Understanding Scale in Pension Funds: A Report for the Scottish LGPS Advisory Board Working Group

1. Introduction

This report examines scale in pension fund management. Today, the Scottish LGPS remains as 11 discrete funds and have not pooled their assets, unlike the LGPS in England and Wales, where the pooling of LGPS scheme assets has been ongoing since 2015. Outside of the LGPS setting, there has been a trend of increasing scale in pension funds globally with drivers including, reductions in costs and fees, insourcing, and co-investment.

Currently, the LGPS in Scotland consists of 11 funds with £35.2bn of assets under management as of March 2016, which would meet the criteria of a pool as set out by the Department for Communities and Local Government (DCLG), as this exceeds the £25bn minimum size threshold set by the department.

The underlying rationale for pooling pension assets is simple. With greater size come economies of scale, which reduce costs, increase efficiencies, and this ultimately secures member benefits. Moreover, in the Local Government setting, if these gains from scale can be achieved, this will reduce pressure on Local Government expenditures, thereby allowing for a more efficient use of local tax revenues to ensure the effective delivery of local services.

The cost argument in the LGPS setting has three key components. The first is the duplication of functions across schemes. Across 11 funds, there will be duplication of administration and governance structures e.g. trustee boards. Underlying the governance issue, for example, is the notion that there may be better and more efficient governance structures that can lead to better member outcomes, and there are various pieces of research that suggest the presence of a good governance premium (See for example, Ambachtsheer, 2007).

The idea that improved scheme governance improves pension fund performance is also related to the strategic asset allocation side of pension fund management. If the investment strategy is correct, then this allows the fund to meet its obligations and to respond to changing market conditions as well as taking advantage of opportunities that arise.

The second source of expense is the use of external service providers such as actuaries, auditors, and investment consultants. The duplication of advice across many of these service providers is a cost to the LGPS in aggregate. Moreover, it is difficult, if not impossible to understand value for money in these services at present across differing schemes, where costs and fees may be opaque.³ One indication that these types of services may not always offer value for money comes from the interim report of the Financial Conduct Authority (FCA) Asset Management Market Review, which has suggested that the investment consultant sector should be referred to the Competition and Markets Authority (CMA).⁴

² Source: Annual Survey of Large Pension Funds and Public Pension Reserve Funds, OECD (2015)

¹ There are also 5 sub-funds within the Scottish LGPS.

³ Another issue that is worth mentioning is that there is often lots of ancillary work that is undertaken by these service providers and so the cost in a given year is not representative of the total cost of such services i.e. there may be a significant amount of additional work undertaken in any given year.

⁴ https://www.fca.org.uk/publication/market-studies/ms15-2-2-interim-report.pdf

The final, and arguably most important source of cost, is the use of external fund managers, and in particular active fund managers, who pick shares based on the belief that they can spot mispricing in the market and time the market.⁵ As a result of this active management, the fee structure is much more expensive than a passive low-cost index tracker. The FCA's interim report of the Asset Management Market Review has been explicit in its view that the low levels of disclosure of costs and fees in the fund management industry is wholly undesirable, and the final report looks set to see wholesale change of this, if the current trajectory is maintained.

A key issue concerning costs and fees is the difference between explicit and implicit costs. One of the main issues around costs and fees in fund management is the fact that it is the implicit costs and fees, such as foreign exchange costs etc. that create substantial leakage from pension funds rather than the explicit costs and fees vis-à-vis the Total Expense Ratio. If these implicit costs are taken into account, it is unlikely that active funds generate the level of returns required to merit the fees they charge, and it is unlikely that they will beat the market on a systematic basis.

The consequence of this leakage is increased costs to the taxpayer as the returns to the fund are insufficient to pay member benefits or generating the required returns is more expensive, and so securing the returns costs Local Government more.

There is however evidence to show that the costs to fund management reduce with scale and that scale, in all likelihood, creates buying power that does not exist at smaller fund sizes. Further, where scale is sufficiently large, in-house investment can be undertaken across the investment activities of the fund, thereby stripping out many of the costs and leakages that currently exist across pension fund investment in the UK.

The final part of the scale argument is not purely a cost argument, but one about the types of investment that pension funds can undertake. One rationale for the pooling of investments in the LGPS in England and Wales is the creation of '...up to six British Wealth Funds...but also enable the authorities to develop the capacity and capability to become a World leader in infrastructure investment and help drive growth'. Pension funds are ideally placed to invest in infrastructure as they have a long-run investment horizon given the lifespan of their liabilities.

Pension funds are therefore able to invest in illiquid asset classes such as infrastructure, and large pension funds often invest directly, rather than through some indirect structure such as a fund or a platform. Such direct investments have two advantages. First, direct investment lowers cost as there are no intermediaries in the investment chain who would normally receive a range of different fees in an indirect investment vehicle. Second, pension funds can potentially capture an illiquidity premium, which increases returns to the fund. Illiquidity is an important concept for pension funds and is rooted in the risk-return trade-offs that underpin finance and investment. Simply put, the harder it is to convert an investment into cash, the more illiquid the

⁵ The evidence for this is very mixed both in academia and in practice. There is considerable evidence to say you cannot beat the market in the long-run.

Ministerial Foreword, Local Government Pension Scheme: Investment Reform Criteria, Department for Communities and Local Government, November 2016.

investment. As a result, investors can capture an additional return on their investments to compensate for the risk that is borne by holding more illiquid assets. Moreover, the ability to tolerate illiquidity is dependent upon investment horizon and so pension funds are well placed to invest in illiquid assets as the need for immediacy of execution is not the same as that of other types of investors' e.g. short-term investors or day traders.

