OECD Journal: Financial Market Trends
Volume 2011 – Issue 1

Investing in Infrastructure: Getting the Conditions Right

by

Martin Stanley *

Maintaining and building new infrastructure that delivers agglomerative benefits is crucial for promoting sustainable economic growth. Capital needs for infrastructure investment are massive. This capital could be sourced especially from pension funds and other institutional investors for whom infrastructure funds are attractive investment vehicles. But in order to mobilise such private capital, the public sector needs to provide the right framework, e.g. by promoting a "Regulated Asset Base" model to improve capital expenditure, by avoiding undue solvency rules and other regulatory obstacles to long-term investment, and by closing the knowledge gap with regard to infrastructure investments. Governments should also avoid crowding out private sector investment, confining interventions to projects where public risk sharing is necessary, and refrain from making frequent short-term changes to the regulatory framework.

JEL Classification: E2, G1, G2, G3, H44, H54, H81.

Keywords: Long-term investment, infrastructure, Regulated Asset Base model

* Martin Stanley is Global Head of Macquarie Infrastructure & Real Assets, and Senior Managing Director, Macquarie Group. This article is based on a keynote speech delivered by the author at the OECD High-Level Financial Roundtable on *Fostering Long-Term Investment and Economic Growth* on 7 April 2011. This work is published on the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein are those of the author and do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

I. Introduction

The OECD has identified an important theme: investing for the long-term future, which has been central to Macquarie's Infrastructure and Real Assets (or MIRA) business for close to twenty years.

Development of infrastructure as an investment class is important to tap a pool of savings

MIRA's role in the development of infrastructure as an investment class comes from a practical solution that arose during a period of financial difficulty in Australia. Recession, and the consequent difficulty of finding funding for infrastructure, coincided with the growing pool of savings in Australia being accumulated as part of compulsory employee retirement savings schemes.

Macquarie recognised that infrastructure was an excellent match for long term institutional investors, mobilised capital from these pension funds, and used the combined funds to invest in roads and other infrastructure companies initially in Australia and then subsequently around the world. MIRA now manages more than 100 infrastructure businesses in over 40 different investment vehicles, with assets under management of around USD 95 billion.

According to the annual Towers Watson Survey, MIRA is by far the biggest global infrastructure fund investor worldwide, but we are not alone. We now have quite a few competitors. That is because there is an appetite among institutional investors for infrastructure, and because, like any good idea, it gets replicated. Around the world, we invest in water and energy utilities, road networks, ports, airports, renewable energy, telecommunications and social infrastructure.

Regulatory and investment framework to support infrastructure investments

This note sets out how to mobilise more institutional equity into infrastructure, building on this growing story. We need to build on it, to help bridge the infrastructure funding gap between OECD governments' aspirations for investment in infrastructure to drive economic growth; and the pressures on many government balance sheets following the recent economic crisis. This note's central theme is that if the regulatory and investment framework is right, more institutional money can be invested in infrastructure to deliver the higher levels of capital expenditure needed in the sector globally.

II. Better infrastructure

Investment in infrastructure underpins growth

Why do we need more and sustained investment in infrastructure? The answer is that the current overriding policy priority for OECD economies is the promotion of sustainable economic growth, and infrastructure renewal and new build is at the heart of economic growth. As well as being a direct contributor to GDP in its own right, infrastructure spending underpins investment across the economy.

…and delivers agglomerative benefits…

The renewal of economic infrastructure delivers agglomerative benefits that can accelerate regional economic development and underpin economic and industrial clusters. Good infrastructure is vital for the economic as well as physical growth of cities. Infrastructure is essential for the clustering of professional services and other business sectors in modern cities: transporting people to and from work; enhancing the exchange of information within different economic clusters; allowing new office and building developments; reducing transportation costs through concentration of population; and underpinning all of the above, helping make cities effective environments, and so attracting mobile global talent to live there. Rural communities become more connected, allowing labour and capital to become more mobile and hence allowing for economic growth in the regions.

