CALL FOR EVIDENCE ON THE FUTURE STRUCTURE OF THE LOCAL GOVERNMENT PENSION SCHEME

Submission by: East Riding of Yorkshire Council as Administering Authority for the East

Riding Pension Fund

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The East Riding Pension Fund administers the LGPS on behalf of 142 employers¹ in the Yorkshire and Humber area. The Fund has net assets of £3.1bn¹, a funding ratio, at the 2010 valuation, of 74%, and 93,750¹ members, of which 24,400¹ are pensioners or their dependants.

The East Riding Pension Fund is predominantly managed in-house, with the internal investment manager responsible for c. 75% of Fund assets across Equities, Fixed Income, Property, and Alternatives. The Fund has one external investment manager responsible for the remaining 25% of Fund assets across Overseas Equities and Fixed Income. These arrangements have been broadly in place for the last 20 years.

The Fund has a strong long term track record, both in terms of the Fund's internal strategic benchmark and the WM Local Authority Average, which covers c. 80% of the UK LGPS, as shown in the following table:

	3 years	5 years	10 years	20 years
East Riding Pension Fund	8.8%	6.8%	10.1%	8.0%
Strategic Benchmark	8.5%	7.6%	10.2%	8.2%
WM Local Authority Average	8.1%	6.5%	9.4%	7.8%

Annualised performance to 31 March 2013

Source: WM Company

The response to the call for evidence considers the high level and secondary objectives laid down in the consultation document, and provides answers and options posed by the five subsequent questions, with supporting information provided in the Appendices.

The response also includes a critical analysis of existing studies that have analysed institutional pension funds, including LGPS funds, which are considered to be relevant to this call for evidence.

¹ All figures as at 31 March 2013

HIGH LEVEL OBJECTIVES

1. Dealing with deficits

It should be recognised that the current deficits in the LGPS have built up over a significant period of time due to a number of reasons including reduced contribution rates in the 1990's, weaker than expected investment performance in some risk assets, incorrect assumptions regarding longevity trends, and historically, and possibly artificially, low interest rates and their impact on discount rates. As a result, there is unlikely to be a short term solution to reducing these deficits.

Pension fund deficits (and surpluses) are an interaction of both the value of a fund's assets and the value of its liabilities. Therefore, any proposals for reform aimed at dealing with deficits must consider both of these areas in order to be effective.

The key determinants of the value of a fund's assets are:

Investment performance

An improvement in investment performance, other things being equal, will result in an increase in the level of assets. Investment performance is considered in more detail under "Improving investment returns".

Costs

Investment management and pension administration costs are deducted from the value of the fund's assets and, therefore, a reduction in costs will have a beneficial impact. Costs are considered in more detail under "Improving investment returns".

Contributions

Higher pension contributions, both employee and employer, will have a beneficial impact on the level of assets.

Employee contributions have been agreed with the Trade Unions as part of the LGPS 2014 reform and, therefore, there is unlikely to be scope to adjust these in the foreseeable future, other than as part of the proposed cost cap arrangements. In addition, a further rise in employee contributions may result in an increase in opt-out rates which could reduce the ability of Funds to close existing deficits and be contrary to the Government's drive to increase pension participation rates.

However, even without further changes to the new Scheme there will still be variability in employee contributions depending on the level of opt-outs or take-up of the 50/50 option, in addition to further payroll reductions at Fund employers.

Therefore, employer contributions are the only remaining source of increasing contributions. However, there have been significant increases in contribution rates in recent years, predominantly to fund past service deficits, and further increases are likely to be unpalatable at a time when there is significant pressure on employer budgets.

The key determinants of the value of a fund's liabilities are:

Actuarial assumptions

The variation in actuarial assumptions can have a significant impact on the value of a fund's liabilities.

The key actuarial assumptions are the discount rate, effectively inflation and asset out-performance assumptions, wage growth (linked to inflation) and longevity. There is a great deal of subjectivity involved in formulating these assumptions and scope to make "adjustments" if deemed necessary. It is important that LGPS funds do not merely adjust their assumptions in order to reduce their deficits.

Therefore, LGPS funds, and their actuaries, should provide a more robust justification of the main assumptions used within the valuation. They should also provide a sensitivity analysis to show the impact of changes in those assumptions, especially as the majority of assumptions are based on data at a certain point in time, which tends to fluctuate over time.

Whilst it may be possible to justify different assumptions between funds, there needs to be a consistent basis with which to compare LGPS funds. Therefore, following the results of the current valuation exercise a common set of assumptions should be applied to each LGPS fund in order to enable an effective comparison between funds.

It is important to note that a large proportion of existing fund deficits have arisen due to historically low bond yields, as a result of exceptionally loose monetary policy following the global financial crisis in 2008 – 09, and subsequent economic slowdown. If bond yields return to historic long term averages there will be a significant improvement in funding positions, depending on current allocations to fixed income and the extent of hedging. Although the timing and extent to which bond yields "normalise" is uncertain, funds should be aware of the potential beneficial impact of this reversion and not make short term decisions that could have a negative impact on their funding position in the long term.

Changes to benefits

The proposed changes to benefits under the new Scheme will have a positive impact on fund affordability in the long term. However, due to the protections in place for members within 10 years of retirement it is unlikely to have a significant impact on affordability in the short term. However, as with employee contributions the new Scheme terms have been agreed with the relevant parties and it is unlikely that any significant changes can be made in the short term. In addition, depending on the nature of the employer, the changes to the new Scheme could result in a reduction in affordability compared to the existing Scheme.

Extent of hedging or asset/liability management arrangements

Funds that employ liability hedging or asset/liability management will benefit from a reduction in the volatility of the level of liabilities, and consequently the variability in the funding position. However, there will be a cost to reducing this volatility, in terms of financial up-front and ongoing costs, increased counterparty risk, and limiting the ability to reduce existing deficits. As a result, funds need to decide whether the cost is acceptable for the benefit that is received.

Liability hedging is not a panacea and there will be market environments where it makes financial sense to do it but there will also be other times when it is an

unnecessary cost. Therefore, funds need to be flexible towards their approach to liability hedging over time. In addition, the majority of LGPS funds are relatively immature in terms of cash flow profile and have more scope for absorbing investment risk.

