

pi PRIVATE MARKETS

roundtable



*Dan Aylott | Anish Butani | Martin Collins
Mark Humphreys | Christian Dobson | Roger Mattingly
Joanne Job | Tom Sumpster*

MAY 2022 | PORTFOLIO INSTITUTIONAL



CAMBRIDGE
ASSOCIATES



Dedicated to helping clients align investment portfolios with their ESG values

A partner to endowments,
foundations, private clients,
and pensions since 1973

A GLOBAL INVESTMENT FIRM

London | Munich | Boston | Arlington | Dallas | Menlo Park | New York |
San Francisco | Beijing | Singapore | Sydney
contactca@cambridgeassociates.com

cambridgeassociates.com/impact-investing





PRIVATE MARKETS

If I was writing this 300 years ago, buying stakes in private companies, direct lending and property would be mainstream investment classes. Yet today, they are known as alternatives.

Liquidity concerns and being difficult to access have made private market assets an alternative to the publicly-listed securities which now dominate institutional investment portfolios.

But with some considering valuations on the stock market a little high and with interest rates only rising gradually, investors are turning towards these once mainstream assets again.

Indeed, such assets under management globally swelled by \$2.4trn (£1.8trn) during 2021, according to McKinsey.

It is a growing market. But are investors only chasing private market assets for the return they could offer or is there more to it?

In the following pages we find out what investors are looking for and how they are navigating the challenges that come with investing in private markets.

Mark Dunne

Editor

m.dunne@portfolio-institutional.co.uk

CONTENTS

P4: Private markets in figures

Private markets explained in six numbers

P5: Participants

An introduction to the people taking part in our discussion

P6-23: The debate

Trustees, an insurer, asset managers and consultants sit down to discuss institutional investment in private markets

P24-25: Don't forget about growth

Cambridge Associates' *Ben Gunnee* discusses the role private equity plays in mature pension schemes

P26-27: Alternative income for DB

Mark Humphreys of Invesco outlines the case for adding alternative assets to your portfolio

P28-33: Feature: Infrastructure

What does the asset class bring to institutional portfolios?

PRIVATE MARKETS IN FIGURES

\$9.8trn

The private market assets under management globally in July 2021, up from \$7.4trn a year earlier
Source: McKinsey

20%

The rise in fundraising for private market assets last year to \$1.2trn
Source: McKinsey

27%

The internal rate of return generated by private market assets in 2021
Source: Delio

9.6x

The private equity multiples in the UK during 2021, up from 8.7 times in 2020
Source: KPMG

\$2.3bn

The dry powder held by private equity houses globally
Source: White & Case

\$2.7trn

The global private debt market is expected to more than double by 2026
Source: Preqin

PARTICIPANTS



Dan Aylott
European head of private equity research
Cambridge Associates

Dan Aylott leads Cambridge Associates' Europe, Middle East and Africa (EMEA) private equity and venture capital research team. He also advises pension funds, private wealth clients and foundations on managing global private investment portfolios. Aylott has more than two decades of private investment experience. This has included being responsible for private equity at Kedge Capital and managing the BP Pension Fund's global private equity assets. He has also been part of the investment team at PineBridge and Aviva Investors, where he was responsible for European private equity.



Anish Butani
Senior director, private markets
bfinance

Anish Butani leads bfinance's infrastructure coverage, where he has advised on more than \$8bn (£6bn) worth of allocations since 2017. Prior to joining the consultancy, he gained more than 10 years of experience as a corporate financier, advising on mergers and acquisitions, financings and valuing infrastructure assets primarily at KPMG. Butani has also worked at infrastructure developer John Laing, where he was responsible for leading the divestment processes of its project portfolio.



Martin Collins
Trustee director
20-20 Trustees

Martin Collins has worked in pensions for 30 years. He joined Lloyds Banking Group as a treasury director during the financial crisis, where he saved the bank more than £20bn by implementing a de-risked investment strategy and collateral-led funding plan. Collins also led the in-house pensions investment team and served on the investment sub-committee. He has also led a derivative structuring team at Santander, designing one of the first longevity hedging contracts.



Christian Dobson
Portfolio manager, alternatives
Border to Coast Pensions Partnership

Christian Dobson manages Border to Coast's private equity programme. He joined the pool in 2020 from the investment team of the £6.5bn Nationwide Pension Fund. Dobson has experience of a range of asset classes, including fixed income, equities, real estate and alternatives.



Mark Humphreys
Head of EMEA client solutions
Invesco Investment Solutions

Mark Humphreys is responsible for the development of Invesco's multi-asset offering for its clients in Europe, the Middle East and Africa (EMEA). This includes managing strategic asset allocations as well as developing advisory service lines and outcome-based products. He is a member of Invesco's investment committee. Having started his investment career at Aon, Humphreys became an investment consultant at Willis Towers Watson before joining Schroders as outsourced chief investment officer.



Joanne Job
Managing director, head of investment consulting
MJ Hudson

Joanne Job is responsible for strategy reviews, manager selection, investment research and portfolio analytics as well as investment and operational due diligence of private market funds. Prior to joining MJ Hudson, she spent five years in the alternative investments group at Moody's Investors and has also worked for GlobeOp Financial Services, ABN Amro Asia Securities and Cirne International.



Roger Mattingly
Trustee director
Ross Trustees

Roger Mattingly chairs several trustee boards and investment sub-committees. A former president of the Society of Pension Professionals, Mattingly has been a member of various industry groups, including the Pensions Regulator's Stakeholder Advisory Panel and chair of the Pensions & Lifetime Savings Association's Multi-Employer Defined Benefit Committee.



Tom Sumpster
Head of private markets
Phoenix Group

Tom Sumpster brought more than 20 years of structured finance experience to Phoenix when he joined in March last year. His previous role was head of infrastructure at Legal & General Investment Management where he worked across equity and debt. A chartered accountant by trade, Sumpster's previous roles include focusing on infrastructure debt, structuring and underwriting at Royal Bank of Canada. He has also held related positions at BayernLB, Dexia, Santander and PwC.



Private markets

Private markets are vast. From owning stakes in unlisted companies to lending businesses money directly to investing in property and funding roads, digital networks, data centres and wind farms, there is a lot to consider when adding alternatives to your portfolio.



We invited pension schemes, an insurer, asset managers and consultants to discuss how investors are approaching these markets and their attitudes towards the illiquidity associated with such assets. The results of our discussion can be read on the following pages.



What private market assets are in institutional portfolios?

Christian Dobson: We invest across the piece. We aim to build diversified infrastructure, private equity and private credit portfolios over three years.

Diversity of theme is key in those portfolios. Private equity, for example, is across buy-outs, special situations, growth and venture.

We are also keen on Asia, which we see as a growth market, while technology and healthcare are long-term megatrends where growth is available.

Border to Coast also has a climate opportunities sleeve, which invests across private credit, infrastructure and private equity. We see exciting opportunities around cleantech and hydrogen.

Tom Sumpster: We focus on Solvency II-eligible instruments,

which are largely investment-grade debt. We invest much of the billions we are responsible for into real assets where we can influence communities and people's lives in a positive way.

In the UK, that means supporting the levelling up agenda. So, affordable housing, waste-to-energy plants and electric vehicle charging are good examples.

It is more than just the economic return we can deliver in private markets, but also the social value we can attribute to those instruments.

We have other pools of capital. We are allocating mandates for private equity, real estate equity, infrastructure equity and venture capital. Again, we are thinking about local economies and where best we can support industry to thrive.

This is different to how insurers used to think, which was awarding mandates to be deployed across public equity and fixed



Private markets have demonstrated over decades that they can produce outsized returns.

Dan Aylott, Cambridge Associates

income markets to create balanced portfolios. We put greater emphasis now on how our investments can be impactful.

Martin Collins: The role of private markets has always been a return driver, but it also offers diversification because it allows access to markets you cannot get to through public markets.

What has changed for private markets in the past few years has been the increased focus on liquidity. Around 20 years ago you might have assumed that you could invest forever. The growth of buyout transactions and the like means you need to reconsider how much liquidity you have.

Roger Mattingly: The trend is increasingly towards defined contribution (DC). A number of my defined benefit (DB) schemes, through economic circumstances in the past 12 to 18 months, are now better funded compared to the historic deficits that were so prevalent.

Suddenly, lock-in periods of seven-plus years have become more challenging if you now believe you could buyout within five years. So, where we have illiquidity, we are asking if it is an acceptable asset for the buyout market.

As I say, the trend is towards defined contribution, especially the master trusts. I chair the Cushon Master Trust trustee board, which has an objective of “net zero now”. By definition, that needs illiquids and we are looking at a potential exposure of up to 15%, focusing on infrastructure, forestry and clean energy.

We are conscious of understanding what we are getting into. Fortunately, everyone on our board is a professional trustee. It is a challenge from an educational perspective to take lay trustees along that journey. Private markets are wide ranging and the devil is sometimes in the detail. You need your wits about you when entering into these contracts. Reading 200-page subscription documents is not for the faint hearted.

Mark, what opportunities are you seeing in private markets?

