Infrastructure

The options for building a long-term income

In conversation:
Jonathan Ord | Adrian Jones | Georg Inderst | Ian Berry | Mike Weston
Andrien Meyers | Peter Hobbs | Sebastian Cheek

DECEMBER 2016 | PORTFOLIO INSTITUTIONAL ROUNDTABLE

portfolio institutional conference

Liquidity conference

2 March 2017 • 200 Aldersgate, London, EC1A 4HD

Getting to grips with liquidity

Join us in March 2017

Liquidity risk has become a popular source of return for yield-hungry investors, but measuring its impact on portfolios is a difficult feat, especially in today's liquidity-constrained environment. The need, therefore, to better understand the ebbs and flows of liquidity has never been more important than now.

Join us for a complimentary half-day conference focusing on the nature of liquidity in today's uncertain market and its likely effect on portfolios.

Topics for discussion include:

How should investors measure illiquidity?

Making the most of illiquidity premia

Opening up illiquid assets to DC schemes

For more information, visit
portfolio-institutional-conference.co.uk

portfolio institutional

Infrastructure: building a long-term income

In theory, investing in infrastructure should provide pension schemes with long-dated, index-linked cashflows to meet their liabilities as well as access to the illiquidity premium. But the asset class has faced a number of headwinds in recent months, not least from the UK's decision to leave the European Union in June.

According to a recent paper by Standard & Poors, UK infrastructure has experienced a decline in funding of projects in the short term as a result of Brexit. S&P said this, combined with a weakening sterling, could change market fundamentals for infrastructure investment in the UK, while the willingness of the UK government to step in for the future remains unclear.

But as with all asset classes in the post-Brexit landscape, there will be short-term volatility but the long-term case for infrastructure remains strong, backed by government intent. Indeed, last autumn the UK government, led by former Chancellor George Osborne, had been clear in its aspiration: for pension funds, particularly those in the Local Government Pension Scheme (LGPS), to play a larger role in financing domestic infrastructure projects.

However, despite an obvious desire on the part of pension schemes, public and private, many have found the pipeline of investable UK-based infrastructure assets has run dry. Furthermore, the few opportunities that do become available are in high demand and most UK investors end up being priced out of the market by foreign investors with greater size and scale.

Collaboration through LGPS pooling and the Pensions Infrastructure Platform is addressing the scale issue for smaller players, but the truth is for the majority of pension schemes it remains difficult to access infrastructure. Therefore, a stock of investable assets with government-backing is both highly desirable and necessary if the government wants to achieve its goal.

That said, infrastructure is a diverse asset class and there are, of course, opportunities to be found. But with that comes many ways to access it, and whether listed or unlisted, debt, equity or direct investment, investors need to start from the perspective of what role infrastructure is playing in their portfolio – and then gain a full understanding of the underlying projects and contracts before committing.

This roundtable featuring asset owners, managers and consultants, sheds light on investing in infrastructure by looking at the asset class in the post-Brexit landscape, as well as whether it is just for the big boys and the current opportunities – or lack thereof – in the market.

Sebastian Cheek
deputy editor, *portfolio institutional*

Taking stock: listed infrastructure

Listed infrastructure no longer provides the returns it once did, but opportunities still exist, *Lynn Strongin Dodds* finds.

“Expected return has come down from 8% in 2006 to 6% now, but fundamentally we still like listed infrastructure because the underlying cash flows are predictable, it is less volatile than typical equities and returns are superior to government bonds.”

Colin Dryburgh, Kames Capital

Listed infrastructure had a good run but overcrowding, plummeting oil prices, uncertainty over the Federal Reserve interest rate policy and volatile stock markets have tarnished the shine. Globally, returns slid 6.7% last year and while this may offer a good entry point, investors are advised to not only build diversified portfolios on a sector basis but across geographies.

Last year’s pipeline subsector, one of the largest components, is an example of why investors need to sift carefully through opportunities. The former investment darling plunged 36.1% in 2015, according to research from global investment firm Cohen & Steers. Drilling down, these companies were the hardest hit of the energy groups with the S&P MLP index, which tracks pipelines and their operators, plummeting 26% in 2015, compared with 19% for the S&P index that tracks oil exploration and production companies.

The downfall occurred as energy prices started their descent last year and energy producers slashed capital expenditure plans for 2016 prompting fears over slower pipeline volumes and reduced cash flows. The situation was further exacerbated by difficulties in accessing capital and balancing cash flows with refinancing needs and distribution expectations.

Other areas that took a battering include marine port firms that suffered a 12.3% decline on the back of slowing global trade as well as a sluggish Chinese economy while freight rails, which are mainly based in North America, fell 10% due to reduced volumes for bulk commodities such as coal, crude oil and grains.

These negative results offset the healthy gains posted by airports, which boasted a 29.2% hike thanks to a robust tourist trade, as well as passenger railways – especially in Japan – which also benefited from increased traffic. Toll roads enjoyed a 18.9% jump as more people, especially in Europe, took to the highways, taking advantage of lower oil prices and an economy lifted by quantitative easing.

Meanwhile water utilities (15.3%) led by US companies demonstrated resilient cash flows and reaffirmed capital expenditure programmes and the communications industry- showed a 6.5% rise due to the solid earnings growth of wireless towers.

Despite the mixed picture, the overall demand remains strong for the sector based on emerging markets’ requirements for new infrastructure and developed countries’ need to bolster their existing foundations.

“The expected return has come down from 8% in 2006 to around 6% now, but fundamentally we still like listed infrastructure because the underlying cash flows are predictable, it is less volatile than typical equities and the returns are superior to government bonds,” says Colin Dryburgh, investment manager in Kames Capital's multi-asset team. "It also offers diversification and low correlation with equities and bonds because the fundamental risks of infrastructure are different from that of the business cycle."

Bertrand Cliquet who manages the £700m Lazard Global Listed Infrastructure fund further adds: "If you look back to the global financial crisis, the earnings of MSCI World companies fell on average 53% while the earnings of the preferred infrastructure companies in our fund only fell by 3%. What makes infrastructure relevant is the longevity of the assets, the high predictability of earnings over long periods of time and the inflation hedge it provides."