Funds do not have to focus solely on sophisticated, and potentially costly, hedging techniques in order to reduce the volatility of deficits. They could instead focus on investment in assets that are a good, but not necessarily perfect, long term match for their liabilities.

2. Improving investment returns

Although the call for evidence focuses on improving investment returns it should perhaps be made clearer that funds should be seeking to improve risk-adjusted returns. A fund could potentially improve investment performance merely by accepting a higher risk profile in its asset allocation which may result in greater volatility.

An analysis of the performance data for LGPS funds over the 10 and 20 years to 31 March 2012 and investment management and pension administration cost data for the 3 years to 31 March 2012 (see Appendix 2 for the full analysis) highlights a number of key issues with regards to the UK LGPS.

Size

The review of existing studies (Appendix 1) highlighted that there was no clear evidence that larger funds generate better performance over the long term compared to smaller funds, although there is wider dispersion of performance in smaller funds.

The analysis of the investment performance data for the LGPS (see Appendix 2 for more details) suggested that there is no clear evidence that size is a key determinant of performance. This is supported by a correlation coefficient (r^2) between fund size and fund performance of just 0.24 over the 10 year period to 31 March 2012 and 0.27 over the 20 year period to 31 March 2012. The correlation falls further, to 0.18 and 0.20 respectively, when comparing externally managed LGPS funds only.

Management arrangements

The review of existing studies (Appendix 1) demonstrated that internally managed funds tend to generate better performance over the long term, partly due to lower transaction costs as a result of significantly lower portfolio turnover (see below). This is due to having a longer term focus with less emphasis on short term performance. In addition, these funds tend to have considerably lower investment management costs which enhances the performance differential to externally managed funds.

There is evidence that management arrangements are a key determinant of performance. Internally managed LGPS funds have outperformed externally managed funds by 80bps p.a. over the 10 years to 31 March 2012 and by 50bps p.a. over the 20 years to 31 March 2012. This is before the impact of investment management costs (see below) which, when taken into consideration, increases the out-performance of internally managed funds by a further 20bps p.a.

This difference in performance does not appear to be driven by a higher asset allocation risk profile in internally managed funds, and WM have commented that internally managed funds generate higher risk-adjusted returns over the long term.

Transaction costs

A large part of the out-performance of internally managed LGPS funds is due to lower portfolio turnover. It is estimated that externally managed funds incur transaction costs in Equities that are more than three times higher, on an annualised basis, than internally managed funds. There may also be an additional impact from lower levels of portfolio turnover in the other major asset classes, particularly as transaction costs are likely to be higher than Equities in both Property and Alternatives.

Therefore, there is the potential for funds to improve investment returns purely by taking a longer term investment focus and reducing portfolio turnover, including reducing the turnover of external investment managers and also encouraging these managers to take a longer term approach. The savings in transaction costs, as a source of additional return, should not be under-estimated.

In addition, a longer term focus is also more compatible with the emphasis on stronger corporate governance and increased level of engagement.

Investment management costs

The review of existing studies (Appendix 1) highlighted that although larger funds tend to have lower investment management costs, as a percentage of funds under management, these benefits tended to reduce as fund size increases.

The analysis of the investment management cost data for the 3 years ended 31 March 2012 (see Appendix 2 for more details) suggested that there is some evidence that larger funds have lower management costs (c. 10 - 15bps p.a.) as a percentage of assets. This is supported by a correlation coefficient (r^2) of -0.44 for the 3 year period to 31 March 2012, although this falls to -0.37 when comparing externally managed funds only.

In addition, internally managed funds have significantly lower investment management costs (c. 20bps p.a.) than externally managed funds.

Pension administration costs

The review of existing studies (Appendix 1) highlighted that there was no clear evidence that larger funds have lower pension administration costs and that it was difficult to make a direct comparison due to differing levels of service.

The analysis of the pension administration cost data for the 3 years ended 31 March 2012 (see Appendix 2 for more details) suggested that there is some evidence that larger funds have lower administration costs (c. £5 – 25 per member p.a.). This is supported by a correlation coefficient (r^2) of -0.39 for the 3 year period to 31 March 2012.

As is the case with investment management costs, internally administered funds have lower pension administration costs (c. £15 per member p.a.) than externally administered funds.

SECONDARY OBJECTIVES

1. To reduce investment fees

The review of existing studies (Appendix 1) highlighted that there was no clear evidence that the wholesale merger of funds would result in material cost savings after taking into account the costs of transition. However, there was some support that increased collaboration between funds could capture the majority of the cost benefits without the need for a potentially expensive and disruptive merger process.

Larger funds tend to have lower investment management costs, as a percentage of funds under management, but these benefits may not accrue to a combined fund due to potentially considerable transition costs, and there is also evidence that the cost benefits diminish as the size of the fund increases.

In addition, it is likely that a pooled fund, without the full merger of Fund's assets and liabilities, will have to pursue multiple investment strategies in order to reflect the different maturity profiles and risk appetites of the component Funds, which again suggests that the cost benefits may not accrue to a combined fund.

There is very little publicly available data on LGPS investment mandates with which to make a cost comparison between funds, although there is evidence that investment management fees have become more competitive in recent years.

However, the move towards more complex and higher cost investment strategies by a large number of LGPS funds, such as Global Equities, Diversified Growth Funds, and Absolute Return funds has resulted in a smaller reduction in investment management costs, as a percentage of funds under management, despite the increase in the value of assets in recent years.

It is possible that significant cost savings could be generated without having to resort to the costly and complex process of merging funds, with the associated loss of local accountability, such as:

- Greater collaboration between funds, in a similar way to that seen in recent framework agreements for custodian services and actuarial, benefits, and investment consulting. A framework agreement would certainly increase the level of competition on costs from investment managers. However, it may be harder to develop a framework agreement for investment management services due to the wide ranging and somewhat bespoke nature of the services provided. Nevertheless, it could still be useful for more generic services such as index tracking.
- As part of the tender process for investment management mandates within the LGPS, investment managers could be required to provide that particular service to all interested LGPS funds with a sliding fee scale, to which all participating funds would benefit from, depending on the total assets under management. This would enable LGPS funds to retain the responsibility for asset allocation and manager selection but still benefit from the wider economies of scale within the LGPS. This is already happening, to a certain extent, with some asset managers, particularly within Alternative investments.