The case for scale as set out above may seem compelling and there are clear advantages that scale can bring to pension fund investment. However, the practical reality of pooling of assets on the scale of the Scottish LGPS is not without significant challenges and costs. The abstract description of what scale can achieve has to be caveated with the fact that it is about implementation and getting the structures in place that will allow these benefits to accrue over the long-run, and also getting the correct balance of talent and experience embedded in any new structure, with the correct long-run targets and goals.⁷

The remainder of this paper is set out as follows. Section 2, of this paper will present a brief overview of some of the evidence on returns to scale in pension funds. Section 3 discusses the trend for consolidation and the motivations for doing so across a number of countries, including the UK. Section 4 discusses the Lothian Pension Fund as the scheme has been in-housing much of its investment activities and has collaborated with Falkirk to co-invest in infrastructure investments allowing Falkirk to leverage the scale and experience of the Lothian Fund. Section 5 presents two international case studies of pension funds that have significant scale. The countries that have been selected for the case studies and the international trends are Canada and Australia. Canada was selected as it has recently changed legislation allow employers with two or more Ontario-registered defined benefit pension plans to merge subject to meeting a number of criteria around solvency etc. Moreover, Ontario also has The Ontario Municipal Employers Retirement System, which is one of the more innovative large pension funds that invest in infrastructure. The case of infrastructure investment in Australia in useful as it sets out the importance of government in creating an institutional context where infrastructure investment can occur, and also that large scale infrastructure investments can occur in a largely defined contribution environment. The next section of the report will examine issues concerning governance. The final section of the report will draw conclusions from the preceding analysis and consider the different options from a range of different perspectives if pooling in the Scottish LGPS were to be undertaken.

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⁷Moreover, as with any investment, there are also diseconomies of scale that can occur where investment becomes overly reliant on a particular strategy e.g. matching assets and liabilities through the purchase of indexed-linked gilts i.e. the strategy looks expensive at current rates.

2. Scale in Pension Fund Investments – Do Cost Savings Exist?

A number of papers examine the issue of whether scale in pension funds leads to lower costs and fees. Much of the evidence on the economies of scale comes from the US e.g. Bauer et al (2010) who find evidence of economies of scale in the equity investments of US pension funds. These economies of scale may be the result of increased bargaining power (Andonov et al, 2011) and comparative advantage that results from in-house resource (Dyck and Pomorski, 2011). The results of Dyck and Pomorski (2011) are also notable as their results show that the largest pension funds outperform smaller funds by 43-50 basis points per year⁹, which compounded over the life of a pension fund is a significant saving. Moreover, between a third and one half of these gains arise from cost savings related to internal management, where costs are at least three times lower than under external management.

Bikker and De Dreu (2009) examine the investment and administration costs of Dutch pension schemes at a fund level and find evidence of cost savings and scale. Moreover, their analysis shows that an increase of 100 basis points in annual operating costs over the entire accrual period decreases eventual pension benefits by approximately 27%. More recently, Broeders et al (2015) in their examination of 225 Dutch occupational pension schemes find that a fund with 10 times more assets has lower on average costs of 7.67 basis points and that these savings are driven solely by lower management costs. ¹⁰ In decomposing this result, large pension funds were found to benefit from economies of scale in equity, fixed income, and commodity investments, but not in real estate, hedge funds, or private equity.

Cummings (2012) examines the impact of scale and cost differentials between not-for-profit and for-profit superannuation funds in Australia. The results of the study show that fund size positively affects the performance of not-for-profit superannuation funds and this holds for both gross and net returns. However, while both retail and not-for-profit superannuation funds show operational cost savings with increased size, the performance of retail superannuation funds does not improve with size, which may be indicative of the gains going to profits rather than to members.

In looking solely at administration costs¹¹, there is also consistent international evidence to be found for scale in the US (Mitchell and Andrews, 1981) Australia (Bateman and Mitchell, 2004)¹², Chile (James et al, 2001), and South Africa (Mama et al, 2011). The case for scale and cost

⁸ This result of costs and scale is also intuitive as it mirrors to some degree the evidence on scale in the mutual fund industry (See for example Indro et al, 1999).

⁹ 100 basis points = 1%, a 50 basis points saving as a percentage of assets under management across the Scottish LGPS would therefore be circa £175m (£35bn x 0.5%).

¹⁰ It is worth noting that this cost saving is present in the Dutch pension system, which is regarded as being one of the most cost transparent systems in the World.

of the most cost transparent systems in the World.

11 Administration costs exclude the costs of investment but include all other costs e.g. costs of management, staff, communications, auditing and reporting, premium collections, benefit payments, rents, and outsourcing costs.

¹² It is worth noting that a J.P. Morgan research paper found that the cost base of large funds in Australia have a higher cost base compared to similar international funds. The Bigger, the Better? The Costs and Benefits of Scale in the Australian and in the International Pension Landscape (2013)

reduction is therefore based on a number of studies and is not focussed on a few funds or one country.

One argument that is made is that the payment of higher fees is the result of a search for higher returns. The evidence on this is mixed with a majority of studies finding no relationship between higher investment costs and fees and outperformance, and so pension funds are unable to outperform external benchmarks in the US (Lakonishok et al, 1992; Busse et al, 2010;) and in the UK (Blake et al, 2013). Some studies, however, have found evidence of outperformance in the US e.g. Bauer et al, (2010) and Andonov et al, (2011), so while the majority of the evidence finds no link across a range of countries, the evidence is not wholly in one direction.

In summing up why pension funds underperform, Lakonishok et al, (1992) argue that the pension fund industry underperforms the market as pension fund managers trade too frequently resulting in large execution and transaction costs and do not exhibit any ability to time the market. It is not clear, therefore, that higher fees equate to increased performance.

Overall, the academic evidence on costs and fees seems to support the premise that there are cost savings with scale, and that this can occur on both the administration and investment side.

The next section of the report is going to look briefly at consolidation and pooling in pension fund management both internationally and in the UK.

3. International Trends in Pension Fund Consolidation

Globally, there is a trend towards scale in the pension fund industry. Below are three cases that show some of the trends and motivations for the pooling of schemes globally. This trend will not be uniform across countries, so there are likely to be developed economies with small schemes where pooling and scale is not being considered, and others where it is occurring or being discussed. Moreover, there may be differing motivations and country specific drivers for doing so. That said, the pooling of scheme assets is an emerging and significant trend in the organisation of pension funds to maximise the security of member benefits and ensure best practice in investment and governance.¹³

In Australia, there has been a long history of consolidation in the pension fund industry. While, Australia is largely defined contribution schemes with compulsory pension savings, the rationale for consolidation of schemes is the same as those that dominate the defined benefit setting, namely, getting better value for money for scheme members, economies of scale and the resulting efficiency gains, and stronger governance.