Mark Humphreys: Larger pension schemes, with their in-house resource, have been effective in exploiting the yields you can get above investment-grade credit. They do not have the restrictions Phoenix has as an insurer.

Smaller schemes looking at a 10-year exit strategy, need to take care with longer dated assets as they would need to sell them in future at an unknown price. Shorter-dated private credit assets, such as direct lending, infrastructure and real estate debt, have a place in smaller scheme portfolios and can be easily accessed.

The yield premium you can get over investment-grade credit can feed through into actuarial assumptions, which can take pressure off sponsors because there would be less reliance on employer contributions.

The yield gap is an opportunity for smaller schemes and has the added advantage that a lot of these instruments are floating rate or have frequent re-sets. So, if interest rates rise over time there is an element of protection against that and inflation.

Dan, what are you seeing in private equity?

Dan Aylott: Where we have been directing our clients' attention has not changed in the past few years. Even through the exceptional times we have lived through with Covid, Brexit and now the war in Ukraine. Despite all that uncertainty, our long-term views have held firm.

We have a preference for orienting our clients towards the smaller and lower-middle ends of the private equity market where we see better valuations. There has been a huge amount of money raised, a lot of which is being held by managers at the upper end of the market who are aggressive buyers of the businesses smaller managers invest in.

We have always been big supporters of emerging managers, which is harder to get right, but we are trying to find the next fund which will outperform. That has worked well for our clients.

A sector focus is something we have been proponents of for a decade. We collect operating metric data from our managers at the portfolio company level. That has been telling us for a long time that sector-focused managers tend to outperform their generalist counterparts.

That is not to say we do not support larger or generalist managers, but this is what we have been focusing on.

Could I challenge the concept of illiquidity? I work with schemes which are on their de-risking path where private equity and venture capital play an important role as the growth engine. Once you have a mature portfolio, it can be a strong cash-cow.

I work with schemes which are rationalising their portfolio but in a way that will continue to generate liquidity. Private markets – private equity and venture capital, in particular – can still play a role even as schemes are de-risking.

What returns are you seeing?

Aylott: The dispersion of returns is greatest at the early venture stage. If you get it right, those returns can be strong.

Our clients expect to earn mid- to upper-teen internal rates of return on a portfolio level. There is a blend of returns driving that, so you would expect a higher return from your venture portfolio than from your buyout managers, who are generally targeting a two-times return on a fund level.

Joanne Job: Private markets are broad: infrastructure, for example, is not just one asset class. You have core and core-plus strategies, which are fairly conservative with lower returns. Then you have high octane strategies. So, it depends on what level of risk you are comfortable taking.

Anish Butani: There has been a surge of activity in private markets amongst our clients. There are those starting out and those coming back for their third or fourth helping of the asset class. More work is required to help them understand where the gaps are in their portfolio and to fine-tune the mandate.

Some investors are looking to integrate climate sensitivity or ESG within infrastructure, private equity, private debt and real estate. Then there are those creating a dedicated sleeve for it.

We are all on a journey as far as ESG is concerned. It is clear that one size does not fit all. Different investors have different beliefs. Being “ESG sensitive” and “impact oriented” are different concepts though these terms can be used interchangeably. We spend a lot of time understanding investors’ beliefs before the implementation process begins.

Being carbon sensitive underpins the E in ESG. What about the S and the G? There is a realisation that private market

assets have an important role to play in societies, so what broader footprint beyond carbon should these assets have in terms of local engagement with key stakeholders?

Picking up on the illiquidity issue, how big a problem is it?

Dobson: Private markets are as liquid as they have ever been.

Once you have a mature and diversified portfolio, distributions will come off the backend to fund your drawdowns.

Looking at it on a fund basis, whatever you make of general partners using subscription lines it gives the capital call process more visibility. You know when they are coming up.

On the flipside, pricing in the secondary market for blue chips is tight. You can liquidate mature private market portfolios fairly easily.

So, it is not as illiquid as people might think and you are still being rewarded for that illiquidity in the returns you are generating above public market assets. You are also accessing assets you cannot access through the public markets.

Butani: Canadian and Australian schemes are fairly mature investors in alternative asset classes. Some are 40% to 50%

The perception with defined contribution schemes is that you need daily liquidity. You don't.

Roger Mattingly, Ross Trustees



exposed. It is interesting that many of the Australian plans are defined contribution and are opening offices in London to invest in private markets.

The point about illiquidity and private markets is interesting. Some investors who moved into the asset class are not just maintaining their allocations, their exposure is growing larger and larger.

Sumpster: The Australian and Canadian models are interesting because they run two distinct origination strategies. One is direct investing, which gives them more control over their investments.

The other is to use best-in-class asset managers to not only produce attractive returns, but to invest in sectors and geographies that complement in house origination capability.

And there is such a diverse choice of managers, from sector specialists to generalists. There is a whole sub-set of asset classes out there, with different liquidity profiles needing different approaches and expertise.

Job: The comments on liquidity are important. People want liquidity, but they may not necessarily need it.

Sometimes you are given liquidity but do not know what to do with it. So, getting to the bottom of why you need or want liquidity is important.

Collins: I had to wind up a plan a few years ago and we could not sell some assets for 10 months. That is an extreme case, but as a trustee you need to know what illiquidity means for the asset you are going into.

Sometimes it is not a genuine issue, sometimes you cannot sell the asset for love nor money and sometimes you have to apply a discount. If the return potential is high, taking a 5% hit and a few months to get out is fine because it will outperform. The challenge for trustees is a faster journey to buyout than expected. That should not be a reason to never invest in anything slightly illiquid, but it has become harder for a trustee to decide what their tolerance for illiquidity is and how to judge that when constructing a portfolio.

Humphreys: It is about having the endgame clearly mapped out. There is a big difference between the large funds, which have multi-decade horizons, and smaller schemes who want to get out as soon as they can but the funding is not there.





Collins: We are seeing billion pound buy-ins that come with one year's notice. In the past, we planned 10 years ahead. Now, we are getting surprises from improved funding levels, which is making the job harder.

That does not rule out illiquid assets. As a trustee you have to understand what illiquidity means, whether you have to exit at a discount or can exit at all. It is not a barrier to investment, but you have to think about it.

Mattingly: From a fiduciary point of view, we have to consider the financial materiality of all this. We have to make sure it is in the members' best interests to enter into illiquids.

The future of private markets, especially in defined contribution, is a platform approach that can create greater liquidity.

The opacity of some illiquids creates suspicion and unnerves trustee boards. So, there is an onus on private market providers to meet us halfway in making themselves more compatible with institutional investors. This means looking at how their charges are structured and being more transparent.

We now have the Task Force on Climate-Related Financial Disclosures, but prising data out of private markets is challenging, although, perversely, there is greater influence to make a difference here. There is a close association between the owners of

those assets and what they can do with them. They are not one step removed.

In terms of liquidity, the perception with defined contribution schemes is that you need daily liquidity. You don't.

Provided that you have a blend of liquid and illiquid assets, of which you cannot go much beyond 15%, your cashflows and liquid assets could provide liquidity for most schemes.

It is important to look at this in context. There is a desire in government to consolidate to create greater mass to invest in private markets. This goes back decades, but it has taken ESG to accelerate it.

I chaired a DC conference last summer and we predicted that in 10 years' time master trusts would manage on average between £25bn and £100bn of assets. If they invest 10% of those assets in private markets, that is a huge wall of money entering the asset class in the next decade.

Dobson: The manager selection decision changes depending on where you are in your scheme's life. If you are approaching a position where you may need liquidity in your private markets portfolio, that may encourage you to go to the larger funds where there is a better secondary market.

I share the view on smaller and lower mid-market managers. There are more value creation and growth levers there, but a

Diversify through private markets

From senior loans and private credit to real estate and infrastructure, Invesco's alternatives platform offers easy access to diversified private market strategies.

Discover alternative opportunities with Invesco >

Capital at risk.





There are a lot of private market assets where you do not know what they are worth until you sell them.

Martin Collins, 20-20 Trustees

secondaries fund will often give a greater discount on emerging managers than a blue chip manager. That may be a factor in your decision, depending on which stage your scheme is at.

Sumpster: If you look at the market makers which have emerged in the past five years, the secondary market fund of fund strategies have been proven to making substantially higher returns than many primary funds. That suggests the liquidity shortfall is being solved and with more secondary market managers arriving, so greater liquidity will be available in private markets. So, we can talk about liquid assets and less liquid assets rather than pure illiquid, which feels like they are buy and hold with no exit opportunity. In reality, within weeks or months you can sell out of performing positions in an active private market.

Collins: There is a related issue for defined contribution markets, which is the lack of daily pricing. There are a lot of private market assets where you do not know what they are worth until you sell them. So, the challenge with defined contribution is, are you pricing them fairly when members allocate their funds?

Mattingly: There is also the charge cap, which is a challenge to squeeze illiquids into.

Collins: ESG is interesting. The most exciting impact investments in the E and the S spaces are made in private markets. With the G you have to be careful. There are more expenses and risks than you have in the public markets.

