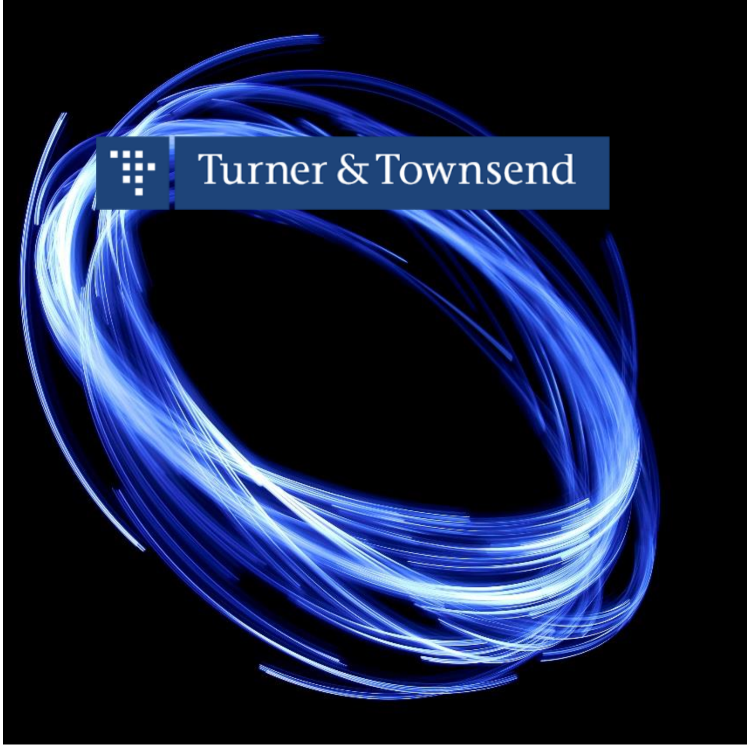

Insight

A new model for investible infrastructure

By Murray Rowden - Global Head of Infrastructure and Managing Director North America

Global population is rising. The United Nations estimates that by 2050 the planet will be home to nearly 10 billion people with two thirds living in cities. Pressure is growing on the vital transport, energy, housing, communications and water infrastructure that supports our modern lives. A new model for investable infrastructure is required to successfully support this.

Investment is vital to underpin living standards but also to provide the connectivity that drives economies and generates growth and wealth.

Yet while there is certainly a political will and a clear logic to this investment, the challenge faced by global leaders is how to pay for it. For all the speeches and policy commitment, driving forward with long-term investment remains difficult.

Inconsistent delivery record, high-risk profile and funding difficulties plus long return on investment, continue to act as major barriers to both public and private investment.

A new model is needed for the funding, planning and delivery of major infrastructure projects. This should be a new way to focus 21st century global infrastructure projects is on investment need, transforming delivery and understanding long-term value.

Tackling the funding challenge

Infrastructure is an expensive business and across both the developed and developing world governments simply do not have the cash to fund all programmes from the public purse without resorting to undesirable levels of borrowing.

We see this in the USA, with programmes such as the $137bn Emergency & National Security Projects programme proposed by President Trump shortly before taking office and public and private funded schemes, which require vast amounts of private schemes to underpin the public commitment.

Similarly in the UK, the government's long-term £500bn National Infrastructure and Construction Pipeline of 728 projects assumes that more that 50 percent will be delivered and funded by the private sector; and in Australia, Singapore and Malaysia where Sydney metro and the Kuala Lumpar to Singapore high-speed rail link respectively are anticipated to feature heavy private sector involvement.[1]

There is a great appetite in the global investment community to support this infrastructure ambition and a multitude of ways to finance projects, from issuing long-term bonds to institutional investors, to the long-term involvement of pension funds.

[1] https://www.gov.uk/government/publications/national-infrastructure-delivery-plan-2016-to-2021

Typically there are two routes to provide funding; taxation, or through some form of fare box.

Key criteria for successful investible infrastructure

1. **Tackle the funding challenge:** make the link between investment and longer-term economic value, and create innovative funding models.
2. **Understand the long-term investment need and how the asset will operate:** a model for the whole life value of infrastructure investment.
3. **Transform delivery:** embrace innovative and digital technology to boost consistency and productivity across construction, maintenance and operation.

