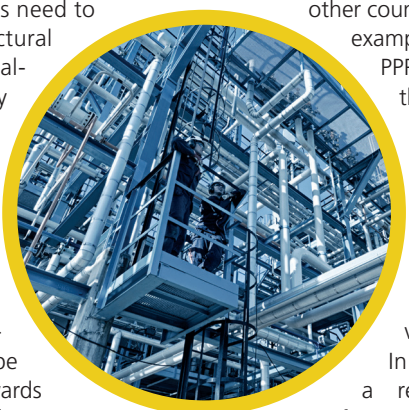
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There is much room for improvement in terms of turning infrastructure needs into investable projects by most governments, and many proposals have been made with the help of international organizations as well as the private sector. One of them is 'asset recycling'. Looking forward, investors need to realize that this structural supply-demand imbalance will not easily subside:

- Not many states are currently planning major waves of privatizations. Instead, in some places, the pendulum seems to be swinging back towards nationalizations of water, railways and other infrastructure.
- More countries have started to protect 'critical' or 'strategic sectors' from foreigners, including seaports and airports, energy distribution networks or

digital/high tech infrastructure.

- Public-private partnerships (PPP/P3) are particularly delicate risk-sharing mechanisms. Opinions over their usefulness differ widely. The demise of the private finance initiative (PFI) in the UK – long deemed a successful prototype for other countries – is an instructive example². The annual global PPP deal volume is less than 0.2% of GDP, and likely to remain small.



Evolving investment approaches

Can better intermediation help to alleviate the imbalance?

In fact, there has been a remarkable evolution of investment approaches since the invention of infrastructure as a dedicated 'asset class' in the 1990s/early 2000s. Initially, the industry was largely wrong-footed with limited choice of private equity-type funds (of-

ten with high leverage, high costs and poor governance).

Now investors find an ever-growing number of (open and closed-ended) funds for different regions, sectors and development stages, and more specialists for infra debt. Larger asset owners increasingly follow the 'Canadian model' of direct investing in private assets, aiming for better control and lower costs. For smaller pension funds, co-investment platforms have been created in various countries to overcome lack of scale and overly concentrated exposures (Table 1).

Long-established listed infrastructure and utility stocks

Listed infrastructure investment instruments could be developed further, too. Here it is important to distinguish between companies and funds. Rather confusingly, some unlisted funds have started to invest in listed companies while listed funds frequently invest in private projects or companies. >

2. Inderst, G. (2017). UK Infrastructure Investment and Finance from a European and Global Perspective. *Journal of Advanced Studies in Finance*.

The question is, can the volume of listed companies grow sufficiently (e.g. via IPOs or organic growth) to satisfy the massive investor demand?

Listed infrastructure equities and bonds are already well established, especially through privatizations of utilities or motorways since the 1980s in various countries. Private railways were substantial portfolio holdings of wealthy people already in the 19th century. Depending on definitions, the market value of infrastructure stocks amounts to \$2-4tn, or up to 5% of global market capitalization. Therefore, listed securities still tend to be more sizeable in investor portfolios than unlisted infrastructure, although often hidden in the (active and passive) equity or bond segments.

In general, stock market listings have not been very popular with companies in recent times – the private route is often preferred. Here is another job for regulators: To look at how to make this market more attractive again. What listed companies themselves can certainly do is to inform better about their capital investment activity – their contribution is often unclear and overlooked.

Listed funds to grow?

In contrast, listed infrastructure funds are currently very limited in number, mainly on UK and US stock exchanges. Infrastructure ETFs have also been introduced to retail investors over the years. Listed commingled instruments could certainly be developed further. They need to be well-constructed and well-regulated. In fact, several Australian listed infrastructure funds ran into problems during the financial crisis due to over-optimistic market expectations and high leverage. So did US yieldcos in 2015.

The pros and cons of listed vs. unlisted have been explored many times over the years for equities, real estate and beyond, and don't need to be repeated here. In the context of infrastructure investment, established governance and disclosure provisions for listed instruments could be reassuring. The investment universe of listed and unlisted is rather different and so are sector exposures, e.g. in renewable energy or social infrastructure, which can help portfolio diversification.

Experienced investors take advantage of the enormous heterogeneity of investment opportunities. They look deeper into the underlying assets, their company or project finance – whatever the investment route.

So how credible is the long-term funding model? Last but not least, from a policy perspective, all investment vehicles should in principle be welcomed – what matters are raising the capital flows into the underlying infrastructure or green projects.

Serious sustainability challenge

Investors are increasingly realizing that infrastructure investments are inherently political, whether they are regulated utilities, PPPs, or other contractual forms. Infrastructure (if it is truly infrastructure) provides essential public services. This implies a social function that goes beyond that of, e.g. a real estate development or a company in fully competitive markets. See the public's reactions to the collapse of a privately run bridge in Italy. As a corollary, transferring concepts from other

asset classes (e.g. 'core, value-added and opportunistic') can be misleading as they may miss key political, regulatory, legal and reputational risks.

Connected to this, investors need to rise to a new challenge: The quest for 'sustainable infrastructure'. This does not look too difficult, given its natural connotation with social objectives (e.g. hospitals) or green objectives (e.g. public transport, clean energy, water & sewage systems, flood defences). However, infrastructure projects are also notoriously prone to wasteful decisions, complex financial engineering, excessive bureaucracy and poor governance, if not corruption. The public will demand visible efficiency gains and service improvements from private operators.

Controversies over how to define 'sustainability', how to weigh 'ESG performance', and how to measure the environmental and social 'impact' of investments are not purely academic exercises. Box-ticking approaches will not be sufficient for very long. Users and consumers, shareholders and regulators, will insist on visible efficiency gains and service improvements – even more so from private owners and operators of public infrastructure. 🌍



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