Focus

Time to get fiscal: bridging the UK's infrastructure gap

- UK infrastructure is perceived as poor, and there are significant areas of congestion
- Parts of the infrastructure network are operating with 19th century assets
- These shortcomings are hurting productivity and growth, and adding to vulnerabilities
- These risks become all the sharper when there is a risk of 'secular stagnation'
- Government would be wise to commit to the OECD's 3½ % of GDP infrastructure target
- There is also a strong case for a National Infrastructure Bank

Slow progress

Infrastructure has been the focus of new policy initiatives ...

Over recent years the public debate in the UK surrounding major infrastructure projects such as the northern-link high-speed train HS2, the Hinkley Point C nuclear power plant, the high-capacity high-speed Crossrail 2, and the extension of Heathrow Airport has intensified.

There is, moreover, no doubt that policymakers' overall tone on the subject of infrastructure has become more constructive. Successive governments have launched a number of important new initiatives. These include the establishment of Infrastructure UK within the Treasury to oversee infrastructure planning; the creation of an independent National Infrastructure Commission (NIC) chaired by Lord Adonis, to sharpen longer-term strategic thinking on the subject; and the appointment of former Goldman Sachs Chief Economist Lord O'Neill as Commercial Secretary of the Treasury, with a remit to oversee important aspects of this area of policy, not least as regards the north of England.

Indeed, the NIC has now published its first judgements, which, inter alia, suggest that the government should rapidly move ahead with the planning and development stages of Crossrail 2 and various trans-Pennine transport links. Moreover, these recommendations have been included in the 2016 budget.¹

Poorly perceived

There remains, nevertheless, a sense that the official rhetoric is running some way ahead of infrastructure policy substance, that the government's strategy remains unwarrantedly timid and piecemeal, and that the political premium attached to fiscal austerity continues to stand in the way of a more adventurous and productive approach.

... when low quality assets leave the UK exposed

Notwithstanding the high profile and genuinely exciting nature of the projects mentioned above, and a generally highly-regarded system of utility regulation, the UK's infrastructure is for the most part perceived as poor.

In international comparison, the UK ranks 24th out of 144 countries for overall quality of infrastructure.² The National Audit Office has been withering in its criticism of infrastructure project delivery.³ Significant parts of the country's energy, water, transport, and communications networks are in urgent need of renewal or replacement. Smaller, local roads and rail links have often been allowed fall into disrepair, as larger, headline-grabbing, projects have been prioritised.⁴

Indeed, Britain continues to operate well into the 21st century largely with 20th century, sometimes 19th century, infrastructure assets that are creating bottlenecks, crimping productivity and growth potential, putting off potential foreign investors, undermining the economy's competitiveness, and leaving Britain ill-equipped to face the challenges of climate change, or for that matter the potential trials of life outside the EU.

Below the OECD target

Spending falls short of the OECD's 3½ % of GDP benchmark Meanwhile, tentative government estimates of total (public plus private) average annual infrastructure investment between 2010 and 2014 amount to £47bn, around 2¾ % of GDP, although there was a distinct declining trend over this period, as the Labour government's temporary post-crisis fiscal stimulus came to an end.⁵

This 2¾ % figure falls some way short of the 3½ % of GDP of annual infrastructure investment that the OECD has suggested is necessary in advanced economies to avoid detrimental implications for living standards, quality of life, and competitiveness.⁶

Nor, on the basis of existing plans, does this situation seem likely to change significantly anytime soon. Public sector net investment is projected to run at around 1.2% of GDP in the years ahead, while in the meantime, the quest for greater private sector financial involvement in the sector continues to frustrate. Pension and insurance companies remain reluctant investors.

The fact is that considerably more remains to be done to raise the standard of UK infrastructure to a level where it is viewed as a comparative advantage for the economy, and where the financial resources of an expansive and mature institutional investment community are efficiently employed to that end.

Infrastructure's unique role

Infrastructure impacts all areas of the UK economy ...

A country's infrastructure is central to the functioning of its economy, and to the welfare and development of its population.

... playing a key role in demand and supply management

It is hard to imagine any productive process in any sector that would not benefit from decent infrastructure. Equally, infrastructure inadequacies are quickly felt. They result in congestion; restrict trade and innovation; raise transport costs; undermine the reliability of power supplies and telecommunications; increase pollution; leave workers less healthy and more poorly educated; and constrain firms' production.

Infrastructure investment thus has the potential to increase, substantially, a nation's capital stock and thereby boost productive, or supply-side, potential. Infrastructure programmes can therefore also be considered an element of structural policy.

There is furthermore a conceptually separate, and potentially crucial, way in which publicly-sponsored infrastructure investment spending can be useful – as a quantitatively important element of macroeconomic stabilisation policy.