More recently, the 2010 Cooper Review proposed that trustees should, as part of their remit, assess whether the scheme was of sufficient size to maximize member outcomes¹⁴ and since then the number of schemes with four or more members has fallen from 333 schemes in 2012 to 242 schemes in 2015.¹⁵

As with Australia, there has been a trend of consolidation in the Netherlands under the direction of the Dutch pension regulator (DNB). The approach of the Dutch regulator has been to set criteria by which 60 small vulnerable funds were identified, one of which was size, and the regulator asked each scheme to consider its viability as a standalone entity. If it was felt that the scheme was unable to continue realistically in this way, then consolidation was sought after approval from the pension fund's board. Since this programme was initiated, around 30 of the schemes have liquidated, merged, or been placed with an insurer. This trend is also part of a much wider consolidation of the Dutch system where the number of pension funds has fallen from over 800 in 2005 to 308 in 2016. 16

In Ontario, Canada, there has been a significant change in legislation to allow employers with two or more Ontario-registered DB pension plans to merge if:

been made by different sponsors.

 $^{^{13}}$ It is worth noting that in some jurisdictions, both the scheme assets and liabilities are being consolidated/merged and aggregated. While this is not the aim of any pooling of scheme assets in the LGPS, it is a trend worth mentioning, as there may be a similar trajectory in the UK at some point. Such a process is, however, complex and particularly so in private sector schemes given differing benefit promises that have

Final Report, Review of the Governance, Efficiency, Structure and Operation of Australia's Superannuation

¹⁵ Interim Report of the DB Taskforce, http://www.plsa.co.uk/PolicyandResearch/DocumentLibrary/0597-DB- Taskforce-Interim-Report.aspx

¹⁶ Source: Best hands on deck: The consolidation of Dutch pension funds, Investments and Pensions Europe, March 2015.

- (i) the solvency ratio (the ratio of plan assets to solvency liabilities) of the merged plan is at least 100%; or
- (ii) the solvency ratio of the merged plan is not more than 5% lower than the highest solvency ratio of the original pension plans.

As with other cases of consolidation, some of the motivations that have been put forward for undertaking such mergers are increased efficiencies by reducing ongoing costs related to administration, custodian fees, actuarial fees, auditor fees, legal fees etc.¹⁷

Finally, in the UK, the pooling of assets is already underway in the LGPS in England and Wales. However, this trend is not unique to public sector schemes, and one of the conclusions of the Defined Benefit Taskforce in their interim report is that there is a case for smaller schemes in the UK to be consolidated. Based on numbers from the Pension Protection Fund, of the 5,945 schemes in its universe, 66% have fewer than 1,000 members and the average scheme has just over 1,800 members and £200m of assets. Again, the issue raised becomes one of pooling for efficiency gains,

"At present nearly all of these schemes fund their own running costs, and operate their governance, administration and investment management systems on an individual basis. This cannot be the most effective and efficient way to mitigate risk, optimise investment returns and attain the quality of governance needed to achieve the best outcomes for members and sponsors." ¹⁸

In summary, the trend across a range of countries is towards one of scale and consolidation. While the trend in the UK is towards some sort of pooling of assets, there are numerous examples where it is not only about assets but also about liabilities too. Although in many instances such consolidations are very country specific, there is the potential for full consolidation to occur in the UK at some point in the future, but the legal issues around this, seem considerable at this stage.

Numbers and quote are sourced from the Interim Report of the DB Taskforce http://www.plsa.co.uk/PolicyandResearch/DocumentLibrary/0597-DB-Taskforce-Interim-Report.aspx

¹⁷ http://www.benefitscanada.com/pensions/db/the-benefits-of-merging-ontario-pension-plans-49520

4. The Lothian Experience

The Lothian Pension Fund is an interesting case within the Scottish LGPS as it has undertaken both the in-housing of investment and cooperation on investment, which give insights into some of the options that could be undertaken by the Scottish LGPS. As with all cases, the experiences are not necessarily replicable nor are they a guarantee of how any solution would eventually work. However, it is interesting to look at a model within the Scottish context, as this allows for a local perspective rather than just a wholly international one.

In-House Investment

The Lothian Pension Fund has significantly increased the amount of in-house investment it undertakes as opposed to awarding mandates to external fund managers. As of today, the fund manages approximately 90% of its equity market investments, 100% of its index-linked gilts and it provides direct funds for infrastructure investment and has minimal exposure to fund-of-fund investments.

In addition, the Lothian Fund outperformed the CEM benchmark cost for a fund of comparable size and asset strategy. CEM estimated the cost for an equivalent fund to be 0.5%, while Lothian actually incurred costs of 0.39%. This equates to a saving of approximately £5m. ¹⁹ Further, Lothian Pension Fund's service plan includes a contingency budget of £10m, which is authorised spending in the event of the internal team departures. ²⁰

Cooperation with Falkirk

Within the Scottish LGPS, there has been some cooperation and sharing of services between Lothian and Falkirk on the investment side. The cooperation has expanded following a desire within the Falkirk scheme to increase infrastructure investments and to leverage Lothian's larger exposure and experience of investing in infrastructure. To allow this to happen, a number of Lothian staff were seconded to the Falkirk scheme as this allowed for investment advice to be given as staff were employed by the pension scheme. Prior to this, there was a support arrangement between the two schemes with Lothian helping with service level agreements on the investment side, supporting the oversight of mandates, and attending the relevant committees. The secondment, however, changed the dynamic as rather than providing a monitoring/support role, seconded staff could provide investment advice directly to the Falkirk scheme.