…for example in London

Last year this author chaired a Commission on the future of London's infrastructure.[1] The Commission's report highlighted some startling statistics about the productivity gains from this agglomeration effect in London. Inner London has an average Gross Value Added per head that is 2.8 times the UK average. And most industry clusters are around a quarter to a third more productive in London compared to the UK average for that industry. None of that can be achieved or sustained without high quality infrastructure.

III. Pension funds, insurance companies and infrastructure

Pension funds are a major source for infrastructure capital

The bulk of the capital that Macquarie has historically invested in infrastructure has been sourced from the global pension fund market. So why are pension funds and insurance companies and infrastructure assets a good match? Fundamentally, because they are all *long-term* businesses.

Infrastructure typically provides low risk regular revenue , often inflation-linked

Infrastructure businesses provide essential services to the community or economy. They typically are relatively low-risk and low-volatility, with regular, long-term revenue streams. As a result, many are regulated, either formally by economic and standards regulators, or indirectly by competition authorities. They have a high proportion of fixed assets and a stable competitive base. Revenues are often inflation-linked directly or indirectly, which is attractive to pension funds whose liabilities are also inflation-linked. Today, these characteristics are particularly appealing when many other fixed-income investments, such as government debt, are paying historically low yields in most countries. Infrastructure funds are attractive investment vehicles for pension funds and other institutional investors, providing diversified portfolios of infrastructure businesses.

Pension funds and insurance companies are well-placed to invest for the long term

Pension funds and insurance companies are better placed than most investors to invest for the long term, especially the larger pension funds, although trustees are not immune from the pressure of short-term and near-term economic cycles. Macquarie's investments in the sector are typically long-term. This allows us, as investment professionals, to take a long view of the companies in which we invest, which is good for those infrastructure companies. We are comfortable with the businesses in which we invest undertaking long-term capital expenditure because we, and they, will be there to see things through to the end of the investment cycle.

Regulation should be supportive

This is very different from the traditional private equity approach where investments are made with the intention of selling them, or "flipping" them, following a short period of ownership. Of course, this type of investment rightly has its place in a fund manager's portfolio, but it is very wrong to group infrastructure fund investments and private equity fund assets in the same bucket for evaluation and regulation purposes.

Pension funds are trusted partners

There is also an attractive symmetry in citizens' pension contributions being used to finance the infrastructure that underpins the jobs of tomorrow. Pension funds are correctly seen by governments as trusted partners and socially responsible. MIRA has found time and again that when we have purchased a nationally important piece of infrastructure in a jurisdiction that is new to us, the public authorities are reassured not only by Macquarie's reputation as an active and responsible investment manager, but that we are managing the investment on behalf of long-term institutional investors.

IV. The funding gap

Infrastructure investment has been lower than required

Infrastructure investment is expensive, and there is a backlog of ageing assets in many advanced OECD economies that need renewal. The OECD's own excellent Futures Infrastructure Project, on which Macquarie has been very pleased to partner, has set out the scale of the funding challenge. The OECD's 2007 report, *Infrastructure to 2030*, estimated that around USD 50 trillion would be needed worldwide in the period to 2030.[2] But economic investment has been running at lower levels than this rate in many economies. In the UK, for example, the national infrastructure plan suggests increasing spending in the economy on infrastructure from a historic average of around £30 billion a year[3] to £40 billion annually.

The private sector will have to fill a large capital expenditure funding gap

Given the state of the public finances in many countries, it is predominantly the private sector that will have to fill this large capital expenditure funding gap. In 2009, the value of assets in institutional funds was some USD 65 trillion globally. Compulsory national or regional pension schemes, in particular, have the potential to accumulate large amounts of capital quickly. If the public sector creates a supportive investment framework the private sector can do a great deal more to fill the gap.

…but to do so the right framework is needed

The objective must be, first, to facilitate greater and better capital expenditure in infrastructure networks and assets by the owners of those infrastructure businesses. And second, to avoid putting unnecessary barriers in the way of pension funds and other private institutions seeking to invest more in the infrastructure sector.