• A number of LGPS funds have considerable experience and strong performance track records in direct investment in certain asset classes via in-house management (see Appendix 2 and Objective 6 below). These funds could offer their expertise to other LGPS funds either through an investment management agreement, a unitised or pooled vehicle, or as part of a shared service arrangement. Costs are likely to be significantly lower than traditional asset managers, with no detrimental impact on performance, whilst still covering the costs of additional resources that would be required and permitting a modest profit incentive for the host authority.

2. To improve the flexibility of investment strategies

The improvement in the flexibility of investment strategies for LGPS funds should be considered across three different strands:

• Flexible strategic asset allocation

Funds should set a strategic asset allocation that is expected to meet the target rate of return over the long term. This should be reviewed on a regular basis, in conjunction with the triennial actuarial valuation cycle, to take into account changes in the target rate of return and changes to asset class forecasts.

Funds should also ensure that the strategic asset allocation has sufficient flexibility to respond to market movements which, due to short term volatility, can create attractive opportunities in terms of risk-adjusted returns. This can be achieved by setting ranges around which the strategic allocation can be adjusted. However, it is important that these ranges are wide enough to take advantage of market opportunities but not too wide that the original objectives of the strategic asset allocation are not met.

• Flexible approach to investment selection

Funds should ensure that they have the appropriate knowledge and experience in order to conduct detailed due diligence on a wide range of potential investments in a variety of asset classes, in order to generate suitable risk-adjusted returns. They should also ensure that there is a flexible decision making process, including delegation to suitably qualified and experienced officers, in order to take advantage of appropriate investment opportunities.

As an example, in late 2010 East Riding Pension Fund identified Alternative Credit as a potentially attractive area due to dislocations in the credit markets which was expected to generate exceptionally strong risk-adjusted returns in the medium term. This opportunity arose across a number of investments including Real Estate and Infrastructure Debt, Corporate Senior and Mezzanine Debt, Aircraft Leasing, Healthcare Royalties, and Bank Capital Release. Due to the flexibility of the Fund's asset allocation, an internal investment resource with extensive knowledge and experience with which to conduct due diligence, and appropriate delegation arrangements, the Fund has invested or made commitments to investments totalling £320m (c. 10% of the Fund) in less than 3 years, with a further increase to c. 15% of the Fund expected over the next 2 years.

Investment regulations

The LGPS investment regulations should not affect the flexibility of investment strategies. The current regulations, particularly the relatively arbitrary limits on different types of investment, are likely to hamper the ability of LGPS funds to take a flexible investment approach.

For example, without the recent amendment to the current investment regulations (increasing the maximum limit on investments in limited partnerships) there was a real risk that some LGPS funds, including East Riding Pension Fund, would be prevented from making investments that were expected to generate exceptionally attractive risk-adjusted returns.

Therefore, given the new Scheme is being implemented from 2014 and the current debate on flexibility of investment strategies, it is appropriate that there should be a complete review of the LGPS investment regulations to ensure that they are relevant and fit for purpose in the long term.

It is important to stress that the LGPS investment regulations should facilitate the flexibility of investment strategies. It should not set limits on individual asset classes or investment vehicles nor should it determine which types of investments or vehicles a Fund can invest in. LGPS asset allocation and investment focus is dynamic and constantly changing and there is a risk that the regulations could rapidly become out of date.

For example, the current investment regulations are unclear as to the use of derivatives within LGPS funds. Funds have become more sophisticated in recent years and are looking to reduce their risk exposure whilst maintaining an acceptable investment return, and the use of derivatives is a good way of achieving these objectives. Depending on the interpretation of the regulations LGPS funds are not permitted to invest in derivatives. However, funds have been able to circumvent this restriction merely by investing in a pooled fund, at an additional cost, which then invests in the underlying derivatives.

In addition, it is the Elected Members, supported by Officers and Advisers, who are responsible for determining the appropriate asset allocation for the Fund having due regard for the particular circumstances of the individual Fund including maturity profile, funding levels, and risk appetite.

However, it is important that the regulations ensure that Funds demonstrate appropriate due diligence, including obtaining suitable advice, when determining the strategic and tactical asset allocation and selecting investment managers or individual investments.

3. To provide for greater investment in infrastructure

The East Riding Pension Fund first invested in Infrastructure in 2004, and currently has investments plus undrawn commitments equivalent to 3.5% of the Fund, which is expected to increase to c. 5% in the medium term. The Fund is of the opinion that there is already adequate flexibility to source appropriate investment opportunities within this asset class.

Within Infrastructure, the Fund has deliberately chosen to invest in low risk investments with limited exposure to construction risk, availability-based rather than demand-based assets, and generally UK-focused. If the Fund chose to relax these criteria there would be a

significant increase in the potential investment opportunities to consider although the risk-return profile would be materially different.

The major risk to the asset class, which may also be preventing additional investment, is regulatory risk. A stable regulatory regime, which supports and appropriately rewards infrastructure investment, is the most effective way of facilitating investment in the asset class. The renegotiating of existing PFI investments and the mixed messages in the last couple of years with regards to renewable power generation in the UK are two examples of an uncertain regulatory environment. This uncertainty not only impacts on additional investments but also requires an investor to reflect this additional risk in their return expectations when considering a potential investment.

There has been some debate suggesting that a merger of LGPS funds or the pooling of investments would result in a significant increase in investment in UK infrastructure but this is a complete misnomer. It is not the scale of Funds that is restricting investment in UK infrastructure, as there are a large number of existing pooled funds, quoted or unquoted, available to LGPS funds. The issue is that these funds tend to be focused on operational assets that are not subject to construction risk. Investments in UK operational infrastructure assets are a good fit for LGPS funds given their long term contractual, stable, inflation-linked, sterling-denominated cash flows and relatively low risk profile.

Investments in infrastructure at the pre-planning or pre-construction stage have a completely different risk profile and require significantly higher returns, in the absence of government guarantees, which do not appear to be forthcoming.

The overriding objective should be for the Government to create an opportunity for investors to generate an attractive risk-adjusted return on new infrastructure assets in the UK. This includes setting out a range of projects that require financing and may require offering investors a range of funding options e.g. senior debt, mezzanine, and equity exposure so that potential investments can be tailored to an individual Fund's risk appetite. Despite the launch of the Pension Infrastructure Platform in March 2012, other than a commitment to low management fees, there has been minimal progress in appointing suitable investment managers and a lack of new infrastructure projects on which to conduct due diligence to determine whether this would be an appropriate investment.