The preferred companies Cliquet refers to are those that meet the fund's specific criteria of revenue certainty, profitability and longevity. This translates into gas and electricity utilities as well as airports in North America and Europe that are monopolistic in nature with strong government contracts or are within a regulatory framework.

InfraRed Capital Partners, which manages the £2bn HICL Infrastructure Investment Trust, also targets the lower end of the risk spectrum with public private partnerships (PPP) or private finance initiative (PFI) projects across the UK, Europe or North America. The companies which range from health, education and transport, have steady government-backed cash flows. Airports, ports and motorway service stations are off the list because these assets are considered more in the private equity, higher risk realm, according to Tony Roper, director at director of InfraRed Capital Partners.

Utility type of assets in the US such as electricity, water and oil and natural gas distribution and transmission are also a popular stable in AMP Capital's funds. The latter is seen as particularly appealing as it is a fragmented market benefitting from a move away from coal and propane to natural gas as well as continued M&A activity, according to Giuseppe Corona, portfolio manager for the £1bn Global Listed Infrastructure fund at the firm, on the regulated end in the US. "There has been a genuine move down and an opportunity to buy high quality companies with quality management on good valuations in the market," he adds.

In addition, the listed infrastructure fund is focusing on the communications slice of the listed universe particularly broadcast satellites and wireless communication towers in Europe. Corona notes that their main attractions are strong cash flows and low operating leverage and financial leverage, which act as a

Infrastructure Debt – made simple

Real assets. Investment grade. Externally rated.

£6.7bn of infrastructure debt closed across 29 transactions and 12 geographies including in the UK[1]:

- M8
- DBFOII
- Aberdeen Western Peripheral Route
- University of Exeter (UPP)
- Nottingham Trent University (UPP)

Available in pooled and segregated solutions.

For more information please visit:
www.infrastructuredebt.co.uk

Allianz
Global Investors

Main image: Byron House, Nottingham Trent University (UPP).

Understand. Act.

[1]As at April 2016. **For professional investors only.** Investing involves risk. The value of an investment and the income from it may fall as well as rise and investors may not get back the full amount invested. Infrastructure debt investments are highly illiquid and designed for long term investors only. This is a marketing communication issued by Allianz Global Investors GmbH, www.allianzgi.com, an investment company with limited liability, incorporated in Germany, with its registered office at Bockenheimer Landstrasse 42-44, 60323 Frankfurt/M, registered with the local court Frankfurt/M under HRB 9340, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht (www.bafin.de). Allianz Global Investors GmbH has established a branch in the United Kingdom, Allianz Global Investors GmbH, UK branch, 199 Bishopsgate, London, EC2M 3TY, www.allianzglobalinvestors.co.uk, which is subject to limited regulation by the Financial Conduct Authority(www.fca.org.uk). Details about the extent of our regulation by the Financial Conduct Authority are available from us on request. 16-1683

hedge against a rising rate environment. The companies also tend to be more shareholder friendly and are well positioned for the future based on increasing high definition penetration as well as increased data usage on mobiles and tablets.

Airports are also on the AMP Capital investment roster, although views are mixed as to whether this sector is still a good holding. Corona acknowledged they have become pricier than three years ago but believes they still offer good value. Brad Frishberg, head of Macquarie's infrastructure securities investment business meanwhile, says: "I think some airports may have become too expensive and people too optimistic about the current strong business momentum continuing for too long into the future. As a result, and driven by our long-term discounted cash flow methodology, we have a relatively small exposure."

Frishberg is currently more positive on the pipeline sector and believes there has been an overreaction in the marketplace caused by declining oil prices. They are mainly US-based pipeline operators, which are dubbed midstream firms that carry oil and gas between producers on the one end and refiners and distributors on the other. They typically lock in their revenue with long-term, fixed-rate contracts which means that their income is not heavily dependent on oil and gas prices.

Frishberg explains that the lower oil prices have fuelled fears of lower growth and potentially even bankruptcies in the drilling sector that could affect the stability of the underlying contracts. "However, when we conduct a probability-weighted analysis, we see material upside in this aggregate group of stocks," he adds. "They look to be trading at attractive valuations, and we believe that the future cash flows in this space will be better than what is currently priced into the stocks."

Investors can also gain access to the debt side of infrastructure through listed groups such as GCP Infrastructure Investments and John Laing Infrastructure according to Paul Flood, lead manager of Newton Multi-asset Diversified fund. As with other investments, they benefit from sustainable cash flows and low correlation with other asset classes.

The downside, of course, to all these investments is that they are subject to the vagaries of the stock market and even if they are able to weather the storms better than most, investors can overreact when shares look toppy or if they are heading south.

Interest rate movements can also be a negative especially on highly leveraged companies although that might be less of a danger today with the recent decision by the Federal Reserve to keep further rises on hold.

"Listed is also not always as transparent as the unlisted market," says Karen Dolenec, global head of real assets at Willis Towers Watson. "For example, in a diversified company, managers may reinvest or use cash flows from the underlying infrastructure assets for other things and it would be difficult to see that."

Another impending threat is the incoming tax changes proposed by the Organisation for Economic Cooperation and Development (OECD) to prevent so-called base erosion and profit shifting (BEPS). The concern is that multinational corporate groups can use nterest payments to reduce their taxable profits in companies in high tax jurisdictions, even in cases where the group as a whole has little or no external debt.

The rules look to tighten international tax laws and prevent companies from moving to more favourable tax regimes. If passed, share prices of companies that have highly-leveraged infrastructure assets could take a hit.

"These tax proposals are aimed at tax avoidance strategies but some infrastructure trusts with highly leveraged investments could be caught out by the BEPS rules," says Dryburgh.

"It will be up to the national governments to interpret it and although it may not happen until 2017, it is something that poses a risk.

"It is another reason why we are selective in names."