It is worth the hassle because the returns are there along with different opportunities. That is why trustees like private markets, but there are additional risks.

Is it easy to build an ESG portfolio in private markets?

Mattingly: No. The Cushon Master Trust is still constructing that 15% attribution to private markets.

On the equity side, which is ESG orientated, we are invested through an index. There is no annual management charge, so the manager gets a cut from the alpha positions they take. That is the only way we can keep the 15% within the charge cap.

A lot of due diligence goes into this. Once you have done yours, the platform provider will do theirs. So, there are layers of due diligence.

Coming back to the liabilities. They are reasonably controlled within the DC environment. Within DB, if it is not through a fiduciary manager, you can find that your potential liability

exposure is, in some cases, open ended. An investment of £10m could have a liability of £1bn if you are not careful.

You have to negotiate and get the side letters in place to mitigate your exposure. With some trustee boards there is an element of ignorance is bliss in that they do not realise what they have entered into.

Humphreys: ESG is a journey in private markets. Different asset classes are at different stages and the data is better in some assets than others.

The idea that it is all sweetness and light in public markets is nonsense. There are labelling issues. Then if you include nuclear in Germany they show you the door. If you don't include it in France, they show you the door.

We should not be frightened of grappling with ESG in private markets because we think it is okay in public markets.

Aylott: It is easier to build an ESG portfolio today than it has ever been because of the opportunity set. There is a lot of innovation, a lot of impact being created in the early stages.

Managers are focused on ESG and are more aware of what their limited partners expect, what their portfolios are doing and what their employees expect. There is definitely a shift towards being better stewards of capital from an ESG perspective.

ESG means different things to different people: from not wanting to do any harm to making a positive impact. The key is defining what it means for you and what you are looking to get out of your portfolio.

We work with clients on impact portfolios and those with mature portfolios who want better ESG credentials. Getting managers to look at their portfolios through an ESG lens, to re-engineer what they have invested in before is the tricky part. Whereas, if you are starting from scratch today, there is a wealth of opportunities to consider.

Job: We all agree that ESG certainly is a journey. Nonetheless, while private market strategies are all different, they lend themselves well to having ESG considerations built into the investment process. As such, when you are doing a manager selection exercise or a due diligence review, it is important to ascertain, for instance, the role ESG plays in the investment process. That is, whether it is simply a tick box exercise or if it is more important, such as having a veto on investments.

Sumpster: With the billions larger insurers have available we can be impactful in our direct investments and ensure transparency in every investment decision our managers make. Our investment process includes ESG as a key consideration. Phoenix is more than doubling the number of people looking

While the outlook is strong there may be a few bumps in the road.

Anish Butani, bfinance





at sustainable investments. This is a team that make up around 10% of the overall asset management team, alongside other ESG focussed individuals operating elsewhere within the Phoenix Group.

If we are going to make the right investments, then ESG is a major driving factor. We need to think about the significant macro and social situations that are happening and how we are investing into them, such as the aging population.

We are in the midst of a technological revolution with digital infrastructure, fibre networks, data warehouses along with a material change in the way people move around, powered by

themselves, electricity and hydrogen – the changing energy mix we are witnessing.

Capex needs in economies can come in multi, multi billions and large institutions can make businesses behave differently through the size of our investments, voting and exclusions. We are not going to make investments in coal, but we are going to be impactful in this area by investing in renewables.

We are giving careful consideration on how to transition our existing portfolios appropriately to support the returns we said we would deliver while exiting socially bad investments for good investments.



Butani: We work with investors who are grappling with making an impact and making a return.

The returns from operating offshore wind and solar assets in the UK have decreased from where they were previously. This has led to more innovation amongst managers to invest in newer areas of the market to maintain a double-digit return. Hydrogen and electric vehicle charging are areas where investors can make an impact.

Then there is the “levelling up” agenda, which is a laudable objective that involves capital expenditure to build new infrastructure. The return may not come on day one. It takes a while

to emerge. Sometimes investors grapple between making an impact and meeting their liquidity requirements.

There is a diverse opportunity set out there and there are enough operating and construction assets in the primary and secondary markets for everyone to make the impact they want, in some shape or form.

Dobson: Managers are starting to have a better understanding of ESG and are willing to implement the necessary changes into their processes. We have a climate opportunities portfolio, but ESG is a facet of our core programmes across the piece. We review that for every fund we look at. The quality is getting better.

We will work with managers whose policies, processes and reporting are not at the right standard, so during the due diligence process we put actions in place to drive them to the level we expect. If managers do not have the ambition to get there, we will not work with them.

On the private equity side, it is getting better. There are some strong managers in Europe from an ESG perspective in terms of their processes and reporting. The US is further behind. Asia is a little behind Europe, but we have met managers who are keen to drive this forward. So, it is getting better across the board.

How do you select the right private markets manager?

Dobson: It depends on what you are looking for. You have to be clear on what you want from a manager, whether you are keen to focus on a sector, asset class or region.

For us, once we have identified what we are looking to select a manager for, it is down to the key aspects on a quantitative and qualitative basis.

Performance is one but factoring in what they have done in the past may not show what they can achieve in a different market going forward.

Their investment strategy and ESG process are also important. We also run a peer group analysis against other managers in that space comparing how they operate.

Butani: Opacity shrouds the manager selection process in alternative assets. In public markets, you could say that you are dealing with perfect information, but in private markets you are dealing with imperfect information.

For instance, in the past year, more of our clients have been interested in inflation sensitivity. Inflation has different impacts on different private market assets, though investors may not be made fully aware of the inflation sensitivity of the strategy they are investing in.

The other challenge is that managers are evolving their strategies. Once they bought operating assets, now they are going into construction and development. So, how do you test their ability to do different things in different areas?

Often, we miss the people element. That is key in this industry. How aligned is the team? What is the culture in these firms? How do they work together?

Collins: In private market investments you sometimes give up a lot of control. You are trusting people with your money for five to 10 years and you get back what you get back.



Private markets are as liquid as they have ever been.

Christian Dobson, Border to Coast Pensions Partnership





It is more than just the economic return we can deliver in private markets, but also the social value we can attribute to those instruments.

Tom Sumpster, Phoenix Group



One of the most fundamental checks you do is to ensure you have aligned interests with the manager. That is your best protection.

Job: One of the key aspects of investing is doing your due diligence. You need to know how the manager is positioned to deliver what they say they will, what the opportunity set is and understand the key investment and operational risks.

Sumpster: As we represent patient capital, we have to be patient with how we choose our managers. Building relationships is key. Spending time with the individuals who will look after your money is just as important as putting money to work in the first place. You must get it right.

Whilst reading and reviewing a subscription agreement you are hoping never to need to return to it again. If the investment is underperforming, the people relationship comes to the fore. Governance, reporting and how transparent an investment manager is with their investors is important to us.

We have seen an uptick in reporting quality which in being far more transparent breeds a healthier relationship. It gives an investment manager better opportunities to demonstrate their skills and attract your capital for a second and third time.

Mattingly: The prize for these managers who get it right, considering the expected growth in private market exposure over the next five to 10 years, is huge. Those who stick to their traditional ways will lose out.

Going back to ESG and the conundrum between exclusion and engagement, paradoxically it is easier to engage in the private markets than it is through their liquid counterparts.

The other point I would emphasise is the more you become aware of the opportunities and risks, the more you realise it is incredibly complex. For example, wind farms are good from an ESG point of view, but the blades have historically been made from wood which has led to forests in Columbia being decimated. And the Democratic Republic of the Congo is virtually the only country in the world which has a cobalt source.

The context of all this is riveting, but incredibly complex. You may think you are doing a fantastic job from a societal point of view, but in the short to medium term there are repercussions for forests in Columbia.

Humphreys: For smaller entities that access is difficult. The good tend to stay good in private markets and they will charge for it. So, if you are big and have the resources to do some of it



yourself, whether it's direct or finding a new manager, you can capture that extra value.

If you are small, you do not have that expertise and have to rely on consultants and advisers. There is also the benefit of diversification, so you have a trade-off for the higher costs. When you net these costs off it is still worth it, but it is a hurdle for many smaller pension schemes to clear.

Collins: Diversification is harder to achieve than in the public space where there are index funds. Often the only practical way for small pension funds to access private markets is via fiduciary managers.

It is worth the effort, but there is danger of concentration risk for small schemes if they only appoint one or two managers.

There is a drive to get private capital in infrastructure. Is that happening?

Aylott: There is an increased appetite for infrastructure from our clients and capital is flowing into that space.

Sumpster: The Australians and Canadians came in swathes to European infrastructure in the late noughties. Since then, many more international infrastructure investors have entered the market.

The private market for infrastructure is thriving. We are seeing a lot of assets changing hands and attractive returns and investments being made on both sides. We still struggle with the old public-private partnership model here in the UK but are enthused on the next style of public/private programme.

We have had positive discussions with government representatives, focussed on the UK's levelling up agenda [internationally Build Back Better] and Solvency II, providing the flexibility to crowd us into infrastructure and to make investors excited about the environment ahead.