While the above arrangement worked in the short-run, it was not a sustainable arrangement as staff time was split between two schemes. Consequently, in February 2015, Lothian set up two limited companies, LPFE Limited and LPFI Limited, both of which are wholly owned and controlled by the City of Edinburgh Council as the authority that administers the funds. LPFE, as

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¹⁹ Page 16, Lothian Pension Fund, Audited Annual Report and Financial Statements 2015/16

²⁰ http://www.lpf.org.uk/lpf1/downloads/file/328/lpf service plan

of May 2015 employs the in-house investment team of the Lothian Pension Fund. LPFI, however, is an FCA authorised vehicle that supports the investment programme of the in-house team and allows advice to be given to other schemes e.g. Falkirk.²¹

This model of co-investment and sharing of expertise and services is clearly an example of a workable system. However, there are limits to the gains from this structure. Under the current governance model, the Pension Committee for Lothian delegate investment implementation decisions to the internal team. In doing so, the Pension Committee set the investment strategy for the fund i.e. asset allocation, risk budgets and a performance target.²² As a model of investment governance, this structure works well and there is a clear structure of strategy, implementation, and performance monitoring and reporting. However, such delegations are unusual in the Scottish LGPS.

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²¹ This structure also enables Lothian to more effectively partner with other funds who may wish to invest alongside Lothian.

Historically the target was to outperform a benchmark by a particular factor. However, the target has recently been changed to a risk-adjusted performance target, which is arguably a more appropriate benchmark as it ensures that the fund is not running risk that the sponsor cannot tolerate.

5. Case Studies of Scale in Pension Fund Management

All of the international case studies have been picked as examples of best practice or because their evolution helps to draw out key issues with respect to scale. This is not to say that any of what is discussed can be easily replicated nor is it to say that this is the correct organisational form for any potential pooling of the LGPS in Scotland. However, the cases should serve as a basis for debate and discussion as to how best to organise the LGPS in Scotland if pooling is to occur.

The Ontario Municipal Employers Retirement System (OMERS)

The first case is the Ontario Municipal Employers Retirement System (OMERS). The case of OMERS has been chosen, as they are an impressive example of how infrastructure investment and investment more broadly can be organised to maximise the returns to a pension fund.

OMERS was established by statute in 1962 and is responsible for the retirement benefits of 461,000 employees including municipal workers, firefighters, police, emergency services staff, Children's Aid Society workers, school board staff (non-teaching), transit and hydro workers, with the scheme covering, active and deferred members and spousal benefits and pensioners.

As of 2015, the scheme had assets under management of \$77bn CAD, a funding ratio of 91.5%, it generated a net return of 6.7% on plan assets, and paid out \$3.4bn CAD in pension benefits and 25% of the contributions received have been used to pay down the deficit in the scheme. Moreover, from the latest annual reports, the total cost of running the fund was 1.6% as the gross returns were 7.3%. ²³

The structure of OMERS is important as a case study as there has been a move to build in-house teams across all activities of the fund and this includes teams for both public and private investments. In doing so, this allows the in-house teams to originate, execute, and directly manage the majority of scheme assets on behalf of members and enables coordination across investment platforms to manage costs.²⁴

One thing that is notable from the approach of OMERS is that scheme assets are explicitly managed on behalf of members and a focus on cost and performance is part of the culture and performance metrics within the investment functions of the fund. Many of the people who work at OMERS will be highly paid and this is evident from their annual report. However, part of the target that is set for compensation is about the fund's performance and this has to include a focus on sustainable long-term investments and the costs of investment.

As well as this focus on in-house specialisation, the investment philosophy and strategy of the fund has three major strands:

http://www.omers.com/investments/investment_approach.aspx

²³ http://www.omers.com/pdf/2015-OMERS-Annual-Report.pdf

- Global investment, with assets diversified by asset class, geography, economic sector;
- Diversification of income streams in order to earn long-term returns;
- Targeting of high-quality investments that are resilient in times of economic stress.

To achieve these goals, the investments of the firm are split into two broad categories, namely public investments and private investments. For the public investments, these are the standard type of investments that a pension fund would be expected to undertake i.e. equities; fixed income securities etc. and that are traded on global financial markets. The aim of these investments is to provide a mixture of regular income to the fund and capital growth.

For private investments, this covers private equity, infrastructure, and real estate. Underlying this investment strategy is the fact that investments in infrastructure and real estate are undertaken to generate consistent cash flows allowing for more stable valuations.

OMERS infrastructure investment is conducted through its infrastructure vehicle, Borealis. The focus of Borealis is to invest in large-scale infrastructure.²⁵ The investment strategy of Borealis is explicitly clear and embedded in the underlying rationale of OMERS' investments in property and infrastructure:

"We invest in inflation-sensitive assets that are critical to the long-term success of a modern industrial economy. These large and complex assets often have significant governmental or regulatory barriers to entry, are regulated or supported by long term contracts, need strong investment and operational expertise and require excellent relationships with partners including co-investors and governments." ²⁶

As well as this strategic approach to infrastructure investment, the underlying philosophy acknowledges two key issues. First, that such investment needs long-term capital commitments of 15-20 years. Second, any investment is expected to generate consistent annual cash flow, as this is what is required to meet pension obligations. From a strategic investment approach, the underlying conditions for investment are ones based on the payment of pension benefits. While this is likely to be the underlying driver of investments made by any trustee in a pension scheme, investment in pooled infrastructure funds may not necessarily achieve the goal of the trustee in the same cost efficient manner as the clear mandate underpinning the strategy of Borealis.

Another key theme that is apparent in the investment approach of Borealis is governance. Borealis is explicit that it is an active participant in governance and as a direct equity holder, the fund expects meaningful ownership and an active voice in the running of any investee firm. As such, the fund is involved in key aspects of governance including strategy, management, and investment goals to ensure that any investment meets the investment goals of the sponsor i.e. to pay pension benefits in the long-run.

²⁵ Appendix 1 provides a list of key investments that Borealis has made globally to illustrate the types of investment that are sought.

²⁶ http://www.borealis.ca/about-us/our-profile

In looking at the evolution of Borealis, it is worth noting that the creation of a major player in global infrastructure investment did not happen quickly. Borealis' offices opened in 1999 with only 4 people, by 2002 this had grown to 30 people, by 2009 this was 53 people and currently the Borealis team is around 80 employees.²⁷ Moreover, in looking at the evolution of OMERS and Borealis to the current structure and portfolio, there is arguably a 'first' mover advantage. Consequently, this has enabled the creation of significant capacity and networks globally.