For professional clients and advisers only. Not to be viewed by or used with retail clients.
The value of an investment and any income from it can go down as well as up and outcomes are not guaranteed. Investors may not get back their original investment. Issued by Aviva Investors Global Services Limited, registered in England No. 1151805. Registered Office: No. 1 Poultry, London EC2R 8EJ. Authorised and regulated by the Financial Conduct Authority and a member of the Investment Association. Contact us at Aviva Investors Global Services Limited, No. 1 Poultry, London EC2R 8EJ. Telephone calls to Aviva Investors may be recorded for training or monitoring purposes.
RA16/0686/31122016

Georg Inderst
independent adviser,
Inderst Advisory

Ian Berry
head of infrastructure equity,
Aviva Investors

Andrien Meyers
senior investment consultant,
JLT Employee Benefits

Adrian Jones
portfolio manager -
infrastructure debt,
Allianz Global Investors

Jonathan Ord
investment manager,
Local Pensions Partnership Investments

Peter Hobbs
managing director - private markets,
bfinance

Mike Weston
chief executive,
Pensions Infrastructure Platform

Sebastian Cheek
deputy editor,
portfolio institutional


Ian Berry

"Some of the things we can deliver from infrastructure... may be a little bit similar to what we do with real estate debt."

Ian Berry

What are the options available to infrastructure investors in general and how do they choose the right approach for their needs?

Andrien Meyers: An investor should think, "If I have infrastructure in my portfolio, what role is it playing?" Is it there to fulfil a fixed-income role, or inflation protection or some form of liquidity, even?

Ian Berry: We talk about outcomes which allows us not just to think about infrastructure. So what we can deliver from infrastructure, be it debt or equity, may be a little similar to what we do with real estate debt.

Mike Weston: Once you've decided how you want to do it, you need to ask if you do it yourself and perhaps build your own capability?

Georg Inderst: There are now many options available for different investors. Over the last 10 years we have seen all sorts of vehicles developed: listed and unlisted, debt and equity, funds and direct, brownfield and greenfield, and so on, so that it is easier for the end investor to find what fits into their portfolio. I prefer the opportunistic approach, to say, "What do I need? What fits into my investment strategy?" Rather than to say, "Oh, first I have to define infrastructure as an asset class." That's a discussion you will never end.

Weston: More and more segmentation just makes life difficult for pension funds, because they don't have governance bandwidth to do Indian solar, American roads or South American debt.

Berry: One of the challenges, if we just focus on infrastructure, is lots of choice, but what is the data to support choosing one of the options? Because most infrastructure is very long-term, how much information can you take from performance over one, two, three, four, five years for an asset that's meant to perform for 30 years?

Adrian Jones: The banks have an immense amount of data on project finance structures, which they have now shared with rating agencies. If you go back through the 2005 to 2008 period, everything that people did wrong there can be clearly seen in the data, and flagged in terms of creep of scope, and of leverage, and using inappropriate financial instruments.

Meyers: What teams do you have in place in order for you to look into that data, in order to ensure that you know what you're doing, to an extent? It depends, as an investor, what your capabilities are.

Jonathan Ord: Yes, and that's why we went down the collaborative approach. We're able to leverage the resources of another organisation; ourselves and Manchester. You see this in the Canadian market where the pension funds work together a lot on assets.

Peter Hobbs: Georg and I have worked for years trying to create a robust historic infrastructure time series that you can model and put against equities and real estate. Poor data is one of the major challenges of the infrastructure asset class. One of the problems is that infrastructure is arguably the best-performing asset class over the past 15 years, but this has been driven by its one-off repricing, so can you use any of that historic data – is it meaningful?

Meyers: What capabilities are there, in-house or externally, to ensure that you're investing in this asset class for the right reasons?

Jones: We raised funding, on a pooled basis, to co-invest with our parent from the outset. Our parent took a forward-looking approach. It saw what was happening to fixed income, generally. It knew what was being offered by banks. It recognised, to get the scale, it would have to share, and so it appointed us to basically build pools. But everyone has to be slightly forward-looking, anticipatory. All of the investors who turned down opportunities to join our platform during 2012 and '13 may be regretting that decision now because of what's happened to spreads and rates, and everything else. So we're working on this as a fixed income substitute mind-set.

Peter Hobbs

Historically, the people who did the yield-type PPP equity were looking for a return which was gilts plus 500bps. And back then, that was 8% to 9%, 10%. The reality for people is that fixed income is 200bps to 300bps, versus good investment grade if you are lucky. Low-risk structure is mid-single digits, and it's really the high leverage, true equity thing that gets you into the double digits.

Ord: It will be interesting, actually when rates go up. How attractive is this asset class then?

Weston: One of the problems we see is this mindset where people think eight [percent return]. When products come in, the answer's always eight. And you say, "There's no way that asset is going to yield eight." That's one of the problems in getting a group of pension schemes aligned. Because if there's no alignment, and you've got 25, 30 years before you know whether you're successful or not, you can tweak the model in the background, so after 25 years' time it isn't eight but five.

Inderst: Some people use listed benchmarks, others an absolute return benchmark such as CPI plus three, four or five, or Libor plus a few percentage points. And, of course, others use what is available on the unlisted space, including the MSCI/IPD index. It goes back to the question which was raised earlier. "What do you want to achieve? What do you expect infrastructure to do in your portfolio?"

Jones: There are credit statistics. It is why, for example, a lot of our investors are keen for us to continue to use investment-grade ratings. It's just to have some other validation.

Weston: I'm locking the money up for 25, 30 years. If it's delivering or not. I don't care what the opportunity cost or gain might be, because that's irrelevant. I'm generating returns to pay my liabilities.

Inderst: What do you expect it to deliver?

Meyers: If the actuary is forming a gilts-plus model, in today's market, you're probably looking at three and a half, maybe.

Inderst: But if you have a pooling approach, and then you may have different schemes with different liability needs and benchmarks.

Jones: We haven't found that it creates tension with our clients. Obviously, they can allocate to different funds and get a different blended return. But you cannot over-engineer this stuff.

Weston: Nobody is saying, "I want infrastructure to deliver me 4.55%." You don't want to try to be too precise, because nobody is ever going to deliver that. They don't want us to be taking additional risk or tweaking a portfolio to get bits of extra return, because they're not in it to maximise return. No performance fees, no carried interest. Just a flat fee to deliver these standard, absolute returns.