The idea that it is all sweetness and light in public markets is nonsense.

Mark Humphreys, Invesco Investment Solutions

We believe greater flexibility should be employed in contracts, that consider a city's vision and how people want to live, work and play during the next 10 to 15 years. It is investing into real assets where different cashflow streams can attract different investors at different times. Electric vehicles, hydrogen buses, homes with smart technology and waste-to-energy plants to name but a few, there are lots of ways to invest across that city vision and make a positive change to local communities. The moment is now where the public sector is opening up new private market opportunities to institutional investors.

Ayllott: We are seeing infrastructure managers raising additional pools of capital that look more like private equity than infrastructure funds. The lines are getting blurred.

Butani: The market is crying out for more investment. Most governments are in large deficits after Covid and infrastructure is high on their agenda.

On the other hand, pension funds are looking for predictable cashflows and stable yields. The challenge is trying to align the two by allowing institutional investors to get a fair return on a low volatility basis, whilst allowing the government to encourage more private sector investment.

From digitalisation to the energy transition where infrastructure is central to a number of megatrends that are set to dominate over the coming years. But a lot of the money raised in recent years has targeted existing assets, not building new infrastructure.

The PFI [private finance initiative] model worked well but there was an issue with perception of the private sector making an outsized return from taking minimal risk. Finding a balance between private and public sector objectives will therefore be key in unlocking new capital. Expect the private sector to play a greater role in taking ownership of outcomes as part of their overall incentivisation.

Mattingly: There will also be a trend towards national infrastructure spend. Historically, a lot of the investment in UK infrastructure has been by overseas investors. High Speed 1, for example, is owned by the Ontario Teachers' Pension Fund. Whereas infrastructure exposure by investors in the UK is often overseas.

With what is happening in Ukraine, national energy security will dominate infrastructure in the coming years along with sustainable energy.

What other impacts will the war in Ukraine have on the private markets?

Dobson: We look at it three ways: direct impacts, indirect impacts and limited partners.

Direct impacts seem to be muted as most private market managers are not exposed. The indirect impact is much more uncertain, as it has added to inflationary concerns and all companies are impacted by increasing energy prices.

On the final point, we have asked our funds if they have any Russian limited partners in their investor base. Given the sanctions there is a potential they may not be able to fund capital calls, so does that leave a hole in the fund. The general answer is no because there are not many Russian limited partners in European and US funds. These are the smaller risks that you may not think about, but, as private market investors, we need to.

Humphreys: This is all against a macro environment which has fundamentally changed. Dealing with structurally higher inflation comes back to floating rate re-setting in the fixed income space and private equity investments with a degree of inflation pass through. The future will not look like the past. That applies to all asset classes.

Ayllott: In the short term we might see lower deal activity as people work through what the uncertainty means. We have heard

from managers that some of the larger transactions in their pipeline have stalled in terms of their execution. Uncertainty tends to make people pause and take stock.

But I agree with Christian that the direct impact on portfolios today is minimal. It is the second-order impacts that will take time to filter through and hit portfolios.

Sumpster: The war in Ukraine has accelerated peoples' focus on having secure sources of energy to rely on. In the UK, nuclear will come more onto the agenda in the near future and there will be further investment in renewables. Certainly, across Europe we will see the renewables agenda accelerate.

Inflationary pressures and the cost of living could potentially lead to recessionary concerns. Constantly reviewing portfolios will be required. Investing in index-linked debt in utilities may give rise to some inflation protection. Equally, review your exposure to sectors which are more susceptible to a recession.

Butani: Any decision around inflation needs to include interest rates. You could argue that monetary policy has been too loose for too long.

There are two ways you can look at this. Are policymakers going to continue holding their nerve or do they need to start putting rates up because inflation is too high? In most developed economies we are already on an upward trajectory. What does that mean for mortgages and discretionary spend? Will there be a knock-on effect?

There is an added layer of nuance and uncertainty which may make investors watch and wait when it comes to executing deals.

What are the supply and demand metrics like in private debt?

Humphreys: We publish a dashboard twice a year. We have talked about liquidity and it being easier in public markets, but we would say that it is comparable to where it has been in the recent past in the margins you are getting over the public equivalents.

We do not see overheating in private credit. In private equity you have to be more discerning, but the margins in private debt, relative to the forward-looking terms of developed market sovereign bonds and investment-grade credit, are fairly robust.

What is your outlook for the private markets?

Mattingly: There will be exponential growth. The hurdles to overcome from a trustee governance perspective are understanding – especially where you have non-professional trustees – fees and charge cap tensions.

The contexts of this are government policy, the desire for consolidation, the desire to diversify and the desire to get more involved in ESG underlying assets, which all create potential exponential growth over the next three to five years.

Aylott: Private markets have demonstrated over decades that they can produce outsized returns. That has been through

periods of multiple corrections and dislocations in the market, so this is not any different.

The market is continuing to grow and expand. The types of strategies investors can access is growing. I do not see that changing. In fact, times of dislocation often create opportunities. Technology will increasingly play a role. It is more horizontal than vertical in terms of it touching every sector. It will continue to be part of the solution, so I see it growing and the opportunity set being there. Returns have demonstrated over time to be strong if done correctly, which is key.

Sumpster: There are exciting times ahead. Private markets will continue to grow and the investment opportunities will diversify further.

Attractive returns continue to be seen. But what we are gaining as the asset class emerges is greater transparency. The better your understanding of your investments, the more you can relate your brand to certain investment strategies.

People want liquidity, but they may not necessarily need it.

Joanne Job, MJ Hudson



In public markets, whilst you get the benefits of liquidity, in many circumstances there is greater information available to investors in private markets. It will continue to be a growing asset class across equity and debt where we can help make investments that change people's lives and communities for the better.

Job: Also, as investors get more familiar with the asset class it will lose some of its mystique. While I do not see it becoming mainstream in the immediate future, it should continue to grow in institutional investors' portfolios given, for example, its diversification benefits.

Mattingly: The end user of our efforts, the member, wants ESG-orientated investments. They do not want that at the expense of returns, so we have a financial materiality duty.

There is another context in terms of pressure, not just from the government or the physical risks of climate change but members like the idea of their assets doing good.

Butani: While the outlook is strong there may be a few bumps in the road. It has been an exceptional decade, with low interest rates and inflation, economic growth and a healthy stock market, which has created capacity for greater allocations towards private markets. There have been incredibly loose monetary policy conditions as well. In the near term, there may be some turbulence but the overall outlook should be strong. The quality of data metrics continues to improve, which will help investors understand the role of private markets better and arguably make them stronger.

Thirdly, if we had this conversation in three or four years' time, will private wealth have a greater role in allocating capital to private markets? If you look at the trillions held in private wealth portfolios, just 1% of that would increase the size of the private markets by almost 10%.

We are starting to see signs of the private markets industry democratising access to private wealth investors. Expect them to have a more visible presence at the table.





Ben Gunnee is head of UK & European business development at Cambridge Associates

DON'T FORGET ABOUT GROWTH: PRIVATE EQUITY STILL HAS A ROLE TO PLAY FOR MATURE PENSION SCHEMES

In general, British defined benefit pension schemes have experienced significant funding level gains, driven by sponsor contributions, liability management exercises and strong equity market returns, especially since the onset of the Covid pandemic. Quite rightly, trustees and sponsors are focused on protecting these gains while they progress to their long-term objectives. This type of action has been more prevalent during the past five years with schemes de-risking away from growth assets and into matching assets as certain funding level targets are achieved.

However, while the focus is on de-risking, the question of how to continue generating meaningful growth has often been overlooked or completely ignored. With many schemes still relying on investment returns to make up the funding level gap, it is important that the growth assets are not neglected and we would argue they need more attention to maximise their contribution to the scheme. This is increasingly important given the increased volatility in global equity markets, relatively high valuations in many market segments and the late stages of the economic and credit cycles. It is akin to driving a car on a motorway at 70mph; if the engine size is small (less growth assets), then that engine will need to work harder to maintain the speed than a corresponding large engine.

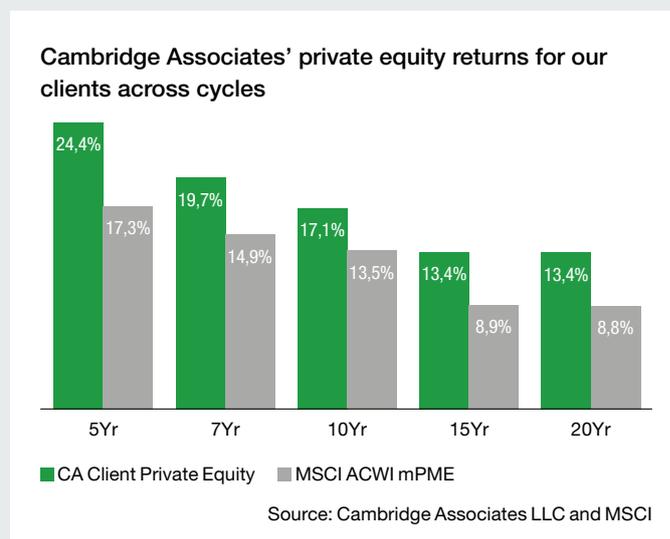
Clearly underfunded schemes require higher asset returns, but generating excess returns relative to liabilities is important even for better-funded schemes. Investment returns protect against unexpected increases to liabilities due to demographic changes, offset future administrative expenses, and help improve funding levels further towards the trustees' secondary funding objectives (either buyout or self-sufficiency).