Investing in Infrastructure in Australia: Where Pensions meets Policy

The pension system in Australia in considerably different to most developed market economies. Unlike the UK, US, Canada, etc. where the move from defined benefit pensions to defined contribution pensions really occurred in the last 15-20 years, pensions in Australia are largely defined contribution. Moreover, this shift occurred in the early 90's with the introduction of compulsory saving for retirement. Australia, therefore, has one of the largest defined contribution pension systems in the World, with approximately 90% of pension assets being in defined contribution funds (Inderst, 2014) and total pension assets under management of \$A 1.498 trillion, which is 119% of Australian GDP. Moreover, Australia has sixteen of the largest pension schemes out of the largest 300 pension funds in the World and five of the largest 100 schemes globally. ²⁹

The Australian context is important as it highlights the importance of governmental strategy in enabling successful infrastructure investment. In the early 90s, some of the initial infrastructure investments that occurred covered assets such as electricity assets and privatised airports. At the same time, Australia was an early adopter of the Public Private Partnership (PPP) model, which created investments in urban toll raids and tunnels (Inderst, 2014).

Although arguments exist that infrastructure investment is too difficult where assets are held in defined contribution savings due to illiquidity, frequent asset valuations, a large number of individual accounts, and a precautionary liquidity motive (Inderst, 2014), this is clearly not the case in Australia. Inderst (2014) attributes the overall success in Australia to five key factors. First, was the privatisation of public assets in the 90s at the same time as compulsory pension savings occurred. Second, was the accumulation of large amounts of pension assets due to economic growth and favourable demographics. Third, was the emergence of financial intermediaries who facilitated the investment in infrastructure. Fourth, was the approach of the trustees of industry-wide pension schemes, as they included infrastructure in their investment strategy. Fifth, was effective use of default funds for liquidity management.

The Australian Superannuation funds are clearly investing in infrastructure and have been doing so for a long time. As such, it serves as a useful case to show that infrastructure investment is possible even where the majority of pension assets are invested in defined contribution pensions.

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²⁷ http://www.borealis.ca/about-us/timeline

²⁸ Source: Global Pension Assets Study 2016 – Willis Towers Watson

²⁹ The world's 300 largest pension funds – year ended 2015 – Willis Towers Watson

Another crucial part of the Australian case is the government's infrastructure strategy. In 2008, the Australian Government established Infrastructure Australia.³⁰ The aim of this independent body is to examine and prioritise nationally important infrastructure projects for the country and to provide research for both government and the investors and owners of infrastructure.

More recently, in 2014 this Infrastructure Australia Act 2008 was amended to allow for the creation of an independent board that brings together experience across a range of sectors, including, business, academia, the public and private sectors. The new remit for Infrastructure Australia is to undertake strategic audits of nationally important infrastructure needs and develop 15-year rolling plans that identify priority investments at both a state and national level. Moreover, the act is explicit in preventing government from directing any outputs from Infrastructure Australia.³¹ The first audit was released in 2015. This was the first independent comprehensive review of the infrastructure needs of the country and took a strategic view as to what the country would look like in 2031 and where infrastructure investments are needed.³²

In addition to the auditing and planning of the infrastructure needs of the country, Infrastructure Australia also set out an Infrastructure Priority List, which allows for a clear identification of strategically important investments and sets out an explicit pipeline of projects that require funding.³³

The approach of the Australian government to set up an independent body to set out infrastructure priorities is extremely important. First, not all of the investments that governments may like pension funds to invest in are suitable as there are no clear returns to the pension fund. Clarke, (1998) highlights a number of cases where pension fund assets were used to invest in local investments that subsequently failed, as the investments were not made using robust investment criteria. Rather, they were made based on local concerns for example, as apposed to sound economic judgement. Second, it is often difficult for clear pipeline of projects to be identified, which can hamper investment.³⁴ In concluding that demand for infrastructure assets could be high as more pension funds seek to invest in these assets, Inderst (2014) caveats this as the demand for such assets relies on political stability and consistent infrastructure policy, which is something that Australia clearly has currently.

In sum, the case of Australia highlights the importance of scale and aggregation to get large investments in infrastructure and the crucial role that government has in identifying strategic priorities for investment.

³⁰ See http://infrastructureaustralia.gov.au/ which was brought into existence under the Infrastructure Australia Act 2008

³¹ http://infrastructureaustralia.gov.au/about/role.aspx

http://infrastructureaustralia.gov.au/policy-publications/publications/Australian-Infrastructure-Audit.aspx

http://infrastructureaustralia.gov.au/projects/infrastructure-priority-list.aspx

³⁴ http://infrastructureaustralia.gov.au/policy-publications/publications/files/IFWG_Report_FINAL.pdf

6. Governance and the Options for the Scottish LGPS

With respect to the Scottish LGPS, there are four main options – status quo, cooperation, asset pool, and merger. In the following section, each of these options will be discussed in relation to their advantages and disadvantages in terms of investment performance and governance and there is a final note on Environmental and Social Governance.

Status Quo

The first option for the Scottish LGPS is to do nothing and to maintain the status quo. As such, there would be 11 funds and 5 sub-funds of varying scale. From an investment perspective this is likely to mean that inefficiencies will exist across the Scottish LGPS as most of the funds will not achieve the benefits of scale that have been documented across a number of countries including the UK.

The consequence of this is that some schemes will cost the taxpayer more and be a greater expense to local authorities than they otherwise need be. Over the long-run, such cost inefficiencies could be considerable and the money could be better spent on local services, while in the short-run they are putting pressure on local government budgets at a time when budgets are under considerable strain.

With respect to governance, for many of the smaller schemes, there is an issue of focus. Many of the smaller schemes do not have a dedicated pension team and it is often the case that the administration of the scheme is only part of someone's job. This is not optimal and may present a key-person risk to the running of the scheme.