Jones: I don't think any of our potential clients would give money, in this kind of strategy, to somebody who is charging a performance fee because, as you said, the outperformance comes from movements in interest rates. If you want to appoint a manager to predict rate movements, you wouldn't use infrastructure as the instrument.

Berry: What about the differentiation of doing a good job or a bad job? The ideal scenario, of course, is that you take the low level of risk, and you get a higher than expected level of return. So, philosophically, there are two ways of looking at allocation. You say, "I want to invest in infrastructure because I want to match something. I want to look at my discount rate." But then, once I've decided how to do that, I've got to decide how to do it best. And 'best' is a combination of costs and outperformance.

Ian Berry, Jonathan Ord and Sebastian Cheek

Jones: Many private pension schemes are thinking, "A few years down the line, I may be bought out." The other thing about this asset class is, everyone tells you it is illiquid and has got high recoveries. Also true. But where that breaks down is if at the first sign of trouble, you panic and try to sell.

Meyers: I'm assuming, when you're backed by the government, do you really need to get a rating?

Jones: The rating goes towards the marketability of the assets. If somebody else has put a rating on it, then that is one more thing that can help if you need to sell it.

Hobbs: I had a fascinating discussion with one of the most experienced UK CIOs in infrastructure. He was saying he really doesn't like regulated assets. He sees them as much more risky than growth assets. Which turns everything on its head, because you normally think of the growth assets as more risky. But he was saying, over a 10-year hold, regulations are likely to change. So, his experience is that, actually, those people who have focused on regulated assets have underperformed those who focused on growth assets.

Weston: But have they delivered what the pension scheme investors need from those assets? Because, arguably, the regulation will change, but you'll still get an inflation-linked return.

Adrian Jones

"You have got to have some first mover advantage, and you have got to keep changing slightly what you do within a core parameter, seeking out new things."
Adrian Jones

Hobbs: Not if you talk to the people suing the Norwegian government.

Ord: In the UK, the regulatory environment is very strong. The environment is always evolving; on the whole they are good at signposting the direction of travel.

Jones: The treasurer of a major UK utility showed me a chart 10 years ago about the market value and the regulatory value cycle. Even in a very transparent regulatory system like the UK, the regulator doesn't get the cost of capital right. He undershoots one regulatory review, and overshoots the next and guess what happens to the market value versus the regulatory value? It oscillates or rather, it used to oscillate over the regulatory cycle. Now it just goes up, because interest rates have gone down. So, at certain times, yes, it would be more risky to buy it. But if you buy at the right price, it is not inherently more risky.

Inderst: The UK is a special case because so much infrastructure is privatised already. David Cameron tried to bring road privatisation on the agenda. There's so much money being allocated by investors these days, and one wonders where the assets are going to come from. Only recently, two mega-funds have raised US$12.5bn. The "dry powder" of capital to invest in infrastructure is at a record high.

Hobbs: But there's more deal-flow in the UK than for many years. You've got the offshore wind, Thames Tideway, the National Grid. And there are opportunities in airports and water. The issue is the pricing. So, it's very hard if you've got a UK-focused fund, because the pricing here is so aggressive, because it's the big sovereigns buying it. It's very hard to compete against that on the equity side.

Berry: What you're implicitly saying there is that infrastructure is 'big stuff', and 'big stuff' gets bought by people who have a lot of capital to invest. Simplistically, that covers a lot of the infrastructure market, but infrastructure is a varied space and there are plenty of other opportunities. So, even despite Aviva being a very large insurance company we actually also like looking at the smaller projects, because we think there can be some very attractive opportunities with lower risk and higher returns.

Is infrastructure just for the big players?

Weston: The Pensions Infrastructure Platform is open to all pension schemes. It was set up precisely because there was this view that infrastructure was difficult to access if you weren't a big scheme. So, if we come back to my earlier point about governance bandwidth and asset allocation, can you asset-allocate to specific sub-sectors of infrastructure? Do you want just infrastructure, when you're a smaller scheme, and your allocation might only be £5m or £10m? How do you get exposure to infrastructure in a diversified way? There was a problem that funds, by and large, don't like small allocations.

Jones: In terms of origination, it is for the big boys, because if you're talking about private debt, people don't want to negotiate with syndicates. They want to speak to one or two people. Most of the successful platforms are based around a big anchor investor with lots of other investors co-investing. It is resource-intensive, and you do need critical mass.

Size also drives down costs, because if you are talking about flat numbers of basis points per AUM, the bigger and bigger the funding is, the more efficiently it can be delivered. The small players can be a part of it, and managers will accept £5m, £10m, £15m allocations to funds, because if they get enough people together, it gives them that critical mass. Aviva, Allianz, Axa in Europe, they are big entities.

Hobbs: With scale, with larger allocations to infrastructure, then you can do SMAs (separate accounts), and significantly reduce the cost down from the 1-1.5% levels.

Berry: Our equity approach can be accessed via a pooled fund which is generally favoured by smaller pension schemes. Larger pension schemes typically look at segregated mandates. And in my experience fees are not along the lines you mentioned.

"We have seen people fall out of transactions in the immediate aftermath [of Brexit], but with processes starting now there still seems to be demand."
Jonathan Ord

Hobbs: A fee for an SMA and a fund investment?

Berry: Well, we'd like it to be zero, but as Adrian says, there are administrative issues that might need to be paid for.

Hobbs: So, in real estate, it's about 30bps, 35bps, for a separate account, 75bps for a fund. So, there's a 40bps difference

Jones: Well, there isn't 75bps available in infrastructure debt to pay such fees.

Berry: We are trying to find a solution to our clients' needs, and part of that solution is infrastructure. When it comes to fees we look to ensure the fees are appropriate and competitive. What we want is for clients to trust us with their money to manage across a wide range of sectors where we have expertise, which could include unleveraged infrastructure equity.

Hobbs: Yes. But in the pooling exercise, one of the big gains of pooling is fee-saving.

Ord: What we're doing with Manchester is a collaborative joint venture, so there's absolutely zero management fees. We're taking a more direct approach; we are open to acquiring assets directly or partnering with others such as managers or corporates. We are long term investors and the structure has to cater for this as well as give us the necessary control.