If the UK regulatory regime is stable and the asset class offers attractive risk-adjusted returns additional measures should not be required to facilitate investment in UK infrastructure. LGPS funds are very capable of analysing investments in terms of risk-adjusted return and suitability if the opportunities are available. However, it should be highlighted that, in the absence of some form of Government guarantee, new UK infrastructure investments would need to offer higher returns than are currently available from existing operational assets to compensate for the additional risk inherent in the investment.

4. To improve the cost effectiveness of administration

The review of existing studies (Appendix 1) highlighted that, although there is no clear evidence that larger funds have lower pension administration costs, there are potential savings from combining resources through the elimination of task duplication. However, it was not clear that these savings would be sufficient to compensate for the loss of local presence.

An analysis of the pension administration cost data for the LGPS funds for the 3 years to 31 March 2012 (see Appendix 2 for the full analysis) demonstrated some evidence that larger

funds have lower pension administration costs, although it was not conclusive. There is also evidence that internally administered funds have lower pension administration costs than externally administered funds. In addition, there is anecdotal evidence that internally administered funds have better levels of service.

There are valid concerns that the cost data that is currently publicly available for LGPS funds is not particularly robust and there are also varying levels of service provision, both of which make it hard to make a direct comparison between funds.

Although cost efficiency and service levels are important the significance of local presence, including face-to-face contact with members where necessary, should not be underestimated, particularly with regards to maintaining high levels of participation at a time when there are fundamental changes to the Scheme. However, there are ways in which costs can be reduced without sacrificing this local presence:

- Sharing best practice across LGPS funds on a formal or ad-hoc basis possibly via a central resource;
- Shared service arrangements between LGPS funds in order to reduce task duplication. If these arrangements are between geographically adjacent funds it is unlikely that local presence will be lost; and
- Moving from an externally administered to an internally administered function to benefit from the reduced costs and, arguably, better service levels.

5. To provide access to higher quality staffing resources

Investment management and, to a certain extent, pension administration are highly specialised roles requiring extensive knowledge, experience and qualifications. The majority of the people who work in these roles, particularly within investment management, are in the private sector and are located in the London area (although there are some resources in larger cities such as Edinburgh and Manchester). Therefore, it can be exceptionally difficult to recruit and retain suitably qualified and experienced staff outside these geographic areas.

More information on recruitment and retention of staff is provided under Objective 6 below but the key issues to consider are:

- There must be a long term commitment to increasing the scale and improving the quality of resources within the LGPS in order to attract suitable candidates, which includes a commitment to ongoing training and development;
- Remuneration must be competitive with the private sector alternatives (i.e.
 institutional pension funds of a similar size and complexity) in order to secure and
 retain appropriate candidates; and
- LGPS funds should take advantage, where possible, of existing resources within those funds that already have internal resources, both in terms of investment management and pension administration.

6. To provide more in-house investment resource

The review of existing studies (Appendix 1) highlighted that internally managed funds tend to generate better performance over the long term, and have significantly lower investment

management and pension administration costs than externally managed or administered funds.

The analysis of the performance and cost data of the UK LGPS (Appendices 2 – 6) provided evidence that internally managed funds have:

- Better long term performance (50 80bps p.a.);
- Significantly lower transaction costs (20 50bps p.a. 1);
- Lower investment management costs (20bps p.a.); and
- Significantly lower pension administration costs (£15 per member p.a.).

Therefore, there is compelling evidence that the internal management of LGPS funds can provide tangible benefits, both for investment management and pension administration.

In addition, the presence of an internal investment resource can prove invaluable in providing the Pension or Investment Committee with impartial advice on a complex range of investment matters at no additional cost and avoiding the potential conflicts of interest when receiving advice from investment managers or consultants.

The main issues arising from internal management are:

Fund size

There are currently 5 internally managed funds in the LGPS (as defined by WM Company) with assets under management ranging from £2.6 – 8.8bn as at 31 March 2012. This suggests that funds need to be of a certain size before considering an internal investment resource.

However, this is not necessarily the case as the majority of the current internally managed funds have had an internal investment resource in place for over 20 years when they were significantly smaller. In addition, a number of other LGPS funds have increased the level of internal investment resources in recent years. This suggests that size should not be a major impediment.

Increasing complexity

There is an argument that, in recent years, asset allocation and governance arrangements have become wider ranging and more complex, which suggests that internally managed funds would need to be better resourced and, therefore, larger than may have been the case in the past.

Keyman risk and succession planning

Internally managed funds are, by their nature, relatively small in terms of the number of employees and there is significant keyman risk if staff were to leave, particularly due to the specialist nature of the roles. In addition, succession planning can be particularly difficult within a small investment team.

¹ Reflected in the long term performance differential

Recruitment and retention of staff

Investment management and pension administration are specialised fields requiring suitable qualifications and extensive knowledge and experience. Therefore, it can be difficult to recruit and retain appropriate staff, particularly in geographic areas where there are no existing comparable private sector resources and especially within existing local authority pay scales and constraints.

This is highlighted by a recent remuneration report published by Greenwich Associates in July 2013 which showed that total remuneration for officers in UK Corporate Pension Funds was more than double that of officers in Local Authority Pension Funds.

The potential impact on performance as a result of not being able to recruit and retain appropriately qualified and experienced staff should not be underestimated.

Potential solutions to the issues raised above are:

Fund size

A fund size of c. £1 – 1.5bn should be sufficient to make a full internal investment resource at least cost competitive when compared to the average costs of an externally managed fund, even with the additional resource requirements that are now required. Larger funds would obviously be able to benefit from additional economies of scale.

Funds do not necessarily have to set up a full internal investment resource at the outset and could increase the level of internal resources over time. This would also avoid the potential issue of recruiting sufficient numbers of appropriately qualified and experienced investment personnel all at the same time.

An alternative approach would be to enter into an investment management agreement or shared service arrangement with other LGPS funds, possibly with those funds that already have an internal investment management resource. This would enable funds to capture the benefits of scale and performance without having to establish an internal resource from scratch.