As the money allocated for infrastructure investment is disbursed, it cascades through the economy, feeding demand for materials and other manufacturing and service sector inputs, creating new jobs, and boosting incomes through its powerful 'multiplier effects' on aggregate demand. In due course, there may also be further constructive effects, with more buoyant animal spirits 'crowding-in' other forms of investment, via the so-called 'accelerator' effect.

Thus, particularly at a time when the UK's productivity performance has been disappointing, and when it is facing increased risks and uncertainties from abroad, to which the Chancellor of the Exchequer is increasingly drawing attention, it is doubly important that the economy remains flexible and productive.

The quality, nature, and timing of the investment undertaken all typically influence the size of the effect on the economy. If the selection and execution of infrastructure projects are poor, and only a fraction of the money spent is converted into productive capital stock, the longer-term output gains will be limited. International experience is that the impact of infrastructure spending will be greater:

- When the stance of monetary policy is easy, and in particular when nominal interest rates are at, or around, the zero bound;
- When the private sector is unable or unwilling to borrow, as was the case following the 2008 global financial crisis;
- When the economy is working well below full capacity and unemployment is high;
- When an economy is relatively closed; and
- When other countries are also adopting an expansionary fiscal policy stance.

Equally noteworthy is that there is no evidence that the impact of public investment outlays on output is affected by a country's initial debt burden.⁸

Public investment multipliers can be sizeable ...

Latest estimates by the IMF suggest that public investment multiplier effects in the advanced economies typically exceed those of tax cuts, often a large proportion of which, is saved.

Infrastructure multipliers typically average about 0.4 over one year, but cumulate to 1.4 over four years. In countries with highly efficient public investment, however, the multipliers can be as high as 0.8 in year one, and 2.6 in year two. In contrast, where public investment is inefficient, they drop to 0.2 in year one, and a mere 0.7 over the medium term. 9 Clearly, it makes sense for governments to improve the quality, as much as the quantity, of infrastructure spending.

This is particularly so because the greater the multiplier effect, the less the government debt burden will tend to rise in the wake of a round of fiscal stimulus. Indeed, the IMF and others have suggested that, in the current environment of historically low interest rates, such are its effects on output that efficiently-employed public infrastructure spending will actually tend to reduce the government debt ratio. ¹⁰

This conclusion is of paramount importance, because it suggests that UK government opposition to a major increase in public infrastructure outlays on the grounds that it is unaffordable is misplaced. Indeed, it might imply that the government's emphasis on fiscal austerity is grounded more in political philosophy than economic calculus.

... and the broader positive effects enduring

Furthermore, even such estimates of longer-term multiplier effects tend to understate the ultimate influence of infrastructure spending, as they rarely capture the broader, more enduring, consequences for growth and development, and in particular infrastructure's role in:

- Reducing the costs of production and enhancing competition in markets;
- Expanding trade, foreign direct investment, and encouraging economies of scale and the division of labour;
- Producing a more efficient allocation of activity across regions;
- Fostering the diffusion of new technologies;
- Encouraging better organisational practices in business and beyond;
- Providing access to new raw material and other resources, including human capital.

Infrastructure that is rich in path-breaking technology tends to be especially potent over the longer-term. Both the OECD and the European Commission have provided evidence that countries that have invested the most in information and communication technology (ICT) have tended to experience the highest productivity growth.¹¹

Time for a change of tack

The downside risks to UK real activity are on the rise ... Whatever the political or financial arguments against more infrastructure spending, government officials would probably argue today that the cyclical case for policy stimulus has weakened over recent years. After all, a period of moderate but consistent growth has raised resource utilisation, and brought the economy close to most reasonable estimates of full employment, even if that has come about in significant part from very slow productivity growth.

Over recent months, however, riskier asset markets have struggled, financial conditions around the world have tightened, and the EU referendum debate has added to uncertainty about the UK's economic future. Moreover, the emerging market economies that did so much to sustain global trade and output growth in the aftermath of the 2008 crisis have slowed, and have begun to exhibit many of the enduring fault-lines and imbalances that had previously afflicted the advanced economies.

The net result is that many countries' forecasts for both growth and inflation have been revised lower, and in speeches the Chancellor and the Governor of the Bank of England have explicitly highlighted the dangers from a more challenging and unstable international environment. The threat of a renewed downturn has therefore increased.

... with fears of secular stagnation building ... There is also a growing fear that, notwithstanding the shallow and hesitant cyclical upswing experienced since late 2009, the advanced economies, including the UK, are beginning to suffer from something akin to 'secular stagnation' – an enduring imbalance resulting from an increasing propensity to save, accompanied by a decreasing propensity to invest. This excessive saving acts as a long-term constraint on aggregate demand, depressing growth and inflation, and pulling down real interest rates.¹²

These are circumstances for which policymakers would be wise to make contingency arrangements for boosting aggregate demand. The question is: how best to accomplish that?