Jones: Comparing the fee models of the classic big infra equity funds that are raising billions at a time with what we are doing, it is totally different. We are looking at assets with an all-in yield of, as I say, 200 to 300 basis points. Four years ago, there was another 200 or 300 basis points of absolute yield on the table. Even if we hadn't got bigger and become more efficient, our clients would have required us to halve our fees just in order to be taking the same proportion of the pot. And it really is that crude. The only way


Mike Weston

"There's a big chunk of, ultimately, government infrastructure that could be structured in a way to make it attractive for pension schemes. It's just that the government aren't doing it yet." Mike Weston

you do it is through scale. If you set up your own team, you are going to be hiring from the same pool of people who have been in this industry. You are going to have the same regulatory costs. You are going to have the same custodian costs, shadow accounting, all the rest of it.

Ord: Going direct isn't just about fees. It's also about governance and control on that asset going forward, so we may not be actively managing it on a day-to-day basis, because we're a minority shareholder, but we know what's going on. If there is an issue with the asset, we have that in real time, and there isn't a fund manager in between us managing that information.

Jones: But, again, that is equity, though, isn't it? Because in fixed income, the reality is that all decisions are collective anyway. If you want to have most control, you actually make sure that you've got more than 51% of the stock.

Ord: But, actually, at a pension fund level, you have blind pool risk by committing to funds. That was one of the big issues, perhaps going back to '06 and '07. These funds are out there, acquiring assets with a different risk profile than perhaps their investors understood. And, actually, pension funds stood back and said, "A number of these assets are now underperforming." Probably because they were highly levered, or the regulatory environment changed. So investors thought, "Great, we pick a great manager, but they may drift in terms of strategy." You know, a PPM is very widely drafted, when returns are compressed it can be tempting to stretch the boundaries of the investment strategy in search of extra return.

Jones: But that is something, again, where pooling can help, where you negotiate the PPM, and you put provisions in the PPM to stop that happening. At the end of the day, one of the big differences between a fund and having your own IMA will be the bells and whistles you put in.

Inderst: Is infrastructure just for the big managers? Some managers might have capacity constraints.

Berry: If the simple thinking is that all the managers do roughly the same thing, and try roughly to buy the same assets or lend the same money to the same borrowers, then yes absolutely. But the reality is that every manager (and particularly niche fund managers) will by definition try to say, "Well, we do things better and differently."

Hobbs: So you've got your niche strategies, maybe niche or country-specific. But what's the scale and how many assets do you need before you start getting that diversification?

Berry: A single manager in infrastructure, almost without exceptions can't get diversification. Because diversification requires a large number of investments and no single vehicle to my knowledge does that.

Weston: Diversification's a bit different in infrastructure, but if you're going in at the lowish end, you've got contractual cash-flows. It's not like looking at the equity space, and saying, "You need lots of assets to effectively diversify." Our approach is, we're looking at 15 assets of around £1bn, and so that means we're not going to go and compete for National Grid, or London City Airport. But if you look at having some in renewables, some in utilities, some in transportation, some in housing, that's diversification. Because you're diversifying away political risk and regulatory risk. You hope that if the government changes the rules on renewable energy, they might not change the rules on housing.

Jones: Your question actually does raise a somewhat ironic conclusion for the smaller guys, which is by the time you have created these perfect platforms that everybody can invest in, it will be too late. Because there isn't the capacity for every pension fund in the UK to have 3% to 7% in core infrastructure, because there just isn't enough of it. You have got to have some first mover advantage, and you have got to keep changing slightly what you do within a core parameter, seeking out new things. That is the challenge.


Georg Inderst

Weston: If you look at things like Tideway, the structure was changed to make it attractive for pension schemes to invest. Some of the risk was taken out by the government taking some guarantees. Now, arguably, you look at the national infrastructure delivery plan, £480bn worth of assets. £300bn in the next five years, 50% of which needs private funding. So, not all of that's going to be applicable to pension schemes, because some of it will be coming through the utilities or whatever. But our argument would be that there's a big chunk of, ultimately, government infrastructure that could be structured in a way, with guarantees, with risk-sharing, to make it attractive for pension schemes. It's just that the government aren't doing it yet. But there's potentially loads there.

Jones: Yes, potentially. But you do have to look back at what has been achieved. In 20 years, they managed to do about £50bn to £60bn of PPP assets, and that was during a period where the government was massively pro-PPP. During that period, the water companies raised about the same amount, maybe more, in debt. So, yes, those volumes can be raised, but I don't see, in the next five to 10 years, £300bn of investable core private sector low-risk infrastructure investment. If you look at the national infrastructure plan, there are things in there which can't be invested in anything other than via a type of gilt, like the nuclear reactors. There is stuff which is going to be done through corporate euro medium-term notes, like Heathrow. There will only be opportunities to do roads, schools and hospitals if the political view of PPP or PF2 changes.

Inderst: And it's not easy for governments to give guarantees. The UK guarantee fund, which is one of the few examples globally, has guaranteed £23bn so far. Most countries are fiscally not in a good position to give large guarantees, and it is politically not easy to get these things through.

Jones: The government initiatives are about driving yield out. Why, when yields are at an all-time low, would they not borrow this year when this will probably be the cheapest money they can borrow?

Inderst: Another problem is on the demand side. The UK has, at least so far, a good reputation as an infrastructure investment location, even if its own infrastructure might not be the best in the world. For example, some of the big Asian social security and pension schemes, large insurance companies and sovereign wealth funds, they now allocate more money to infrastructure. They're rather late in the game. And guess where they wish to invest? The developed market, especially "North-West" Europe, plus bits of North America and Australia.

Ord: I guess everything is 15%, 20% cheaper, isn't it, if you're overseas, assuming the pound recovers in the short to medium term.

What effect has Brexit had? S&P says it will affect investor appetite for UK infrastructure assets.

Ord: We've seen a couple of people fall out of transactions in the immediate aftermath, but to be honest, with processes that are starting now, there still seems to be demand. In the immediate aftermath, a month, six weeks, people just came back.