In reality the former generally involves a direct grant from government, as such it can be an inefficient way to direct funding towards infrastructure and is also politically undesirable, not least for administrations elected on the basis of reducing the state borrowing.

Tolling or charging at the point of use, can effectively focus and connect revenue collection directly with the service. That said, it can be equally unpopular with the public used to obtaining services 'for free'.

But examples such as the UK water industry, which has seen some £108bn invested by companies in England and Wales since privatisation in 1989[2], the French motorway network which has some 12,000km of tolled roads or Hong Kong's multibillion-dollar toll funded programme of investment in tunnels and bridges, demonstrate that levying charges directly on infrastructure use can be successful.

Success in these cases has relied on strong political and regulatory frameworks allowing long-term policies to be set and investment decisions to be made that linked charges with service improvement. But this isn't generally the case.

Understanding the investment need

The creation of the UK's independent National Infrastructure Commission, with its research-based National Needs Assessment programme, is potentially an example of a well-thought-out plan. Not only does this identify the critical needs for the nation today, but it is also capable of identifying those for the longer term, highlighting the whole-life and whole-community value that can be extracted from that investment.

Transforming delivery

Institutional investors like a clear understanding of risk. Given the inconsistency of project delivery witnessed across the global construction industry, they are understandably wary of investing in major infrastructure projects.

In many cases, large-scale infrastructure projects still:

- take too long from inception to implementation
- cost too much to deliver
- cost too much to operate and maintain
- focus on short-term rather than long-term solutions
- carry higher levels of risk when compared to real estate investment.

The current market set-up, with its lump sum and target cost pricing structures, is simply not delivering the performance required by long-term investors. Not least while the supply chain

[2] http://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/

continues to stand back and wait for others to invest in innovation, skills and new products.

The market must move towards larger turnkey contracts with more emphasis on outcomes rather than transactional products. Only then will we start to see improvement in productivity across the sector as demanded by asset owners and governments around the world.

"Project performance must be turned around if investors are to be encouraged into the infrastructure sector at the right price."

The World Economic Forum's shaping the Future of Construction report highlights the scale of the challenge and the size of the opportunity. Given the Engineering and Construction industry is six percent of global GDP and growing and is the largest consumer or raw materials and other resources it cites that even a one percent increase in productivity worldwide could save $100bn a year. Combine this with improving asset management capability then a whole lot more schemes would move from marginal to investable[3].

The UK's Construction Leadership Council understands this and, by following the transformation already seen in the aerospace and automotive sectors, is attempting to reform the construction through:

- digital technology
- off-site manufacturing
- smart asset management techniques.

A new data-enabled, technology-driven production method is a critical step for asset owners and operators looking to reduce their capital programme delivery, asset management and whole-life cost base.

[3]http://www3.weforum.org/docs/WEF_Shaping_the_Future_of_Construction_full_report__.pdf

From an investment perspective, moves to embrace the entire asset lifecycle also herald a transformation for investors. In Australia and Canada, for example, measures are being investigated and instigated in which shares of existing brownfield assets are sold to the private sector so as to fund new schemes. Understanding and managing the whole-life risks and performance significantly impact the value that can be extracted.

Embracing whole-life value

There are numerous global flagship projects which demonstrate that, approached correctly, infrastructure can be very attractive to investors. Think Crossrail and Thames Tideway in the UK; think Sydney Rail in Australia, think Metrolinx in Canada. These projects all make the link between investment and long-term value and are being effectively delivered as part of a longer-term vision.

However, these successes are not yet the norm. For too many nations investment in infrastructure is still rooted in short-term gain, and poorly delivered political pet projects. Neither provide an attractive proposition for private investors. This must change.

"The demands now placed on infrastructure across the world and the expected increase that will be seen as populations rise and urbanisation grows, means it is vital investors are attracted and rewarded."

Infrastructure is now an increasingly attractive asset class for the global investment community seeking long-term secure returns on investment. Making projects investible is critical to securing this investment. A transformation is needed of current delivery models against these three key criteria to enable global infrastructure schemes to be delivered and funded consistently, and so benefit governments and the lives of communities worldwide.

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