V. Getting the framework right for capital expenditure

Introducing balance sheet accounting is important

One of the reasons that there is a funding gap is historic underinvestment by the public sector. Many public sector organisations and enterprises treat both operating expenditure and capital expenditure as fungible cash and do not have a balance sheet for their assets. So when budgets are tight and political pressures high these organisations will be tempted to cut capital expenditure first. That is made much easier when there is no balance sheet to reference the value of the asset base and the declining value of that asset base as it depreciates. That is bad for future generations. Infrastructure is asset heavy and long-term so having a balance sheet that values the asset base is particularly important compared with other kinds of enterprises.

London underground as example

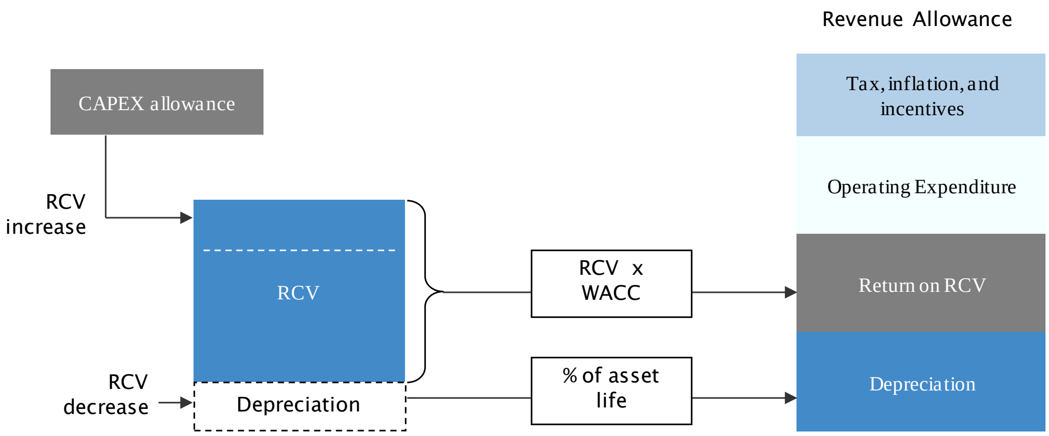
The history of the London underground system is a prime example. Decades of underinvestment are only recently being put right, at great expense. Blacksmiths are still required to repair some items on the network. The London First Infrastructure Commission Report recommended to the Mayor and UK Ministers that the London Underground in future should be funded on the basis of a proper balance sheet. The Underground remains in public ownership. But whether infrastructure is in the public or private sector, it needs a balance sheet and transparency regarding assets and costs. For a public transport asset, however owned, there needs to be a clear understanding of the potential trade-offs between spending on running costs now, upgrading ageing assets, fare subsidies, and so on. A balance sheet also makes unjustified expenditure more visible and so easier to bear down on.

"Regulated Asset Base" model enhances benefits

The other benefit of a balance sheet is that combined with regulation, it can form a secure basis for determining returns to financial investors who need certainty if they are to invest in an asset either as equity or debt. We have found that the use of a "Regulated Asset Base" or "RAB" model is a smart way to do this, while protecting consumer interests (Figure 1).

Figure 1. Notion of Regulated Asset Base has driven UK infrastructure investment

Regulated asset base model in the water industry



In addition to health and safety and quality of service targets

Competition to commit to capital expenditure and hit ambitious targets

Source: Macquarie Infrastructure and Real Assets (MIRA).

The fundamentals are that a RAB is created in a sector or company, and accounted for, and future capital spent once completed is added to the RAB, increasing the company's "Regulated Asset Value" or RAV, increasing with inflation. The regulator awards a return on the RAV based on a "Weighted Average Cost of Capital". The regulator typically has a legal duty to finance the infrastructure company's functions by these means.