In looking at oversight, the current structure is complex and it is likely that there are varying levels of governance across schemes. The delegation of investment mandates, performance targets, and an understanding of costs and fees is unlikely to be optimal. However, the status quo option will maintain a local connection with respect to oversight and strategy, which may be more difficult to keep or may even be lost if a more centralised asset pool or merged fund were to be created.

Cooperation

Cooperation vis-à-vis co-investment across schemes could lead to some efficiency gains on the investment side. The case of Lothian and Falkirk as described above allowed for Falkirk to collaborate with Lothian and leverage some of the expertise and scale within the Lothian fund. Similarly, some cost efficiencies could be gained if broad mandates e.g. UK passive equities were to be invested as one large block rather than as separate mandates across a number of funds.

With respect to the governance of such arrangements, if the case of Lothian and Falkirk were to be followed as a template, the current structure of governance would be likely to continue, and Pension Committees would have to coordinate more with respect to the delegation of investment mandates. While this is relatively straightforward for common investments such as passive equities, it is more difficult for alternatives such as infrastructure. For example, if

investment to infrastructure is only a small part of the investment strategy of a number of schemes, the process of increasing the strategic asset allocation to infrastructure to allow increased investment to occur is likely to be a slow process.

This means that smaller schemes may not be able to co-invest in the same way as larger schemes, or that some investment opportunities are missed as finance cannot be coordinated in time. If this were to be the case, there is the potential for a knock-on effect to larger schemes, as they are unable to raise the funds, and so there is the risk of reputational cost. Ultimately, there are some gains to be had from cooperation, but these are likely to be limited by virtue of extant governance structures. However, the local governance that currently exists would remain in tact, as mandates would be directed by the Pension Committees of the individual funds.

Asset Pooling

Asset pooling would be a significant shift to the way in which the Scottish LGPS undertakes investment decision making. From an investment perspective, if there were to be an aggregated pool, this would result in a centralised fund with circa £35bn of assets under management, but with local authorities still being responsible for the liabilities of the scheme. If there were to be an effective asset pool, then it is likely that there would be significant cost savings resulting from scale. Moreover, this scale would enable the in-housing of the majority of the investment activities of the fund, which is likely to create significant cost efficiencies as well as allowing for a more dynamic investment strategy. As the Lothian case shows, it is possible for there to be effective structures put in place that allow for more efficient investment to take place without having to rely on the external fund management industry.

From a governance perspective, this could lead to a more transparent and consistent governance model. While there are a number of possible structures that could occur, the most likely structure would be one where there is some representation of local authorities on a Pensions Committee, which would set broad asset allocation, risk budgets, and risk-adjusted performance criteria for the investment of the assets. The day-to-day running of the scheme would then be delegated to an in-house investment team. Similarly, there would still be a scheme advisory board as stipulated in The Public Service Pensions Act 2013. This would still have employer and employee representation and provide advice on the administration and management of the fund as well as providing some sort of support to a Pensions Board that would have oversight responsibilities to ensure the fund was run in accordance with applicable laws and regulations.

One thing that occurs under this scenario is an increase in centralisation and so much of the local governance that exists would no longer occur. There may however, be advantages to such a scenario as local councillors may be more focussed on the performance and accountability of a centralised fund, and it is likely that they would exert a high degree of scrutiny on the performance of the pooled assets.

Merger

The final scenario is for the Scottish LGPS to merge and so assets and liabilities sit in one fund. Within the local government setting, a merger is possible as salaries and benefits across the country result from national wage agreements.³⁵ If there were to be a merger, then this is simplest where schemes are approximately equally funded. However, it is unlikely that such a scenario will exist over the coming years given current deficits and the current investment environment. In merging the funds, the assets and liabilities still have to be allocated by employer, as employers would still be liable for the pension obligations that they have accrued, for any deficit that they are liable for currently, and for any new benefits that are promised.³⁶

In merging the funds however, there are likely to be additional gains from better risk-pooling and risk-management, as well as the potential gains on the investment side that have been discussed with pooling of scheme assets.

The merging of the Scottish LGPS is likely to have the most far-reaching governance consequences. Governance would no longer be a local government function and would be the responsibility of a quango. Although there would be local government representation on The Pensions Board, the treasury function of local government would no longer have direct involvement in pensions. A merged fund would have a clear governance structure with strategy being set by a Pensions Committee and oversight being provided by The Pensions Board, however, there would be a significant disconnect between the employer and the scheme and local engagement.

It is worth noting that this is not the only structure. For example, there could be a lead authority or a joint board. However, it is not clear that effective decision-making would result. In this structure, problems of coordination and disagreement with respect to strategy are likely to emerge, as there will be a disparate range of views around the table motivated by a number of factors. Further, it is not necessary to have both a pensions committee and a board as these could be merged as currently happens with unfunded schemes, and so other variations are possible.

³⁵ It is worth noting that there are pension liabilities from non-local government bodies, some of which may trigger cessation valuations in the future. Such liabilities exist whatever the structure, but they will remain the liability of the employer.

³⁶ Such deficits would have to be paid for by the local authority regardless, but could also be tracked and monitored on a consistent basis to ensure equitable treatment of local authorities and the new merged fund.

6. Conclusions

A number of conclusions can be drawn from the preceding analyses that are relevant to the discussions concerning asset pooling in the Scottish LGPS.

First, the trend towards scale in pension funds is a global phenomenon and seems to be gathering pace internationally as well as in the UK. Second, there are real concerns about value for money in pension fund management and scale, on balance, seems to be a significant driver of cost reduction across a range of jurisdictions, including in the UK. Third, there is a growing appetite from more illiquid investments across pension funds as the current low yield environment is both challenging and costly. One key asset class that has emerged as a good match to the investment needs of pension funds is infrastructure, and there are many examples of effective infrastructure investments that drive real value for pension funds.

As examined above, the Scottish LGPS has four options. First, do nothing and maintain the current structure. Second, look to do some more co-investment or sharing of services. Third, pool scheme assets in a manner analogous to the pooling of LGPS assets that is ongoing in England and Wales, and fourth undertake a wholesale merger.