Jones: We represent a lot of investors who aren't in the UK. Frankly, they weren't there to talk about Brexit in July and August. Now they have come back, their margin expectations have been tweaked. But people are still doing business, and it's a dawning realisation that this limbo phase we're in might be a long period. The other thing is, our investors invest for 30 years. So, there is going to be two or three recessions, some unexpected political events over such time periods.


Andrien Meyers

Are there enough projects in the UK?

Berry: There aren't enough of them. But if you're looking at slightly smaller assets, slightly unusual assets, there are. Energy is a massive area for UK infrastructure expenditure in the next few years. There's all sorts of things that people never focused on before like energy storage or smart metering, that suddenly are exciting, because solar and wind is not as easy anymore.

Weston: The problem for us is, if you go overseas then you start introducing a whole new set of risks. Overseas politics, FX, and the inflation linkage. So, where does that sit on the risk spectrum? Arguably, an overseas core infrastructure asset is not the same as the UK.

Jones: And that is the real difference we see when people talk about fixed income or equity. If you say fixed income, the discussion about going into different currencies becomes all about hedging. Whereas, on the equity side of it, it just seems to be accepted. "Yes, we'll go into equity, and yes, currency movements are just one of the swings and roundabouts." That's oversimplifying, but we've tested the markets and asked our existing clients. Should we have multi-currency debt funds? Should we just keep a sterling fund for


Jonathan Ord

"We are open to acquiring assets directly or partnering with others such as managers or corporates."

Jonathan Ord

sterling investors? And the resounding answer we get back from the funds, advised by the consultants, is "You either hedge it or you currency-match at the asset level."

Berry: With our unleveraged equity strategy, we invest in the UK because our clients want exposure to UK assets. Do we think that 100% exposure to the UK is absolutely the right thing, in terms of balancing risk? That of course depends on the client and what else they are investing in.

Jones: But [Andrien's] point about how the value is probably found in smaller, less visible assets has got to be right, if you go for other things, that is where you'll find value. You don't need £13bn. If you've got a half billion fund here, a couple of large IMAs, maybe an anchor investor, you can make a difference on medium-sized projects.

Hobbs: Is there pressure on the LGPS to invest in local infrastructure?

Ord: We're not going to be investing in a project solely because it's in London or Manchester. But, at the same time, if we're able to use our local links in those areas to either solve an issue there, or bring some benefit to it, we would look at it.

Jones: You should always think, "What happens if this project starts well and goes badly?" You perhaps want a bit of distance. And if there is any suggestion that investments were made for non-economic, non-arms-length reasons, even if a project goes well, that is worrying. If it goes wrong, it's going to be awful. It's much better if investing in your local area is a happy coincidence rather than being the sole objective.

For professional investors only

Infrastructure debt, BREXIT and the search for yield

Adrian Jones, portfolio manager infrastructure debt, and Philip Dawes, head of institutional sales UK, Allianz Global Investors

Following the cut in August 2015, interest rates have fallen to new record lows, making the search for yield as relevant today as in 2012 when infrastructure debt opened to institutional investors. Pension funds remain short of the long-dated, inflation linked instruments that would best match their liabilities whilst suffering from financial repression with respect to those instruments they can easily buy. Central bank buying programmes of government and corporate securities are, in effect, suppressing spreads by raising secondary market prices and reducing primary market new issuance yields.

Senior infrastructure private debt remains a valuable alternative, offering enhanced spreads, which generate positive real returns in a negative real yield environment and diversification benefits. Investors are also beginning to attribute more value to the cash-flow matching benefits of infrastructure debt, (particularly those with amortising structures): Insurance companies benefit from the matching asset adjustments available to insurers under Solvency 2 while maturing pension schemes realise the value of cash-flow as well as balance sheet hedging.

But the asset class is not without its challenges. Continued rises in government indebtedness, mean policy-makers continue to be faced with a funding shortfall for long-term infrastructure expenditure while as a result of the trend toward zero or negative rate monetary policy they have fewer tools than ever before to stimulate economic growth. Across the globe political risk and uncertainty is on the rise, characterised in the UK by the recent and ongoing BREXIT debate, leaving investors facing uncertainty. UK government debt now tops £1.5trillion.

BREXIT has led some to question whether the European Investment Bank (EIB) will have the appetite to continue to invest in UK infrastructure as we extricate ourselves from our Continental European partners. It does seem that these record levels will not be met in 2016 but the EIB remains active in the UK, most recently with the closure of an £82m financing package for the Humber Gateway offshore transmission project. While the loss of EIB subsidised funding may marginally increase the average margin on projects, given all-in yields are at an all-time low and investor appetite for the sector remains strong, loss of EIB funding, even if it happens, should not be an excuse for reduced infrastructure spending.

The new Conservative regime is increasingly looking to favour pro-growth investment rather than continued austerity. HM Treasury has indicated a willingness to work with pension funds and insurance companies to attract investment but the dearth of projects suggest that PF2 has yet to establish itself as the obvious mechanism to facilitate this investment. A seemingly never-ending search for "innovative funding" mechanisms obscures the reality that beyond a few "mega projects" such as the Thames Tideway where genuine novelty was needed to ensure unusual and outsized risks were appropriately apportioned and priced, public-private-partnerships have a long track record in the UK and beyond as a financing model that has delivered hundreds of projects off balance-sheet, on budget and on time. The Autumn statement will give a good indication as to the government's plans with respect to attracting institutional investment and the form that this may take.

Away from the social infrastructure sector, the energy sector continues to offer a tantalising prospect, if only pragmatic reform of the wholesale energy "market" could give the new conventional generation capacity needed to balance the intermittency of renewables (and replace the soon-to-be decommissioned older coal-fired stations) the same certainty of revenue (subject to performance) granted to virtually all other forms of UK generation i.e. wind, solar, new nuclear, probably tidal lagoon, and to a limited extent inter-connectors.

The project finance techniques needed to fund new-build CCGT under PPA, CfD, tolling (or similar performance-linked but market-neutral revenue mechanisms) are well established and as the revolution of funding in social infrastructure projects since 2012 has proven, institutional investment working in partnership with shorter-dated bank debt could deliver the dozen or more CCGT plants which are largely permitted and just await funding. One possible result of Brexit may be that UK policy makers may look again at the existing wholesale energy "market" mechanisms in and recognise that fuel supply mix is a largely political question given the eponymous "tri-lemma" of balancing affordability, security of supply and environmental obligations.