Unfortunately, securing excess returns will likely be more challenging in the years ahead. Current valuations, particularly in public equities, suggest future returns for traditional growth portfolios may be lower than historical averages. This means that active public equities – the mainstay of pensions' growth portfolios – must work harder to achieve the necessary growth required to outperform the liabilities. So how, and with what risks, can schemes achieve excess returns?

The case for private equity

Increasing the allocation to private equity within the growth portfolio may enable trustees to achieve higher returns than those possible through traditional asset classes and provide the extra returns needed to push the assets towards the funding level target. Many a trustee meeting has been spent agonising over the appointment, or termination, of a global equity manager who is looking to target c100 basis point of outperformance vs the index.

However, little time at meetings has been spent looking at an asset class that has consistently exceeded public equity by several hundred basis points; the graph below illustrates the average private equity returns relative to public markets for Cambridge Associates clients. As can be seen over five and seven years, returns have been greater than 500 basis points.



It is not all about the returns

By including private equity trustees can significantly expand their investment opportunity set, level of diversification and also offer some protection against public market volatility, which helps with the smoothing of the funding level. For example, the CA Global Private Equity/Venture Capital Index realised significantly less volatility and drawdown compared to

public equities during the 2000–03 technology bust and the 2007–09 global financial crisis, outperforming by 4.8% and 18.4%, respectively, as calculated on a Cambridge Associates mPME basis.

Getting caught up in illiquidity

Investing in private vehicles requires patience. Based on Cambridge Associates' research, the typical private equity fund takes six to seven years on average to produce meaningful performance results. To realise long-term success, therefore, trustees must be able to stay the course over a long enough period to achieve mature performance. These timeframes are often seen as a major hurdle for trustees committing to private investments. While mature schemes in imminent reach of buyout may need a high level of liquidity, many UK trustees overestimate the amount of liquidity they need. In fact, less mature schemes with a longer time horizon, or schemes looking to target a low-risk, self-sufficient approach can benefit from private equity without having to crystallise the program in the foreseeable future.

Current and future liquidity needs, informed by the cashflow profile and the ultimate endgame for the scheme, should help determine the sizing of and types of strategies within the private investments portfolio. Yet trustees often shy away from private investments and sacrifice its return potential by overestimating their liquidity needs or assuming all private investments are similarly illiquid.

The cashflow profile of private equity can also vary by strategy and vintage year, in part due to the ebb and flow of merger and acquisition activity and capital markets movements, with venture and buyout funds generally having less predictable cashflows than say private credit. While exact cashflow planning for a private equity portfolio is not possible, appropriate commitment pacing as well as disciplined portfolio monitoring, can help trustees build a suitably cash-generative private investments portfolio.

Doesn't risk-transfer get in the way?

One of the biggest objections to private equity investing is the assumption that once invested a scheme cannot exit until the program has been completed. Of course, this scenario would be highly problematic for a scheme that had the opportunity to take advantage of a risk-transfer opportunity part way through the investment horizon. However, we have seen an increasing number of pension schemes use the secondary market as a successful way of exiting their program early while still harvesting material gains. While many UK pension schemes might be de-risking, there are plenty of other investor types who are looking to increase exposure to private equity and want to incorporate secondaries into their overall portfolio strategy. In addition, technology is increasing the connectivity between buyers and sellers which continues to further simplify the disposal process.

Conclusion

Overall, we believe trustees and sponsors should pay extra attention to the growth lever as and when they de-risk, as growth assets remains a vital component of the overall success of the pension scheme. High valuations, lower expected returns and equity market volatility also suggest that schemes stand to benefit from re-evaluating their growth assets and private equity offers potential greater reward with lower volatility than traditional public markets.



The performance information provided is derived from CA's performance monitoring data. In keeping with SEC guidelines, it is important to evaluate this information with the following facts in mind: 1. The performance includes investments formed during the client's effective service dates. 2. Because of the private nature of the investments included in this analysis, CA is unable to track and include portfolios for all clients that have terminated their services with CA. 3. For non-discretionary portfolio management and advisory clients included in this exhibit, the performance may be attributable to factors other than CA's advice because these clients may or may not follow this advice. As a result, the experience of a client that follows CA's advice may differ materially from the performance presented. 4. Past performance does not guarantee future returns. 5. Unless otherwise indicated, all foreign transactions are converted to US dollars. Investors' cashflows are converted based on the average daily exchange rate during the quarter in which they occurred. Market values are converted based on the closing rate of the currency on the last day of the quarter. 6. The performance data is net of investment managers' fees but has not been adjusted to reflect CA's management fees and other expenses that a client may incur. A client's return will be reduced by the amount of such fees and expenses which are described in Part II of CA's Form ADV. The following example demonstrates the effect, using a model fee, of compounded management fees over a period of years on the value of a client's portfolio: 1. A hypothetical portfolio with a beginning value of \$100 million, experiencing an annual return of 10.00% per annum, would grow to \$672.75 million after 20 years, assuming no fees were paid. Accounting for an annual fee payable in advance to CA of 30 bps (0.30%), the same portfolio earning an annual return of 10.00% would only grow to \$633.51 million after 20 years. The annualized returns over the 20-year time period are 10.00% (gross of CA's fees) and 9.67% (net of CA's fees). Actual fees could be higher or lower depending on services provided.



Mark Humphreys is head of EMEA client solutions at Invesco Investment Solutions

ALTERNATIVE INCOME FOR DEFINED BENEFIT PENSIONS – JUST WHAT YOU WERE LOOKING FOR?

While there is generally clarity on a scheme’s long-term objective, there are many ways to get there. Often the journey is assumed to be a steady path, which for closed schemes is typically towards an agreed “low risk” asset allocation of gilts and credit, albeit this may still be many years in the future.

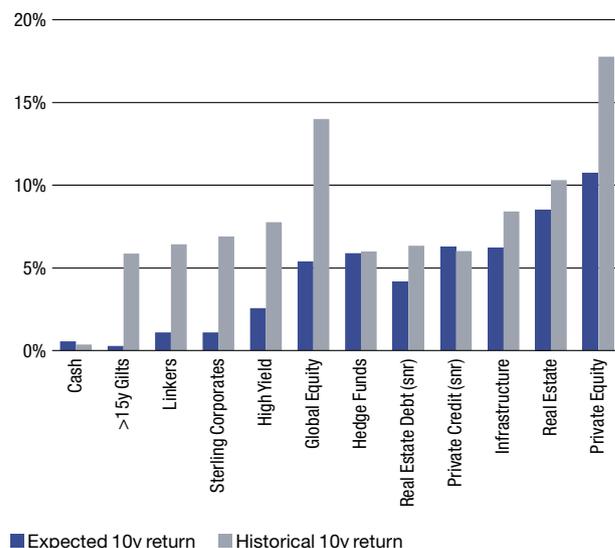
However, a journey is more than the destination: there is a risk that growth assets are held for longer than necessary for returns that may never arrive.

Equities can present an uncomfortable risk of capital loss and uncertain income yields, particularly for schemes which are maturing: demand has pushed valuation multiples to high levels and disruptions from supply chains, tariffs and inflation, particularly for UK investors, look to be far from transient. We find equities are sometimes retained for historical reasons, and only sold when the funding level reaches certain levels.

Meanwhile, investment-grade credit and gilt yields remain low despite the recent rise in interest rates: when funding levels rise, there is a limit to how much of the ultimate ‘low risk’ portfolio can be purchased, as every pound switched reduces expected return and hence increases the value of liabilities (on the technical provisions basis).

Based on our Capital Market Assumptions we expect lower returns from public markets in the next 10 years compared to the past 10 years, as government and central bank injections have pushed easy-to-access equity and bond prices to elevated levels. Defined benefit schemes are now on the hunt for new investment opportunities that provide reliable asset growth as well as high and predictable income.

10 year expected returns vs historical 10 year returns



Source: Invesco; Capital Market Assumptions as of 12/31/2021, Historical returns to 12/31/2021, Private Credit returns refer to direct (unleveraged) returns. Past performance does not predict future returns. There can be no assurance that any estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented. Data is unhedged GBP. An investment cannot be made into an index. Capital market assumptions are forward looking, are not guarantees, and they involve risks, uncertainties, and assumptions. Refer to the important information for additional CMA information. For illustrative purposes only Forecasts are not reliable indicators of future performance.

What is alternative income?

Alternative income refers to any income from non-traditional sources and falls broadly into four categories, (pictured below). The asset class has grown exponentially since the global financial crisis as banks have faced stricter regulation and higher cost of capital to lend customer deposits.