Costs, Fees and Value for Money

From the perspective of the taxpayer, the scenario that delivers the best value for money will be the one that is preferred. Put simply, if pensions can be delivered in a more cost effective way then local services can be maintained at the levels people expect or if the savings are significant, then services can be improved.

Under the current structure, it is likely that significant cost savings could be generated if there was to be a significant scaling up of pension fund assets as this increases the bargaining power of the Scottish LGPS. The duplication across funds in terms of administrative, governance, advisory, and fund management costs, and lack of scale in most of the Scottish LGPS funds, would suggest that aggregate fees across schemes are too high. Pooling is likely to drive significant gains in cost efficiencies.³⁷

If the current approach is maintained, then the problem of fees is likely to remain a challenge. Fees, and in particular, fund management fees are opaque. While it is likely that some improved disclosure via better data collection as is now underway will help to improve this situation in the coming years, it does not necessarily shift the dynamic between funds and fund managers, as there is only a small increase in bargaining power. Pension funds, in all likelihood, would remain price takers.

Infrastructure

Another advantage of scale is the ability to make direct and co-investments in large infrastructure projects. As noted above, these investments, when suitably structured, work well for pension funds as they have predictable cash flows that are often index-linked, and have a

³⁷ This argument also holds for a merger.

longer life, which is good for matching pension liabilities. Moreover, infrastructure is likely to be one of the major investments in the coming years as the global economy transitions to a low carbon world, and many countries in the Western Hemisphere have to upgrade antiquated infrastructure, much of which dates to the industrial revolution.³⁸

That said, what constitutes a suitable infrastructure investment for a pension fund needs to be carefully set out and safeguards put in place to prevent governmental or local issues driving investment to projects where there is no financial return to the pension fund. Any such investments simply weaken any pension fund and increase the cost of member benefits.

What if the Scottish LGPS Pooled?

This is the key question. The scenario where the assets of the Scottish LGPS are pooled leading to a restructuring of assets, a shift to near wholesale in-house investment rather than external management, which creates a dynamic, global, strategic investment fund, that secures better value for money, supports economic growth, and ensures member benefits, is possible.³⁹

However, there are a number of barriers to this.

First, there is a tendency towards the status quo that pervades most if not all organisational structures and institutions. Under the current structure, a large number of people are involved in the running of different schemes across local authorities. Any significant shift towards a more central structure such as asset pooling will remove almost all of these people from their functions as trustees etc. This is unlikely to be popular and is likely to be met with resistance and centralisation is a sensitive issue within local government. However, if there were to be sufficient in-housing of investment functions then this is likely to increase employment as more investment and supporting functions are in-housed rather than outsourced.

However, with respect to the running of pension funds, this is not analogous to other areas of centralisation that have been more contentious e.g. Police Scotland. In looking at the current structure of the Scottish LGPS, local authorities largely set strategy and undertake some monitoring, with the day-to-day activities around key areas such as investment and risk management being outsourced to external providers e.g. the fund management industry. As a result of national wage settlements, all of the pension funds have the same goal, which is simply to pay member benefits in the most cost effective way. There is not, at least at a high level, an issue of localism Vs centralisation that emerges from pooling; it is simply a question of investing taxpayer money in the most cost effective way to secure member benefits.

Second, a restructuring would take time and cost money, both of these factors have to be accepted and the costs and benefits of the envisaged structure would have to be clear and accepted by a wide range of stakeholders. Moreover, the gains to any long-term strategic shift

http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/new-horizons-for-infrastructure-investing

³⁹ The discussion around asset pooling is also applicable to the case of merger but with the different governance implications as discussed in Section 5.

in the operation of the Scottish LGPS are likely to emerge over a number of years rather than immediately or in the short-run.

The final and most important issues are getting the right structures, regulations, and people in place. The governance of any pool is crucial and appropriate employer and employee representation will help ensure that the fund is run for the benefit of members, sponsors, and ultimately the taxpayer.

Similarly, having a very clear delineation between the goals of the fund and the wants and needs of government is crucial. However, this independence must also be overlaid with sufficient oversight, reporting, and monitoring of any pool, as the only goal of any fund should be to secure and pay member benefits in the most cost effective manner.

Ultimately, and most importantly, is the need to get the right people in place, and this, more than any other factor will be fundamental to success. There are clearly very experienced individuals both nationally and internationally, and a fund as large as a pooled Scottish LGPS would be able to attract and recruit the best people. Structures and regulations while important do not lead to success, it is about getting the right culture in place and this can only be done with the right leadership and people.

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Appendix 1 – Notable OMERS Infrastructure Investments

Associated British Ports ("ABP") is the United Kingdom's largest and leading ports group and handles approximately 25% of the United Kingdom's seaborne trade by weight.

Bruce Power is Ontario's largest independent power generator and currently provides more than 30% of the total electricity supply in the Province of Ontario.

Caruna is a regulated electricity distribution utility serving southern, southwestern, western and northern Finland and is the country's largest electricity distribution network with a 20% market share.

Ellevio is a regulated electricity distribution utility serving the capital area of Stockholm, central Sweden, and the Swedish west coast. It is the country's second largest electricity distribution utility with a 17% market share.

HS1 Limited ("HS1") is party to a concession until 2040 to operate, manage and maintain the 109 kilometre high-speed rail line connecting St. Pancras International train station, through Kent, to the Channel Tunnel, as well as the international stations at St. Pancras, Stratford, Ebbsfleet and Ashford.

LifeLabs is an integral part of the healthcare system in the Provinces of Ontario and British Columbia ("BC"). In both Ontario and BC, LifeLabs provides approximately two-thirds of the community laboratory testing services.

Midland Cogeneration Venture ("MCV") is a natural gas-fired, combined cycle cogeneration plant that represents approximately 15% of the power consumption for Michigan's Lower Peninsula.

NET4GAS ("N4G") is the exclusive gas Transmission System Operator (TSO) in the Czech Republic. N4G operates more than 3,800 km of pipelines providing international transit of natural gas across the Czech Republic and domestic transmission of natural gas to its partners in the Czech Republic, transporting 45 billion m³ of natural gas annually.