Central government has been unequivocal in its expectation that local government pension funds are one sector that should be at the forefront of investing in infrastructure in the UK. Given the characteristics of the asset class and the maturity profile of these schemes this is a sensible assertion. However, the creation of regulated regional asset pools is a significant under-taking that has in effect pushed infrastructure investment further down the agenda for local authority schemes. This gives an advantage currently to corporate pension schemes and insurers to take advantage of this inertia and gain access to the pipeline of greenfield and brownfield projects that do exist.

Notwithstanding the (largely) political issues that impact the prospects for senior infrastructure debt there remain logically consistent reasons for accessing the asset class. As in previous investment cycles low yields force institutions to consider alternatives to long-dated sovereign bonds that typically increase the risk of their overall portfolio e.g. High Yield or EMD. That does not make them bad investments but investors need to recognise that there is no free lunch. Equally there are other emerging asset classes such as ground rents and commercial real estate debt that offer enhanced returns but these too do not come without risks such as patronage risk, market risk, merchant risk and deployment risk. All may have a role to play in a diversified portfolio but are they are comparable alternative to sovereign bonds and can investors meaningfully deploy assets in these sectors?
Senior infrastructure debt can be originated and structured to offer many of the characteristics that institutional investors are seeking. Transactions include the following characteristics:

- Fixed rate and index linked tranches.
- Genuine long-dated transactions with a weighted average life of 15-18-years.
- No or limited market risk.
- Pre-payment protection via spens and modified spens mechanisms.
- Spreads of 175-250bps over equivalently dated mid-swaps.
- Positive real returns.
- Investment grade.
- Externally rated transactions.
- Bond format (unlisted registered notes or listed bearer bonds).
- Diversification benefits versus other asset classes and among individual transactions.

Many institutional investors are attracted by these characteristics but lack the expertise to originate, structure and monitor transactions. For this reason it is often seen as the preserve of the larger investors. However, just like other asset classes, platforms have been created that provide access to these private debt transactions. Pooled vehicles are available that will accept investments of £25m from individual investors meaning an allocation of 10% from a pension fund portfolio makes the asset class available to schemes with assets in excess of £250m. Equally co-investment opportunities exist that mean relatively small allocations can be made to even the largest individual transactions. Examples of such transactions funded in the UK since 2012 include the M8, Aberdeen Western Peripheral Ring-Road, and DBFO2 refinancing with average spreads >200bps.

Largely political questions remain over the involvement of institutional investors in funding private, senior infrastructure debt transactions (in the UK) but the methods exist to capture the opportunities. As the US and the rest of the world embrace institutional investment there is a danger that this uncertainty leads institutional investors to consider the emerging pipeline overseas before facilitating the investment that will stimulate UK plc.

Allianz
Global Investors

Infrastructure debt investments are highly illiquid and designed for long term professional investors only.
Investing involves risk. The value of an investment and the income from it may fall as well as rise and investors might not get back the full amount invested.
This is a marketing communication issued by Allianz Global Investors GmbH, www.allianzgi.com, an investment company with limited liability, incorporated in Germany, with its registered office at Bockenheimer Landstrasse 42-44, 60323 Frankfurt/M, registered with the local court Frankfurt/M under HRB 9340, authorised by BaFin.

Unlevered Infrastructure – Challenging Convention

By Boris Mikhailov, investment strategist, Global Investment Solutions, Aviva Investors

Pension schemes looking for low risk inflation-linked cashflows offering the potential to generate significantly higher yields than index-linked gilts should take a closer look at unlevered infrastructure strategies.

The UK's decision to leave the European Union and recent easing measures by the Bank of England has left gilt yields in unchartered territory. Given the uncertain macro-economic environment, with gilt yields expected to remain low for longer, and returns in traditional asset classes exposed to heightened volatility, there is an obvious rationale for pension schemes to consider alternative income assets to help meet their long term liabilities.

Infrastructure is one option; either through a stand alone allocation or as part of a wider multi-asset alternative strategy. Infrastructure assets have certain characteristics that should appeal to pension funds, namely they are long-term investments and are designed to withstand periods of volatility and economic uncertainty.

Challenging conventional approaches to investing

The conventional way to invest in infrastructure is through debt or equity; participating in the financial returns of an underlying infrastructure project and getting exposure to the market. An alternative approach is to invest on an 'unlevered' basis, where the investor buys the whole infrastructure project capital structure and gains full control of the assets. This can reduce financial volatility and provide low risk inflation-linked cashflows at significantly higher yields than index-linked gilts. In other words, it offers the chance to generate 'equity-like returns whilst taking debt-like risks'.

Until recently, this approach was predominantly the domain of pension schemes with significant governance budgets or in-house expertise, but now there is a range of products available to suit the needs of pension schemes of all shapes and sizes

What infrastructure projects could form part of the strategy?

Infrastructure investments can be sourced from lower-risk sectors, such as utilities, renewable energy and social infrastructure, to higher-risk sectors, such as ports and mobile telecoms. Where the objective is to generate low risk inflation-linked cashflows, the focus needs to be on lower-risk infrastructure projects.

There is a diverse range of opportunities that fulfil these criteria whilst aiming for attractive - high single digit - returns; in particular 'low carbon' infrastructure assets such as renewable energy or energy efficiency projects. Revenues from these types of projects tend to be contractual or from regulated mechanisms rather than based on economic usage, making them especially attractive from return and diversification perspectives. The stable, long-term income streams they can provide make them a good fit for pension schemes with liabilities to match.

Energy centres for hospitals offer one such opportunity. An energy centre is a mini power station, providing both electricity and localised heat distribution to the hospital at a lower cost than taking energy from the grid. Energy efficiency is increasingly important to the UK's National Health Service (NHS), which has an estimated annual energy bill of around £750 million[1]. Powering lifesaving equipment and large hospital buildings is a growing strain on public finances, so it is not surprising that energy efficiency facilities have been gaining favour.