Source: Invesco. For illustrative purposes only.

From theory to practice

While there are many potential benefits of including alternative income within portfolios, the road to implementing private

market investments can be difficult. It can take a significant amount of internal resource to assess private markets and source compelling risk-adjusted opportunities. These resources are particularly important during the manager selection process as identifying top performing managers is essential.

Additionally, minimum AUM and fee requirements can be too high for some schemes to overcome. Recognising this challenge, we developed our Alternative Solutions Platform to provide streamlined access to Invesco's specialist in-house alternative capabilities together with high quality investments from leading partner firms. Using this multi-manager platform, pension schemes can benefit from economies of scale and expertise from senior loans and real estate to private credit and infrastructure, with lower minimum investment requirements. Furthermore, we can help reduce the administrative burden in terms of monitoring, oversight and reporting.

Conclusion: not so alternative

The combination of the need to de-risk, the need for high income and the rapid growth of the asset class post the 2008 global financial crisis, means that alternative income is no longer so alternative.

Through our analysis and research, we believe alternative income strategies can be highly complementary for many pensions schemes at this stage of their funding journey. For all schemes, regardless of size, gaining access to high-quality alternative income investments – whilst reducing the governance burden often associated with private markets – will be key to realising its potential.



Investment risks

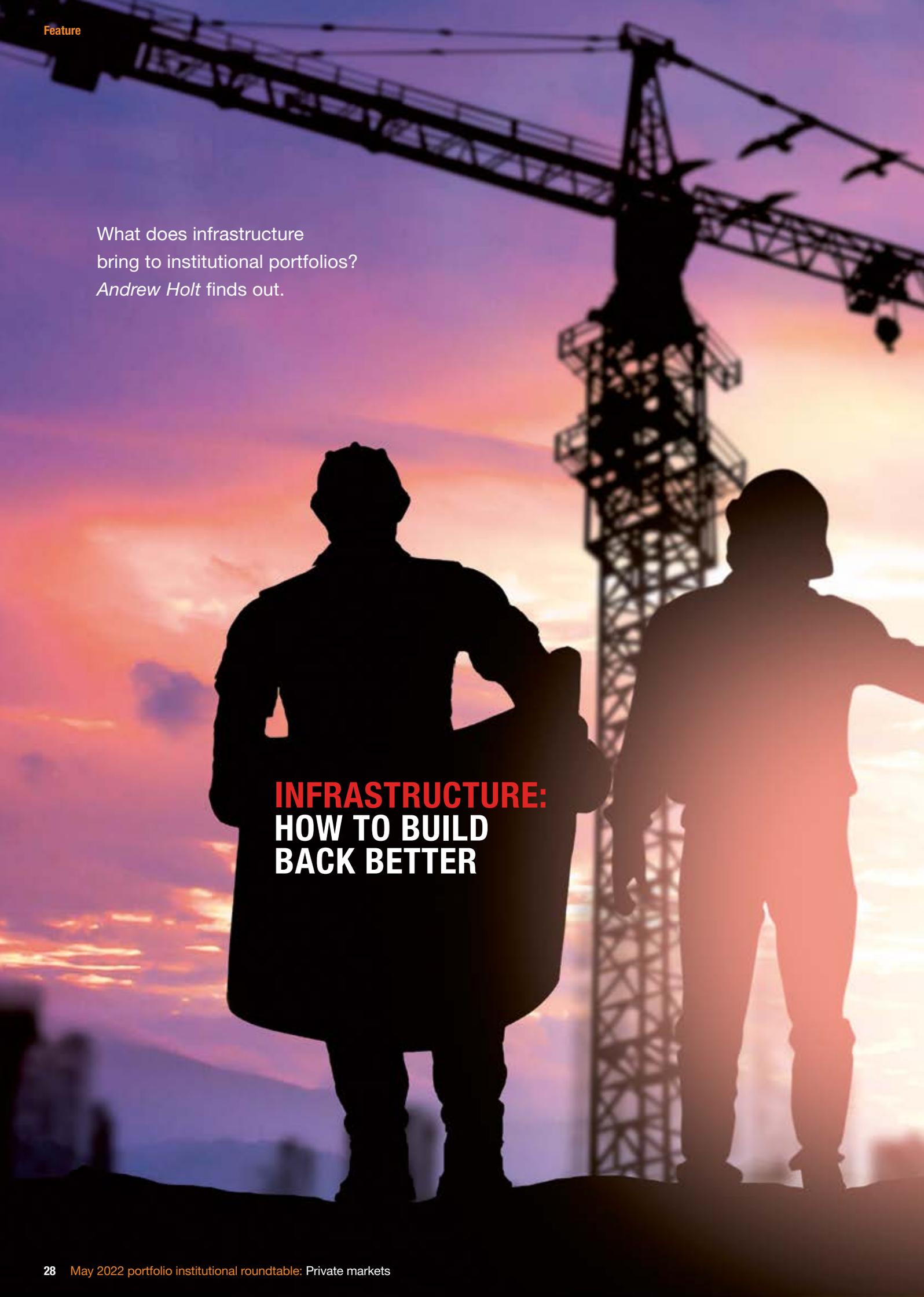
The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Important information

This marketing material is for Professional Clients only in the UK; It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. Please do not redistribute.

Invesco Investment Solutions develops CMAs that provide long-term estimates for the behaviour of major asset classes globally. The team is dedicated to designing outcome-oriented, multi-asset portfolios that meet the specific goals of investors. The assumptions, which are based on 5- and 10-year investment time horizons, are intended to guide these strategic asset class allocations. For each selected asset class, we develop assumptions for estimated return, estimated standard deviation of return (volatility), and estimated correlation with other asset classes. This information is not intended as a recommendation to invest in a specific asset class or strategy, or as a promise of future performance. Estimated returns are subject to uncertainty and error, and can be conditional on economic scenarios. In the event a particular scenario comes to pass, actual returns could be significantly higher or lower than these estimates. Proxies used: >15y Gilts= Bloomberg Sterling Aggregate Gilts, Linkers= BofA Merrill Lynch UK Inflation-Linked Gilt, Sterling Corporate= Bloomberg Sterling Aggregate Non-Gilts - Corporate, High Yield= Bloomberg Barclays Global High Yield, Global Equity= MSCI World, Hedge Funds= HFRI HF, Real Estate Debt= Preqin Real Estate Debt, Private Credit= Burgiss Senior Private Debt, Infrastructure= Preqin Infrastructure, Real Estate= Preqin Real Estate, Private Equity= Burgiss Buyout. This material contains statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return or future performance targets. These forward-looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Invesco assumes no duty to update any forward-looking statement. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented. Unless otherwise stated, all information and data is sourced from Invesco as of Dec. 31 2021, in GBP. This is marketing material and not intended as a recommendation to buy or sell any particular asset class, security or strategy. Regulatory requirements that require impartiality of investment/investment strategy recommendations are therefore not applicable nor are any prohibitions to trade before publication. Where individuals or the business have expressed opinions, they are based on current market conditions, they may differ from those of other investment professionals and are subject to change without notice. Issued by Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, Oxfordshire, RG9 1HH, United Kingdom. Authorised and regulated by the Financial Conduct Authority.

What does infrastructure
bring to institutional portfolios?
Andrew Holt finds out.



**INFRASTRUCTURE:
HOW TO BUILD
BACK BETTER**

Everyone loves infrastructure, especially the government. Indeed, in 2020 the chancellor, Rishi Sunak, set out the UK's first infrastructure strategy. This was followed almost two years later with the Levelling Up whitepaper, which has infrastructure scribbled all over it, like a lovelorn teenager. Institutional investors, particularly pension funds, also love the asset class for a host of reasons.

But for all this love, the biggest challenge associated with infrastructure is the simplest and the most obvious: the lack of appropriate projects to invest in. How can something so loved be so elusive? The government has a major role here, possibly becoming an effective infrastructure-dating agency, so investors and projects can meet their ideal match.

"Government intervention is the most likely and most significant catalyst to increase the number of investable greenfield projects," says Paddy Dowdall, assistant executive director of the Greater Manchester Pension Fund, citing one area that is no doubt the future of infrastructure (see boxout, Infrastructure: Going green). "This could be in the form of direct procurement of social infrastructure, renewable energy subsidies-price certainty grants for brownfield re-development, or co-investment on a subordinated basis," he adds.

Sarah Gordon, chief executive of the Impact Investing Institute, agrees, noting that while the government has encouraged institutional investment, it could, and should, extend its work further to focus on impact investing. "We believe [the government] can go one step further by using public investment to catalyse institutional investment in historically under-served regions of the UK.

"Alongside helping to crowd in investment, government can also empower people and communities in these places to engage with private capital," she adds.

New technology

Michele Armanini, greenfield managing director of Infracapital, M&G's unlisted infrastructure equity business, concurs. He highlights several areas where the government needs to do more to make projects viable to institutional investors, with the emphasis on new and innovative initiatives. "When it comes to encouraging institutional investment into sustainable infrastructure projects, the government and regulators must embrace new technologies in a way that enables them to scale quickly and share risk fairly across the public and private sector," he says.