Oncor Electric Delivery Company LLC ("Oncor") is a Texas-based electricity transmission and distribution company serving ten million customers and is the sixth largest transmission and distribution utility in the United States.

Scotia Gas Networks ("SGN") is a regulated gas distribution utility serving Scotland and Southeast England and is the UK's second largest gas distribution network.

Teranet is an international leader in electronic land registration. The company owns the Electronic Land Registry System ("ELRS") in Ontario and has an exclusive license to access the data in and operate the ELRS and to provide related value added products until 2067. Teranet also has an exclusive license to operate the personal property and land titles registries in Manitoba.⁴⁰

⁴⁰ Source: <u>http://www.borealis.ca/case-studies</u>

Appendix 2 – A note on ESG Concerns

In light of the Financial Conduct Authority's Asset Management Market Review, and an increasing concern about transparency in the fund management industry with respect to costs and fees, there is a trend towards passive management as this is seen as more cost effective way of investing. However, by investing increasing amounts of money in passive vehicles, those who manage money on behalf of beneficiaries such as trustees, will have to ensure that asset managers hold firms to account following the wishes of investors and fiduciaries. 41

There have been attempts to address voting and governance issues in segregated funds. Over the past few years, the Association of Member Nominated Trustees in conjunction with a range of partners has developed Red Line Voting. 42 This approach to engagement and voting is to enable far greater direction from institutional investors in environmental, social, and corporate governance issues. In particular, trustees can direct voting across key issues such as climate change to the manager of the segregated fund, and this voting will apply to all UK firms held in the pooled vehicle.

However, in looking at this issue, although evidence is anecdotal, there is seems to reticence on the part of asset managers ⁴³ to allow asset owners to direct votes, with asset managers citing problems of coordination and conflicting instructions. 44 Moreover, there is a concern that asset managers only respond to large funds in following directed votes and smaller funds do not have parity of treatment.⁴⁵ Further, recent evidence shows that best practice in voting as described under The UK Stewardship Code (2010) such as public disclosure of management voting records and the disclosure of voting rationales is patchy at best. 46

In relation to the Scottish LGPS, ensuring that ESG mandates are satisfied is crucial to effective management of the scheme assets. Size, although somewhat anecdotally, seems to matter in ESG.

⁴¹ Recent debates fossil fuel and asset stranding are good examples of the issues that scheme members feel strongly enough about to insist on divestment.

42 http://redlinevoting.org

⁴³ Asset managers is being used as a catchall for the different parties who may exercise the vote such as nominees, custodians etc.

⁴⁴ https://www.ft.com/content/369b9ada-55a3-11e6-9664-e0bdc13c3bef

⁴⁶ http://www.shareaction.org/wp-content/uploads/2016/01/AssetManagerVotingPracticesFinal.pdf

Appendix 3 – The Mercer Report

The Mercer Report is a detailed piece of work and examines a number of areas and issues that are highly relevant to the question of what should happen to the Scottish LGPS. However, the report itself is limited by the quality of the data that can be used, which the report itself acknowledges. It is likely that much better analytics will be possible with the use of the new cost and fee data collection template but this is not going to be possible in the near future.

With respect to size and costs, as Mercer note on page 7 of their report, "Clearly it does however make intuitive sense that we would expect there to be some form or relationship between size and cost, and further work would be needed to strip out the impact of investment strategy choices in particular." Ultimately, this means that while the figure on page 6 could indicate no relation between costs and fund size, it is only based on the results of the 2015 accounts, it takes no account of fund strategy, and can only address the issue of observable costs. Moreover, on page 11 Mercer acknowledge the likelihood of fee savings once investment strategy is adjusted for across the funds.

In looking at the figure on page 6, there are alternative explanations (none of which may be correct). First, Strathclyde has a higher investment in alternatives and these are more expensive compared to other investments. However, given the size of the Strathclyde fund, these costs would have to be considerable. Second, Strathclyde is the largest fund, which may afford it market power. As such, it may be the case that Strathclyde is able to get better cost disclosure from asset managers due to its size and get more implicit cost disclosures. Smaller funds, however, may be incurring higher costs but these are on the implicit cost side as opposed to the explicit costs and this would be missed from the analysis.

Alpha and active management is also discussed on page 7 and this is a difficult case to make either way. My understanding of the options facing the Scottish LGPS is one of the long-run futures of the schemes and is not about a wholesale shift from active to passive. Active management has a place within any investment strategy. The issue, however, outside of the future structure of the Scottish LGPS, is the cost of active management and what benefits, if any accrue to the pension funds. Under the current structure, it is likely that too much of the active management investment that is held incurs high costs, as most active management is expensive. Moreover, the returns data on active investment presented in the report (p. 6) suggests that there are investment managers within the Scottish LGPS who are underperforming significantly given the rise in global equity markets since 2010.

Again, in terms of cost savings, 80% of private equity investments are in funds of funds structures. On a costs and fess basis, this is likely to be very expensive. Private equity, for the most part, has complex payoffs to the private equity managers and while it can be a profitable investment, it will be less profitable in any fund of fund structure and the investment chain becomes very opaque in most cases.

Overall, the current structure of the Scottish LGPS is likely to be incurring costs that are too high and this can be inferred from the Mercer Report.

One statement in the Mercer Report on page 15 that I cannot find a suitable explanation for is the statement that fee savings may not be long lasting. It is not clear to me that if there was to be a pooling of assets and an in-housing of investment that cost savings could not be achieved and that these efficiency gains would persist.

It is also worth noting that the Scottish LGPS has a low cost base as acknowledged in the Mercer Report, and that for every basis point (0.01%) shaved off costs this equates to £3.5m.

Important Information

This report is provided for discussion purposes only. It is not intended to be the basis for any investment decisions nor does it guarantee any future performance of any investment be it asset class or market.

The information used in this report is from a range of third party sources, and while these sources are believed to be reliable, it has not been verified independently. As such, no representations are being made with respect to the quality and accuracy of the information. No responsibility or liability will be incurred, including indirect, consequential, or incidental damages for any error, omission, or inaccuracy contained within the report.