• Realistic and competitive remuneration

Local authorities need to recognise that they must offer a remuneration structure that is sufficient to attract and retain appropriately qualified and experienced staff. This is likely to be incompatible with the current local authority remuneration structure but would still offer a significant cost benefit compared to the alternative of external management, as demonstrated in Appendix 2.

One alternative structure would be to follow the Canadian public sector pension fund model whereby a quasi-independent entity is created, majority-owned by the local authority, which would permit the decoupling of remuneration from the existing local authority pay structure.

Q1. How can the Local Government Pension Scheme best achieve a high level of accountability to local taxpayers and other interested parties – including through the availability of transparent and comparable data on costs and income – while adapting to become more efficient and to promote stronger investment performance?

High level of accountability to local taxpayers and other interested parties

The potential reform of the LGPS must ensure that the Scheme is sustainable in the long term. Sustainable should mean that the Scheme is affordable to the taxpayer but also ensuring that it is affordable for members and provides a sufficient retirement income in order to maintain high levels of participation.

In order to maintain accountability to local taxpayers, there must continue to be local decision making by elected officials. Although this would probably rule out the wholesale merger of the LGPS it does not have to prevent closer collaboration between LGPS funds.

Availability of transparent and comparable data on costs and income

There is currently insufficient information available to permit a robust comparison of different LGPS funds. This includes data on investment performance, investment management costs, pension administration costs, and actuarial information. All of this data should already be readily available within each LGPS fund but there needs to be a central repository to collate and analyse the information and ensure that it is comparable. This should be a minimum requirement for LGPS funds in the future.

It is exceptionally difficult to determine the appropriate options for reform when using insufficient, incomplete, and incomparable data. Therefore, DCLG and the Shadow Scheme Advisory Board need to ensure that when assessing the proposed options they are basing their judgement on as much good quality information as possible. This may require a request for detailed information, to which all LGPS funds must respond, that should be robustly analysed. This is likely to be relatively resource intensive and potentially costly but vital in determining the appropriateness of proposed reforms.

• Increase efficiency and promote stronger investment performance

There are a number of ways in which LGPS funds can become more efficient and improve investment performance. More detail on these options is provided throughout this submission.

In summary, both cost efficiency and investment performance can be improved in the following ways:

- Increased collaboration between LGPS funds through framework agreements, shared service arrangements, management agreements, and sharing best practice; and
- Increase in the level of internal management and administration arrangements which are considerably cheaper than external arrangements and no less effective.

Q2. Are the high level objectives listed above those we should be focusing on and why?

The overriding objective of the current LGPS reform project should be to ensure that the LGPS is sustainable over the long term. In order to be sustainable there has to be a long term focus on reaching, and maintaining, an appropriate level of funding that will be sufficient to pay fund liabilities when they fall due.

As stated in the response to the high level objectives, the funding ratio will be driven by the growth in assets, either by way of investment performance, costs, or contributions, and the growth in liabilities, either by way of appropriateness of actuarial assumptions, changes to benefits, or the extent of liability hedging.

Therefore, the high level objectives are the ones that should be focused on although there is an argument that there should be an equal focus on the liability side of the equation as well as the asset side. In addition, the second objective of improving investment performance should be clarified to improving risk-adjusted performance for the reason outlined in the response to that objective.

In order for the LGPS to be sustainable in the long term there needs to be a focus on maintaining high levels of participation. This is to ensure that contributions are sufficient to fund current deficits but also to ensure that members have adequate provision for retirement to avoid increased dependence on the State pension provision. Therefore, consideration should be given to including "maintaining high levels of member participation in the LGPS" as a high level objective.

How should success against these objectives be measured?

As stated above there are a number of different factors that influence the high level of objectives and, in order to determine whether these objectives are being met, it would be appropriate to measure each of these influences.

Therefore, as a minimum the following key data should be measured on a regular basis, most likely on an annual basis, and monitored by a central resource to enable comparison between LGPS funds:

- Funding ratio using common assumptions to enable comparisons across LGPS funds. As the actuarial valuation is performed on a triennial basis there is possibly an argument that there should be an annual interim valuation to reflect changing market conditions. However, due to the additional costs that would be incurred, the resources that would be required, and the long term nature of pension funds this may not be appropriate or necessary.
- Movement in assets this would include a breakdown of the movement in assets into its component parts e.g. net contributions, capital growth, investment income, net costs etc.
- Movement in liabilities this is perhaps harder to calculate without the cost and resource requirements of a full actuarial valuation exercise but a "roll-forward" of liabilities would provide a useful indication.
- Investment performance based on Global Investment Performance Standards (GIPS) criteria and using a common set of asset class definitions. This should also include data that takes into account a Fund's risk profile in order to determine

risk-adjusted returns as this would be a more relevant comparator than just absolute performance. Although the investment regulations require performance data to be produced on a quarterly basis, in order to avoid a focus on short term performance, an annual review would be sufficient particularly as it could incorporate long term historic data.

• Cost data – this should include data on transaction costs, investment management costs, and pension administration costs. This would provide the true cost of the management of the Fund and should be analysed on an annual basis and incorporate long term historic data.

This list is not exhaustive and would be likely to develop over time but what is imperative is that the information provided must be comprehensive and in a format that enables a comparison between LGPS funds. Information that is currently available to enable a comparison is either incomplete (e.g. CIPFA Performance Statistics), or not calculated in a common manner (e.g. DCLG SF3 data) which results in a relatively meaningless comparison.

Q3. What options for reform would best meet the high level objectives and why?

The following options would best meet the high level objectives:

Increase the level of assets that are internally managed or administered

This option has the potential to:

- Improve investment performance (see Appendices 1 and 2 for evidence);
- Reduce investment management and pension administration costs (see Appendices 1 and 2 for evidence); and
- Enable more sophisticated risk management, both in terms of assets and liabilities, in a cost efficient manner.

• Increase the level of collaboration between funds

This option has the potential to:

- Improve investment performance through sharing best practice, reducing costs and, potentially, accessing co-investment opportunities;
- Reduce investment management and pension administration costs through economies of scale including management fee reductions and reducing task duplication, which may also result in an improvement in service levels; and
- Enable more sophisticated risk management, both in terms of assets and liabilities, in a cost efficient manner through sharing best practice.

A combination of the two options above is likely to generate greater benefits than focusing on one option alone.