On a positive note, Armanini has seen examples of this, with the UK government's development of effective models, such as Contracts for Difference, to support and incentivise investment in sectors like offshore wind. "This level of support and targeted intervention has dropped off substantially, and private sector investors can now invest in this sector with confidence,

knowing they can make an economic return and will not be left with stranded assets," he adds.

George Graham, director of South Yorkshire Pensions Authority, argues there are other ways of shifting the infrastructure needle. "The key change that would improve matters here is to find more ways to bring the skills and expertise of fund managers together with the people running projects and to create some template projects that can be replicated fairly easily, from say, one district heating scheme to the next."

It is also a more complicated picture, presenting other challenges. "For UK investors in UK projects, the challenge is often competition from overseas investors with deep pockets," Graham says. "This is great for the projects, not necessarily good for us as an investor."

In addition, Graham adds: "An increasing challenge, as the definition of infrastructure broadens, is projects lacking scale and needing significantly more work to be investable."

For Graham, there are other ways the government can try to improve the situation. "It can maintain a consistent policy stance and reducing the time to get projects out of the planning stage would help greatly," he says.

Transition investment

Nest's chief investment officer, Mark Fawcett, offers a different perspective on the lack of infrastructure projects narrative. "We disagree," he says. "If we consider the investment required to transition the world to a low carbon economy, then it is clear there are plenty of projects coming down the track. Also, with government debt across the world at heightened levels due to the pandemic, we should expect private capital to be in demand for a wide range of infrastructure investments."

Offering another perspective, Ted Frith, chief operating officer at investor GLIL Infrastructure, points to the influence of renewable energy on the issue. "It's not that there aren't plenty of projects out there, but the increased focus on areas such as renewable energy has made many a lot more competitive," Frith says. "The infrastructure market has attracted a large amount of capital looking to invest in these sectors, which in turn drives up the price," Frith adds. "Investment opportunities have always relied on a range of factors lining up at the same time, but right now you need to work harder and be smarter to find the projects that are appropriate, accessible and provide diversification for the fund."

And Armanini adds: "It's true that there has been a growing appetite for infrastructure assets, but we equally have seen a proliferation of investment opportunities, driven by macro trends such as digitalisation and the drive to net zero."

This in turn brings opportunities, Armanini says. "In Europe, where our investment activities are focused, there is an estimated €650bn (£544bn) of additional investment required

per year by 2030 to fund the green and digital transitions, the European Economy Commissioner says. With public funds stretched following the Covid-19 pandemic, the private sector has a vital role to play in meeting these funding requirements.”

Project pipeline

Pension funds are being proactive in this area, including the South Yorkshire Pensions Authority.

“Our fund managers are working on larger scale renewable projects and addressing intermittency,” Graham says. “Directly, we are looking at ways to finance the bringing forward of major development sites, which includes things like the site infrastructure,” he adds.

“These are all focused on providing income streams which are increasingly important given the fund’s cashflow dynamics.”

GLIL’s portfolio spans an array of projects, from renewable energy to logistics, transport, utilities and social infrastructure.

“Recently, we invested in Invis Energy’s portfolio of 11 operational onshore wind farms, which provide around 11% of the Republic of Ireland’s installed wind capacity,” Frith says. “We have also doubled our equity stake in Semperian, which invests in essential local services, such as schools and hospitals across the UK.”

Frith adds an important point here. “Our fund members represent pensioners from across the country. We are, therefore, supportive of providing better opportunities and public services wherever they are needed.”

Rewards may vary

When it comes to the risk-reward profile of infrastructure assets, this is placed at the centre of South Yorkshire Pensions Authority’s assessments. “We would regard projects of this sort as around the midpoint of our risk exposures as the income streams are fairly secure and for more local projects where we tend to be a direct investor we tend to act as a senior lender with step-in rights which reduces exposure further,” Graham says.

“The rewards vary but the hurdle rates we use to determine which projects to consider give a margin over the actuary’s return assumption, which means we are achieving our core objective to ensure we have enough money to pay pensions,” he adds.

From a Greater Manchester Pension Fund perspective, Dowdall says: “We only make investments appropriate to our targeted return and risk tolerance to meet stakeholders’ objectives.”

For Fawcett and workplace pension provider Nest, the risk-reward picture varies. “There are core assets with stable cashflows which are relatively low risk and in contrast new projects with construction and technology risk,” he says. “While we have a focus on lower risk assets, we expect our managers to also seek out higher returns by taking construction risk with

proven technologies, for example, financing construction of a new wind or solar farm.”

Frith says GLIL looks, on the whole, at core infrastructure projects. “By definition, the cashflows are much more certain than many asset classes that our pension fund investors allocate to. Therefore, the volatility of returns is expected to be low.

“However, returns are also lower than certain other asset classes, for example, private equity,” Frith adds. “At a portfolio level, investment in infrastructure can improve the risk-adjusted returns of the portfolio due to its diversifying characteristics. GLIL targets a return of CPI plus 4% to 6%.”

Diverse portfolio

For Armanini, infrastructure is about growth and impact.

“Through buy-and-build strategies, our focus is on acquiring, building and managing a diverse portfolio of European infrastructure assets that can deliver long-term sustainable growth while having a positive impact on society,” he says.

Recent examples include its investment in Zenobe – a market leader in the UK for grid-scale batteries and electric buses. “As the use of renewables increases, companies like Zenobe can provide the support required to cope with sudden variances in supply,” Armanini says.

“Another is our investment last year in EnergyNest, a Norwegian thermal storage company which specialises in capturing and recycling surplus heat generated from industrial processes – or using it to generate renewable electricity,” he adds.

In its 2021 whitepaper *Scaling up institutional investment for place-based impact*, the Impact Investing Institute studied the

An increasing challenge, as the definition of infrastructure broadens, is projects lacking scale and needing significantly more work to be investable.

George Graham, South Yorkshire Pensions Authority





It's not that there aren't plenty of projects out there, but the increased focus on areas such as renewable energy has made many a lot more competitive.

Ted Frith, GLIL Infrastructure

risk profiles of various asset classes available to pension funds, with a particular focus on alternatives, such as private equity, infrastructure and hedge funds.

“Drawing on the Pensions and Investment Research Consultants’ annual review, we found that return for unit of risk is highest in these alternative assets, including property, providing a compelling financial case to invest in these asset strategies,” the Institute’s Gordon says.

Infrastructure interest

The reason institutional investors want exposure to infrastructure is usually threefold: the long-term investment associated with the asset class, ESG or social impact motivations, and the inflation-linked flows.

“The income streams from investments of this area are increasingly important for a maturing scheme like ours and are a key part of meeting our primary objective,” says Graham of the South Yorkshire Pension Authority. “That they also support our broader goals in terms of sustainability. And they are more attractive than other investments that do not have the full combination of these characteristics.”

For Dowdall, there is a main reason why the Greater Manchester Pension Fund invests in the asset class. “All three can be achieved, but the primary aim always has to be the long-term inflation linked cashflows to pay our pension liabilities,” he says. But for Sarah Gordon there are more than three attractions. “Investments in infrastructure have a powerful multiplier effect and can play a critical role in supporting local communities and the local economy – improvements to infrastructure can help to

unlock an area’s potential and support improvements in a myriad of other areas, from the viability of new homes to access to education and work opportunities,” she says.

Stressing the investor benefits of infrastructure, Armanini says: “Infrastructure assets typically benefit from strong incumbent market positions, which can protect investors from wider market volatility and offer resilience during economic downturns. The essential nature of infrastructure assets can represent a reliable foundation for delivering returns that are uncorrelated with other traditional asset classes.”

INFRASTRUCTURE AND LEVELLING UP

The Levelling Up whitepaper offers many positives on the infrastructure front. “Infrastructure investment represents an integral part of the government’s Levelling Up agenda, and it will be interesting to see how private capital can be invested to help rebuild key public services, such as schools, roads and hospitals across the regions,” says Ted Frith, chief operating officer at infrastructure investor GLIL. In tandem with this, the UK Infrastructure Bank is attempting to identify the most pressing and viable projects in need of funding for local, regional and devolved administrations. “If it plays this role successfully, it could spark a surge in infrastructure investment that will help regenerate our economy and support the needs of local communities,” Frith says.

“For funds like GLIL, the UK Infrastructure Bank and Levelling up agenda present a significant development in the market, but what we ideally need is for our local and regional leaders to be clear about their investment priorities, so that we can assess the projects,” he adds. “The government is facilitating this, and the UK Infrastructure Bank is an important step.”

For Sarah Gordon, chief executive of the Impact Investing Institute, the Levelling Up whitepaper and the ambitious goals it lays out is a welcome step forward – particularly the announcement of a 5% local investment target by local government pension schemes.

“This new target will encourage pension schemes to consider the real opportunities presented by investing for impact in UK towns, cities and regions across all of the investment opportunity areas that make up our place based impact investing model – from SME finance to infrastructure,” Gordon says.