Monetary overload; fiscal opportunity

... while monetary policy is offering diminishing returns Monetary policy has been overloaded for some time (and not just in the UK). The distortionary costs of a near-zero Bank Rate and successive rounds of quantitative easing have risen, while the benefits have diminished. It is an open question whether, even in the event of exaggerated

weakness, further resort to monetary unorthodoxy, at least as employed to date, would exert much of a positive influence on the economy.

There is also the issue of whether, if the underlying problem is one of secular stagnation and declining real interest rates, further monetary policy easing would actually make the problem worse rather than better. After all, to the extent that monetary policy works by pulling forward demand, it will actually add to the downward pressure on real interest rates in the future.

Increasingly, public discussion, in the UK and abroad, is considering the case for a fiscal policy response – whether immediately, or at least to be thought through and then kept in reserve in the event that there comes a time of need.

The case for fiscal activism is strong

If the argument for a greater role for fiscal policy in macroeconomic stabilisation is accepted, no doubt many would say that tax concessions aimed at the income-constrained should bear some of the burden. Such giveaways can impact spending quickly and will, after all, always find favour with hard-pressed politicians, who can 'spin' them in any number of positive ways.

If, however — as in our view should be the case — the arguments for higher spending on infrastructure are deemed stronger, it is important that there be put in place a set of clear, agreed, plans about how to proceed.

Policy recommendations

In our judgement, the requirements would seem to extend to:

- Increasing the ambition of government policy with regard to future infrastructure spending.
 This is particularly appropriate given the potential scale of the risks secular stagnation and long-term interest rates remaining historically low.
- Achieving the OECD's 3½ % of GDP per annum infrastructure investment target which could be employed both as an immediate target and a long-term benchmark for the NIP and NIC.
- Prioritising energy capacity, but also addressing transport congestion on the roads, the railways, and at airports in the south east of England, and strengthening flood protection.
- Maintaining an appropriate balance between headline-grabbing 'mega-projects' like HS2 and Crossrail2; repairing and maintaining existing assets; and smaller local initiatives, which by addressing specific bottlenecks, often generate especially large returns.
- Prioritising cutting-edge technology in infrastructure investment so as to maximise longer-term multiplier and network effects.

A NIB would offer an all-embracing approach

Finally, there is the issue of whether the piecemeal institutional changes made over recent years ought to be superseded by an operationally independent National Infrastructure Bank (NIB). Accountable to parliament, the NIB could be tasked with providing long-term policy stability, offering partial or complete project guarantees, issuing 'National Investment Bonds', developing risk management and other tools, providing a repository of information, and simplifying planning procedures.¹³

Through these overlapping and reinforcing mechanisms, not only could the 3½ % of GDP target be met in shorter order, the long-sought-after increase in private sector financing could finally become reality. ■

#Focus: Government rhetoric on infrastructure goes some way beyond the substance of policy. Bridging the UK's huge infrastructure gap requires a fundamental change of course.

- ¹ Financial Times, 15 March 2016,
- ² World Economic Forum (2015). Global competitiveness report 2015/16. September 2015.
- ² OECD (2013). OECD Product Market Regulation Database. OECD Paris.
- ³ NAO (2016), Delivery of Major Projects in Government: a Briefing for the Committee of Public Accounts, January 2016.
- ⁴ Real outlays on smaller roads have fallen by some 20% since 2010. Financial Times. 7 March 2016.
- ⁵ HM Treasury (2014). Infrastructure plan 2014.
- ⁶ OECD (2007). Infrastructure to 2030. Volume II. Mapping policy. OECD Paris.
- ⁷ It is interesting to note that following downward revisions to its growth forecasts, the OECD has recently called for a 'collective fiscal policy response' from member states. See OECD (2016). *Interim Economic Outlook*. February 2016.
- ⁸ IMF (2014). World economic outlook October 2014. Chapter 3. 'Is it time for an infrastructure push? The macroeconomic effects of public investment'. IMF. Washington.
- 9 IMF (2014). Ibid.
- ¹⁰ IMF (2014). *Ibid*. The OECD has recently also endorsed the IMF's view. See OECD (2016).
- ¹¹ OECD (2006). *Infrastructure to 2030: Telecom, Land Transport, Water and Electricity*. Also European Commission (2006). *Effects of ICT Capital on Economic Growth*. OECD Staff Papers. 30 June 2016.
- ¹² Summers. L. (2016). 'The age of secular stagnation'. Foreign Affairs. February 2016.
- ¹³ Llewellyn Consulting and Pension Insurance Corporation (2013). Op.cit.

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