There has been a great deal of debate regarding the appropriateness of wholesale fund merger within the LGPS. However, this option is unlikely to meet the high level objectives for the following reasons:

- There is no evidence that size is a key determinant of performance (see Appendices 1 and 2 for evidence); and
- Although there is some evidence that larger funds have lower investment management and pension administration costs (see Appendices 1 and 2 for evidence) the majority of these benefits can be secured without resorting to the full scale merger of funds.

In addition, existing LGPS schemes are already, in effect, merged schemes – the East Riding Pension Fund has 142 different employers (at 31 March 2013). However, the key difference is that the larger employers in these schemes effectively act as a "backstop" for the smaller employers in the event of failure. These large employers are well placed, both operationally and geographically, to identify potential issues that may have an adverse impact on the Pension Fund and to act accordingly. It is not clear that a large centrally managed fund would have the same level of insight or control.

Q4. To what extent would the options you have proposed under question 3 meet any or all of the secondary objectives?

The two options proposed under Question 3 would meet the secondary objectives as follows:

- Increase the level of assets that are internally managed or administered
 - Reduce investment fees. Internal investment management costs are significantly lower than external management (see Appendices 1 and 2 for evidence);
 - Improve the flexibility of investment strategies. An internal investment team
 with appropriate knowledge, experience, and resources can rapidly respond
 to market opportunities as and when they arise. They can also identify
 attractive market opportunities and provide an unbiased assessment of
 relative value opportunities without the potential conflicts of interest
 present with external investment managers;
 - To provide for greater investment in infrastructure. Although an increase in the level of internal management will not directly result in a greater investment in infrastructure, funds would be able to undertake appropriate due diligence to determine if a proposed investment is suitable;
 - Improve the cost effectiveness of administration. Internally administered LGPS funds tend to have lower pension administration costs than externally managed funds;
 - Provide access to higher quality staffing resources. A long term commitment to internal management and an appropriate remuneration structure would secure sufficient high quality staff; and

• **Provide more in-house investment resource**. The significant reduction in management and administration costs can be partially reinvested in improving the level and quality of available in-house resources.

Increase the level of collaboration between funds

- Reduce investment fees. This could be achieved through framework agreements, scale purchasing, pooling of assets, or co-investment opportunities;
- Improve the flexibility of investment strategies. This could be achieved through sharing best practice or creation of "centres of excellence" for specific asset classes;
- To provide for greater investment in infrastructure. Although an increase in collaboration will not directly result in a greater investment in infrastructure, funds would be able to benefit from shared due diligence to determine if a proposed investment is suitable and potentially take advantage of scale to reduce management fees;
- Improve the cost effectiveness of administration. This could be achieved by sharing best practice or using shared service arrangements to reduce task duplication and capture economies of scale;
- Provide access to higher quality staffing resources. This could allow funds to access knowledge and experience at other funds; and
- **Provide more in-house investment resource**. Additional costs could either be shared between funds or recouped via a management fee.

As was also stated in the answer to Question 3, a combination of the two options above is likely to generate greater benefits than focusing on one option alone.

The option of wholesale fund merger within the LGPS is unlikely to meet all of the secondary objectives for the following reasons:

- There may be the potential to reduce investment management fees as larger funds tend to have lower investment management costs, as a percentage of funds under management. However, these benefits may not accrue to a combined fund due to potentially considerable transition costs. There is also evidence that the cost benefits diminish as the size of the fund increases.
- Although a combined fund would be able to increase resources which may improve the flexibility of investment strategies there is a risk that such a large fund would not be able to adequately respond to changing market conditions and opportunities.
- A combined fund is unlikely to directly result in a greater investment in infrastructure any more than individual funds or pooled assets can unless it is felt that greater influence can be exerted over a single fund. The requirement to undertake appropriate due diligence to assess the suitability of a potential investment should be no different.
- Although there would be scale benefits within pension administration and the
 potential to improve service levels, or at least have a common service level, the

loss of local presence cannot be underestimated, particularly given the significant changes to the Scheme in the short term.

 A combined fund would increase the level and quality of staffing resources and provide more in-house investment resource which would reduce the costs of management. However, the majority of these benefits could be achieved with the options provided in Question 3 without the significant disruption of a wholesale merger.

Are there any other secondary objectives that should be included and why?

The objective to increase investment in infrastructure could be viewed as being politically motivated, particularly as the Government have announced significant infrastructure investment plans and already made attempts to encourage LGPS funds to invest in UK infrastructure.

As was stated under the "Secondary Objectives" section it is not the lack of suitable opportunities that is restricting investment in infrastructure as there are a significant number of opportunities to invest in operational assets that offer relatively stable and attractive risk-adjusted returns. The key issues are the lack of clarity on the availability and risk profile of new development assets as well as concerns over the stability of the current regulatory regime.

This consultation exercise is aimed at determining the appropriate long term structure of the LGPS. It should not be used to encourage investment in any particular asset class, whether politically motivated or not. Therefore, it is probably not appropriate to include investment in infrastructure as a secondary objective.

An additional secondary objective that should be considered is to ensure that any proposal retains local accountability in the decision making process. The elected members who form the LGPS funds' pension or investment committees are accountable to the local taxpayers for the performance of the fund as this can have a direct impact on employer contribution rates and, ultimately, council tax rates. Therefore, they cannot be excluded from the decision making process. Critics will highlight that elected members may not have the requisite knowledge and experience to discharge these duties. However, their role is not to make individual investment decisions, it is to ensure that there are proper arrangements in place for managing the fund, including obtaining specialist advice and delegating authority where appropriate.

Q5. What data is required in order to better assess the current position of the Local Government Pension Scheme, the individual Scheme fund authorities and the options proposed under this call for evidence? How could such data be best produced, collated and analysed?

The overriding requirement for any data that is analysed as part of this project is that is accurate, complete, representative, and comparable across the LGPS.

The key information that is required for the options that have been proposed in this call for evidence is:

Investment performance

 Long term investment performance data for all LGPS funds calculated on a comparable basis.

- Sufficient data to calculate risk metrics, such as volatility, in order to compare risk-adjusted returns.
- Management arrangements to determine whether the correlation between internal management and investment performance is valid for funds with a lower level of internal management.
- Performance data, risk data, and management arrangements from other institutional pension funds, both in the UK and Overseas, in order to verify, or otherwise, the trends highlighted in the LGPS.
- Portfolio turnover for each major asset class to determine whether funds with lower turnover tend to have better performance.