The announcement, however, is only half of the story, Gordon says. “If the ambitious aims of the whitepaper are to be met, and pension funds fulfil their 5% target, local schemes will have to be supported by government along with other organisations to allocate to these types of investments.”

Aligning objectives

Infrastructure is also a diversified asset class, ranging from clean energy through to transport. “This means institutional investors can select the opportunities which most align with their overriding objectives – whether this be predominantly climate-focused, social-focused or otherwise,” Gordon says.

Investment in real assets can also provide income streams as they are underpinned by revenue generating models, with returns often inflation-linked, providing a particularly good match for pension payments. “Investing in local infrastructure is therefore a compelling example of our place-based impact investing approach – securing risk-adjusted financial returns while enhancing local resilience, advancing regional development and improving people’s lives,” Gordon says.

Fawcett also sees the advantages for Nest’s members. “Illiquids present great opportunities for our members as a source of

higher and more stable returns. Our members are investing for decades, in some cases up to 50 years, so we can put their money away for the long-term and help generate an illiquidity premium.” In addition, Fawcett adds other attractive factors for investors. “Global unlisted infrastructure has shown itself to be a strong performer, fairly insulated from the performance of the global economy. We believe this will continue and be a useful diversifier of our portfolio, while reducing our reliance on other growth assets such as equities,” he says. “The direct relationship with the asset can also help us manage key ESG risks. In particular, we believe investing directly into green energy infrastructure will play an important role in helping us achieve our net-zero ambitions.”

Core of infrastructure

For Ted Frith there is an essence in the attractiveness of infrastructure. “Core infrastructure appeals to pension funds like our members because it offers long-term, stable cashflows and inflation-linked returns that align well with the liabilities of a pension fund,” Frith says. “Social and ESG-linked projects in particular also appeal to the objectives of our members and those they represent,” he adds. “After all, as well as fulfilling their primary fiduciary role, pension funds also consider which investments are attractive for other reasons, and investors increasingly want to see money spent on reducing carbon emissions and tackling climate change.”

The focus on infrastructure investment has never been greater and, it represents a clear benefit to the broader economy, in terms of driving growth. “As well as playing a beneficial role in a portfolio, and helping to support the climate change agenda, infrastructure investment in general has a strong positive impact on economic growth,” Frith adds. “It is possible to see the tangible benefits as we refresh and evolve services and facilities for the benefit of local communities across the UK.”

Beware the pitfalls

Infrastructure is, therefore, a natural investment world for institutional investors, but it’s not without its pitfalls. “It is an exciting time, but as ever risky,” Dowdall says. “The long-term nature of these investments coupled with the natural illiquidity of the asset class mean that when paying the current prevailing market prices there is only a fine margin of error in asset specific due diligence given the potential risk of an inflexion point in long-term interest rates and inflation.”

Offering an insight into infrastructure equity investment for a pension fund, Fawcett has some words of warning. “The costs of investing in something like infra equity have typically been too high for defined contribution (DC) schemes. But Nest has used its scale and long-term focus to negotiate good fee rates. We have also found workable solutions with our infra equity fund manag-

NEST: AN INSIGHT INTO INFRASTRUCTURE INVESTMENT

Workplace pension provider Nest has taken a threefold infrastructure approach. Last year the master trust appointed three infra equity partners – CBRE Caledon, GLIL and Octopus Renewables – to invest in projects in the UK and around the world, with a particular interest in renewable energy. “The types of infrastructure Nest could invest in include fibre networks, electric vehicle charging hubs, water and waste treatment plants and roads,” says Nest’s chief investment officer Mark Fawcett.

CBRE Caledon’s mandate is to help Nest invest directly in global core and core-plus infrastructure projects. “They provide access to an infrastructure fund sponsored by the firm, with the opportunity to also co-invest in select investments to help Nest members take advantage of bigger projects,” Fawcett says.

“GLIL Infrastructure is a unique organisation, representing a joint venture between a number of major local authority pension plans,” Fawcett says. “Nest will invest in the fund along with GLIL’s members, with its open-ended fund giving access to new opportunities in UK core infrastructure.”

Octopus Renewables is the largest investor in utility-scale solar power in Europe, as well as a leading UK investor in onshore wind and biomass, managing a global portfolio valued at more than £3bn. “Nest has appointed the firm to boost its investment in clean energy infrastructure and has already deployed money into projects such as a solar farm in Reading and biomass power plant in Brigg,” Fawcett says.



Global unlisted infrastructure has shown itself to be a strong performer, fairly insulated from the performance of the global economy.

Mark Fawcett, Nest

ers to overcome issues such as daily pricing.”

In turn, the issue over pricing needs to be addressed. “To help further open up the market to other DC schemes, there needs to be a better discussion about cost and value – as they are not the same thing,” Fawcett says. “We challenged the private credit market to review their fees and investment structures and think ahead to the opportunities available with the growth of defined contribution pensions. They stepped up to the plate and the infrastructure equity managers we are working with have followed suit. “We are comfortable paying more for some asset classes over others because we recognise the trade off, but some fees charged remain prohibitive for many DC investors. More fund managers still need to sharpen their pencils.”

Delivering growth

The scenario of institutional investors focusing on infrastructure is vital going forward, Frith says. “Crowding private capital into infrastructure in the UK will be essential to support taxpayer funded initiatives if we are to deliver half of the government’s aspirations. We have been investing in core UK infrastructure on behalf of pension funds for more than six years, and are very excited to do more.”

Frith does note, however, that much has been achieved in a short period. “A great deal of investment has been made during the past two to three years and, with the progress of initiatives like the government’s UK Infrastructure Bank and Leveling Up whitepaper, we stand ready to explore further projects that can deliver stable, long-term inflation-linked returns for the benefit of our pension fund members,” Frith says.

INFRASTRUCTURE: GOING GREEN

Like the majority of investments, green projects are central to the growth of infrastructure. Greater Manchester Pension Fund’s Paddy Dowdall cites the importance of renewable energy. “There is a need for a vast amount of renewable energy, plus the networks to support that and maximise the effectiveness of such generation, including battery storage and electric car charging infrastructure, requires a huge amount of investment. New residential development requires a huge amount of energy supply,” he says.

“We have a well-diversified portfolio pipeline and are looking for new opportunities, but one interesting example is a platform to invest in battery storage,” Dowdall adds.

Infracapital’s Michele Armanini also places an important emphasis on a shift to the opportunities presented by greenfield sites. “While the operational brownfield infrastructure market is now maturing, greenfield infrastructure is still seen as a relatively new way of investing for pension funds,” he says. “By providing access to infrastructure earlier in the asset cycle, greenfield investment can result in more attractive yields during the operational phase when compared with traditional brownfield investment.” Entering at the greenfield phase allows investors to come in ‘at cost’, meaning long-term investors can typically enjoy a significant return premium over brownfield investments during an asset’s lifespan, including enhanced yields, Armanini says. “Greenfield infrastructure also appeals to investors because of its ability to bring clear benefits to the economy,” he adds.

While foregoing yield during construction, which can vary from several months to several years, greenfield projects essentially become brownfield assets once operational, carrying all the associated attractive characteristics – including secured, reliable cashflows linked to inflation, alongside the potential for capital growth.

“Greenfield infrastructure is not without risk, so asset managers must have a robust risk-monitoring, structuring and management process in place,” Armanini says. “Effective cost management, allowance for overruns in timetable and budget, as well as careful structuring of contracts, are all important risk management techniques.”

Although Graham observes that while institutional investors are important in the infrastructure narrative, it cannot be built by them alone. “Institutional investment cannot be the panacea that addresses all infrastructure needs. We can be a part of the solution, but not all of it.”

Editor: Mark Dunne
Deputy editor: Mona Dohle
Senior writer: Andrew Holt

Publisher: John Waterson
Head of sales: Clarissa Huber
Business development manager:
Basit Mohammed
CRM manager and business development:
Silvia Silvestri
Marketing executive: Hannah Carry
Head of roundtables: Mary Brocklebank

portfolio Verlag
Office 5.08 – 5th floor
Fleet House
8–12 New Bridge Street
London EC4V 6AL
(0)20 7822 8522
ISSN: 2052-0409

Printer: Stephens & George
Pictures: Richie Hopson
Layout: portfolio Verlag

© 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.

**THIS PUBLICATION IS A SUPPLEMENT OF
PORTFOLIO INSTITUTIONAL AND SPONSORED BY:**





CAMBRIDGE
ASSOCIATES



ARE YOU INTERESTED IN PARTICIPATING IN FUTURE ROUNDTABLE DISCUSSIONS?

Pension schemes and independent trustees are invited to share their opinions and could be offered a complimentary place at a future roundtable event.

Asset managers and investment consultants interested in joining the panel can secure one of the limited sponsorship packages available.

To find out more contact:

Clarissa Huber

+44 (0) 20 7822 8522

c.huber@portfolio-institutional.co.uk

Topics for confirmed upcoming *portfolio institutional* roundtable discussions:

May – Endgame investing

June – Emerging market debt

September – Responsible investing

October – Defined contribution

November – Real estate/infrastructure

December – 2023 outlook



no