The RAB model is not confined to the UK, although it started there. For example, many European airports have a RAB-based framework, with prices set based on cost allowances, including capital expenditure. And the French toll road networks have regulated price increases subject to a capital expenditure requirement, which helps align business goals with wider public needs. We have invested in a number of these assets, not least because there is in place an understandable asset-based regulatory model that works.

VI. Getting the framework right for institutional equity

Second, a plea: we must avoid creating unnecessary barriers to mobilising more institutional equity if we are to provide firepower for the capital expenditure required by infrastructure networks.

Need to mobilise long-term institutional capital

There is capacity for more long-term institutional capital to be invested in infrastructure. In the UK, for instance, the level of investment is estimated to be less than 1% of pension fund assets, compared with 8% to 15% in some Australian and Canadian funds.

Understanding infrastructure funds and the "alternative" category; there is a knowledge gap to be overcome

Let us not close off the opportunity. As an investment asset class, infrastructure funds are not yet as well-understood and well-known as corporate or government debt or a basket of equities. They are bracketed as an "alternative" investment, but that "alternative" category contains significant variations – hedge funds and private equity are "alternatives", too, but have very different investment characteristics relative to infrastructure funds. Not all institutional investors, particularly smaller pension funds, are familiar with infrastructure as an asset class. That knowledge gap can be overcome – and the OECD's current work in this area is playing a valuable role in that regard.

The implementation of capital adequacy regulations should recognise the relatively lower risks of infrastructure funds

But it is also important that policymakers take account of the differences among "alternatives" while formulating regulation, particularly in implementing capital-adequacy regulation in the banking and insurance sectors. Under the Solvency II framework infrastructure fund investments seem likely to face capital charges at the same level as hedge funds, private equity and "other equity". Solvency II is, of course, a complex and wide-ranging package and the treatment of infrastructure funds is only one aspect of it. But as they develop the final implementation of the overall package this year, policy makers should be strongly encouraged to look hard at finding a way for regulators and insurance companies to recognise the underlying relatively low risks of infrastructure funds compared with some other investments, particularly infrastructure funds where the manager takes a long-term and active interest in the management of the infrastructure assets in the fund. Disincentivising insurance companies from investing in infrastructure funds through such regulation would be something of a public policy own goal.

Governments should not crowd out private sector investment

One final point: in looking at interventions such as publicly-owned infrastructure banks, governments must take special care to avoid crowding out private sector investment. The fact is that if private investors believe they will be competing with public sector capital for infrastructure assets, this will overall reduce the appetite of private sector investors to participate in the market. Any such public sector interventions should be confined to those projects where the risks – perhaps regarding planning or other consents – are such that only the public sector can realistically manage them without crowding out the private sector.

Frequent short-term changes to the regulatory and tax framework should be avoided

The much more powerful way to deliver sustained infrastructure investment is to get the regulatory framework right; and then for governments to avoid the temptation to make frequent short-term changes to the regulatory framework or introduce ad hoc taxation that undermines confidence on the part of investors – as unfortunately we have seen recently in some well-publicised renewable energy schemes in Europe.

VII. Conclusion

So, in conclusion, infrastructure investment drives wider economic growth. Long-term institutional money is a great match for infrastructure assets and it can help bridge the infrastructure-funding gap. But we need stable regulatory frameworks, based on balance sheets or asset bases, to give investors the certainty they need. Further, we need governments and policy makers to focus on creating the right framework required for private sector investors to participate in funding the infrastructure gap, rather than seeking to find partial public-sector funding solutions that will merely discourage the private sector. And finally, we should seek in wider solvency regulation to facilitate, not disincentivise, a greater mobilisation of pension and insurance fund capital towards investment in infrastructure.

Notes

1. *World Class Infrastructure for a World Class City*, London First, www.londonfirst.co.uk

2. OECD Infrastructure to 2030 programme, *www.oecd.org/department/0,3355,en_2649_36240452_1_1_1_1_1,00.html*

3. March Budget 2010, HM Treasury, UK Government.