Investment management costs

- Long term investment management cost data for all LGPS funds calculated on a comparable basis including performance fees.
- Analysis of transaction costs and pooled fund fees to incorporate all investment management costs.
- Evidence of the impact of scale on investment management costs preferably using actual data rather than indications from investment managers.

Pension administration costs

- Long term pension administration cost data for all LGPS funds calculated on a comparable basis.
- Analysis of service levels in each fund to determine the extent to which the level of service provided correlates with administration costs.
- Fund member data, analysed by active, deferred, and pensioner members, and employer information to determine the impact of different membership and funding profiles on administration costs.
- Evidence of the benefit of current collaborations between LGPS funds in pension administration.

Actuarial data

- Detailed information on funding ratios, actuarial assumptions, and contribution rates for each LGPS fund.
- Funding ratios recalculated for each LGPS fund based on common actuarial assumptions.

APPENDIX 1: REVIEW OF EXISTING STUDIES

There have been numerous studies in the last few years which have analysed institutional pension funds to determine an appropriate structure, in terms of performance, cost efficiency, and governance, which are relevant to this call for evidence. Some of these studies have focused on the LGPS, either on a regional or national basis or the LGPS as a whole, whereas other studies have focused on other institutional pension funds on a global basis. This section provides a summary and critical analysis of these studies. The key findings of these various studies were:

- There is no clear evidence that larger funds generate better performance over the long term compared to smaller funds, although there is wider dispersion of performance in smaller funds:
- Larger funds tend to have lower investment management costs, as a percentage of funds under management, but these benefits may not accrue to a combined fund due to potentially considerable transition costs, and there is also evidence that the cost benefits diminish as the size of the fund increases;
- Although there is no clear evidence that larger funds have lower pension administration costs, there are potential savings from a combined fund through the elimination of task duplication but it is not clear that this would be sufficient to compensate for the loss of local presence;
- Internally managed funds tend to generate better performance over the long term, partly
 due to lower transaction costs as a result of significantly lower portfolio turnover. In
 addition, these funds tend to have significantly lower investment management costs
 which enhances the performance differential to externally managed funds. There is also
 evidence that internally administered funds have lower pension administration costs than
 externally administered funds; and
- There was no clear evidence that the wholesale merger of funds would result in a significant improvement in performance or result in material cost savings after taking into account the costs of transition. However, there was some support that increased collaboration between funds could capture the majority of these benefits without the need for a potentially expensive and disruptive merger process.

"Scottish LGPS Pathfinder Project Phase 1: Options Appraisal", Hymans Robertson, November 2009

The initial report considered three options – separate funds with shared administration; separate funds with shared investment management; and rationalisation of funds.

The report expected the following developments in investment management within the LGPS:

- Widening range of asset classes, investment vehicles, and investment instruments to be analysed and evaluated, with a greater focus on strategy and risk management; and
- The need for an increasing, and ever more knowledgeable, internal resource able to deal
 with increased investment complexity; a decision making structure with clear delegation
 to an executive who can take advantage of investment opportunities as they arise;
 increasing demand for high standards of corporate governance; and continuing pressure
 to reduce costs.

The findings of the report were:

- There is no statistical evidence, either from an analysis of the 11 Scottish LGPS funds or the wider LGPS, to support the assertion that larger funds enjoy better investment performance than smaller funds. However, there is evidence that smaller funds have more extreme (both good and bad) performance.
- There is clear evidence that larger LGPS funds enjoy lower investment management costs demonstrated by larger mandates attracting lower fee rates. The report estimated that the average fee rate for a £250m fund was 44bps p.a. compared to 24bps p.a. for a £5bn fund. However, the report also highlighted that there is a diminishing rate of improvement as there was only a 3bps p.a. reduction in the fee rate for a £5bn fund compared to a £3bn fund. The report does not make it clear whether the costs of internally managed funds have been incorporated into this analysis and so size may not be the sole determinant of lower investment management costs.
- The report suggests that some form of collective investment fund (CIF) using internal management resources, rather than external investment managers and consultants, could have the potential for significant cost savings on investment management and possibly an improvement in fund governance and performance. This would mitigate the significant keyman risk that is evident in LGPS funds, particularly smaller funds, and would enable the recruitment of sufficient staff with wide ranging knowledge, experience and expertise as well as allowing for appropriate succession planning.
- The CIF could be part of one or more local authorities or a separate pension body could be established. Any local authority which wished to become a "host authority" should be required to abide by a good practice code which specified indicative levels of resource, experience, and commitment. The adherence to such a code should be independently reviewed and adherence should be a condition of continued "host" status.
- The report highlights that the major issue with using internal management resources is the difficulty of fitting into local authority pay scales. This is not an insurmountable issue and should be pursued further if there are suitable benefits to be achieved from using internal management resources.
- The report suggests that the level of understanding among elected members is lower than in their large private sector scheme counterparts and expected developments in investment management and administration within the LGPS are likely to place an additional demand on elected members. This suggests that there is an argument for more robust training and possibly for fewer members on committees, who have significant investment knowledge and experience, and who spend a larger part of their time on training and development.
- The report highlights that there are likely to be considerable transition costs incurred in changing managers. These were estimated at 60 80bp of the value of the assets being transitioned, which would account for 4 5 years of the estimated annual cost savings. This demonstrates that the costs of transition as a result of combining funds could be significant.
- There is the potential to save administration costs of £3m p.a. (2bps p.a. based on assets under management of £15bn as at 31 March 2009) by outsourcing the administration of the Scottish LGPS funds to the Scottish Public Pensions Agency (SPPA). However, the report recognises that it is not clear whether the SPPA could provide a level of service for this price that is comparable with the current level of service provided by the local administration teams in Scotland.

- The report highlights that administration costs for the Scottish LGPS funds are not directly related to the size of the scheme and there is evidence that larger funds invest more per member in certain areas such as communications and technology. As there isn't a standardised level of service within pension administration it is difficult to make a direct comparison between funds.
- The overall conclusion regarding pensions administration is that rationalising administration within the existing Scottish LGPS funds does not provide a great deal of scope for cost saving. The report also suggests that the importance of local presence and the time consuming nature of maintaining relationships with employers creates significant challenges for merging administrative services. However, the report does suggest that there is merit in funds adopting a shared service approach in a number of areas such as web-based development or member communication material, as there is evidence that larger funds tend to produce higher quality communication material.