In Dundee, a £15.4 million[2] project is underway that will include the construction of a new energy centre for Ninewells Hospital and Medical School. The energy centre will supply 100% of the hospitals' heat requirements and c.90% of power requirements. The project is forecast to reduce energy costs by c.25% and CO_2 emissions by c.13%[3].

As well as providing savings for the NHS, it should also provide stable and low-risk cashflows to investors that funded the project. All cashflows for this project are contracted with NHS Tayside.

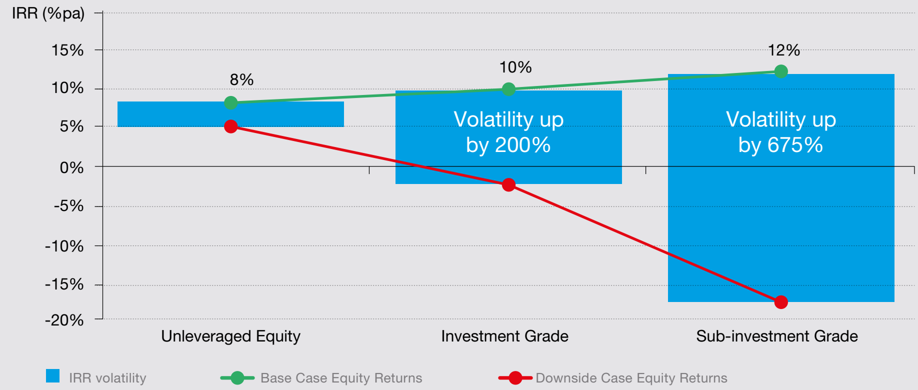
Renewable infrastructure assets such as solar panels and wind turbines qualify for regulatory support through Feed-in-Tariffs or Renewable Obligation Certificates. These provide payments for the electricity generated as an incentive to invest in the sector and also offer predictable returns.

Equity like returns with debt like risks

Investing on an unlevered basis gives investors the opportunity to capture all of the returns on the whole project. An unlevered asset will be subject to exactly the same project risks as debt on that asset - including operational, revenue and counterparty risks - but have a different return profile.

The traditional model of structuring an asset using debt and equity tranches introduces financial risk that is not present in the unlevered approach. The chart below illustrates how the return forecasts, defined as Internal Rate of Return (IRR), from a typical windfarm project, assuming different levels of leverage, are affected by a fall in wind speeds and hence energy generation.

Illustrative example of the IRR impact from a 20% drop in wind speed



Source: Aviva Investors. All information is based on the internal forecasts and estimates of Aviva Investors and should not be relied upon as indicating any guarantee of return

The green line on the chart represents the central forecast return for different levels of leverage, and the red line the impact on returns should wind speed fall by up to 20 per cent. The return dispersion is illustrated by the blue boxes. For an unlevered investor, the forecast base return may be eight per cent with downside volatility limited to approximately three per cent – equivalent to an IRR of around five per cent – if the electricity generation drops by 20 per cent over the 20-year life of the project as a consequence of the fall in wind speed[4]. For a levered investor, the same drop in wind speed could result in significant losses or even default. The downside risk increases with the level of leverage employed.

Investing on an unlevered basis in 'low risk' infrastructure projects can significantly reduce the volatility of returns associated with equity investing. Volatility can be further reduced by investing in a diversified portfolio of unlevered infrastructure assets, which could form part of pension schemes' matching strategies with significantly higher yields than comparable index-linked gilts.

Opportunity knocks

As with any innovation, it often takes time for the market to catch up. To date, a small number of pension schemes have invested in low risk infrastructure on an unlevered basis, but there is growing interest in this type of strategy. There is certainly enough capacity for pension schemes, large and small, to benefit. Those that have invested have received stable high single digit, inflation-linked income from their investments.

[1] Source: Green investment Bank. A healthy saving: energy efficiency and the NHS. April 2014
[2] Source: Aviva Investors 31 August 2016
[3] Source: Vital Energi, July 2015 (Date of Assessment)
[4] Source: Aviva Investors

AVIVA INVESTORS

Important information:
This document is for professional clients and institutional/qualified investors only. It is not to be distributed to or relied on by retail clients. Unless stated otherwise, any sources and opinions expressed are those of Aviva Investors Global Services Limited (Aviva Investors) as at 21 September 2016. This commentary is not an investment recommendation and should not be viewed as such. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. Past performance is not a guide to future returns. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested.
Issued by Aviva Investors Global Services Limited, the Investment Manager to the Fund registered in England No. 1151805. Registered Office: No. 1 Poultry, London EC2R 8EJ. Authorised and regulated by the Financial Conduct Authority (Firm Reference No. 1191780).

portfolio
institutional

Editor: Chris Panteli
Deputy editor: Sebastian Cheek
Contributing editor: David Rowley

Contact:
Sidra Sammi
Phone: +44 (0)20 7822 8522
E-mail: s.sammi@portfolio-verlag.com

Printer: Buxton Press
Pictures: Richie Hopson
Layout: Wani Creative

Publisher:
portfolio Verlag
Office 5.05 - 5th floor
Fleet House
8-12 New Bridge Street
London EC4V 6AL

ISSN: 2052-0409

This publication is a supplement of
portfolio institutional and sponsored by:

Allianz Global Investors

AVIVA INVESTORS

© Copyright portfolio Verlag. All rights reserved. No part of this publication may be reproduced in any form without prior permission of the publisher. Although the publishers have made every effort to ensure the accuracy of the information contained in this publication, neither portfolio Verlag nor any contributing author can accept any legal responsibility whatsoever for any consequences that may arise from errors or omissions contained in the publication.

Are you interested in participating in future roundtable discussions?

Investors and investment consultants are invited to share their opinion and can be offered a complimentary place in future roundtable events. Asset managers interested in joining the panel can secure one of the limited sponsorship packages.

Contact us to find out more:
Sidra Sammi
Phone: +44 (0) 20 7822 8522
E-mail: s.sammi@portfolio-verlag.com

Topics for roundtable discussions in 2017 include:

Managing volatility
Emerging markets
Fixed income
Smart beta
Liability driven investment
Fiduciary management
Absolute return
Global equities
Alternative investments

portfolio institutional