"Scottish LGPS Pensions Pathfinder Project Phase II: Interim Report", Deloitte, 21 April 2011

The Phase II interim report considered the findings in Phase I in greater detail. The findings of this report were:

- There is no clear evidence that larger schemes perform better than smaller schemes or that there would be a significant improvement in performance either from changing the current structure in the Scottish LGPS or through more complex investment arrangements. This reaffirmed the conclusion reached in the Phase I report.
- The report suggested that a shared central resource could be established to provide cost
 effective technical advice and assistance to officers and elected members on some of
 the more complex investment opportunities. This would mitigate some of the issues
 surrounding the low level of resourcing in some funds and the significant keyman risk
 identified in the first report.
- The report conducted an analysis of potential investment management fee savings obtaining indicative fee quotes from a number of managers across active and passive equity and bond mandates of different sizes. This analysis suggested potential cost savings of 3 5bp p.a. for active mandates and 0.5 1bp p.a. for passive mandates. One of the reasons for this relatively low level of potential cost savings is that there are a number of current investment mandates that have fees which are lower than would be charged for a current equivalent mandate. Transition costs were estimated at 10 20bps of the value of the funds transitioned, which would be equivalent to 4 10 years of fee savings. The overall conclusion was that investment management fee savings of £2m p.a. (1bp p.a. based on assets of £21.9bn at 31 March 2010) were not significant in the overall context and insufficient to justify moving from the current structure. This suggests that investment cost savings are unlikely to be the key determinant for considering the rationalisation of funds.
- The report did not establish any clear evidence that there are economies of scale to be achieved through the merging of LGPS administration services. The average cost per member is significantly lower in Scotland than in England and Wales with no direct correlation between fund size and administration cost, although this may not be a direct comparison of quality or breadth of service. Administration data for England and Wales shows that there is little variation in costs per member once a fund size of £1bn is reached. The overall conclusion was that there is unlikely to be significant benefits from

centralising pension administration, with costs savings of just £200,000 p.a. (0.1bp p.a.), and that there were considerable transition risks.

- The report highlights that an independent survey of pensions administration costs commissioned by Capita in 2010 covering 400 schemes (including public sector schemes) showed an average cost for third party providers of £41 per member for the largest scheme category (over 10,000 members). This is considerably higher than the LGPS average (c. £30 per member) shown in Appendix 6.
- The report also provided the example of Cumbria County Council who considered outsourcing the pension administration function to an external company but concluded that the costs were higher and service levels were lower before opting for a shared service agreement with Lancashire County Council. This suggests that the outsourcing of pension administration services is likely to result in higher costs and that there are potential efficiencies from an increased focus on LGPS fund collaboration.

The third stage of the Pathfinder Project appears to have been cancelled with the conclusion that the expected benefits of change were outweighed by the costs.

"Reconfiguring the London LGPS funds: Evaluation of options", PriceWaterhouse Coopers, October 2012

The report considered the benefits, in terms of improved investment performance and lower investment management and administration costs, from some form of combination of the 34 London LGPS funds into one fund, either through a collective investment fund (where the asset allocation decision remains with the individual authority) or a framework fund (where there is a full transfer of investment management responsibilities to a central entity).

The findings of the report were:

- There are potential improvements in investment performance of 35bps p.a., equivalent to £84m based on assets under management of £24.2bn (at 31 March 2011). This is based on the assumption that a combined fund would achieve investment returns similar to other larger LGPS funds. Therefore, in order to substantiate this potential improvement in investment performance, it would be necessary to prove that larger funds generate higher levels of investment performance.
- There are potential savings of 15bps p.a. in investment management costs, based on a survey of investment managers, equivalent to £36m, as a result of economies of scale. However, the report suggests that a significant proportion of current investment managers would initially be retained ahead of a process of rationalisation, and so it is unlikely that these economies of scale will accrue in full at first. In addition, the report does not state what size investment mandates needed to be in order to achieve the reported cost savings and has not included the impact of transition costs.
- There are potential savings of £10m p.a. in administration costs, equivalent to 4bps p.a., due to greater efficiency by reducing the number of administration teams, leading to lower running costs and potentially a better and more consistent service for members and authorities. The report highlights that the average administration cost per member in London is almost double the average of all LGPS funds, which is possibly due to higher salary costs. However, it may also be a function of the level of outsourcing of the administration function in the London LGPS funds (27% of assets under management) compared to the LGPS ex-London average (6%). There is also no guarantee that there will be an improvement in service from a combined administration function.

- The report states that London LGPS funds have typically not performed as well as larger LGPS funds. An analysis of the performance of the London funds shows that, over the 10 years to 31 March 2011, the weighted average return of London LGPS funds was 4.9% p.a. compared to an average of 5.7% p.a. for the seven largest LGPS funds in the UK. As the asset allocation of the London LGPS funds is broadly similar to the asset allocation of the larger LGPS funds this is a meaningful comparison of performance. However, the analysis only includes 28 of the 34 London funds, accounting for c. 70% of the assets under management in London, and so the analysis has the potential to be misleading, particularly as it excludes the London Pensions Fund Authority (LPFA) which is significantly larger than the other London funds.
- The performance analysis of the London LGPS funds shows a wide dispersion of relative returns compared to the larger LGPS funds, which, the report suggests, proves that risks can be more effectively minimised by larger funds. However, this dispersion demonstrates that size cannot be the sole determinant of performance as a number of the smaller London funds have out-performed the average London return over the period under review. Perhaps more significant is that a majority (18 out of 28) of the London funds under review have out-performed the London Pensions Fund Authority (LPFA), the largest London fund by a significant margin. The LPFA generated returns of 3.6% p.a. for the active sub-fund and 6.3% p.a. for the pensioner sub-fund over this 10 year period, a blended return of 4.6% p.a. for the Fund as a whole based on the historic proportion of funds invested in each sub-fund.
- The report acknowledges that, due to the dispersion of returns and the fact that some smaller London funds have performed well in comparison to the average, any new structure should enable individual funds to make their proven expertise available to all London LGPS funds. This is a sensible recommendation as it recognises that there is clear evidence that some of the smaller funds have been able to out-perform the average despite their size.

"Welsh LGPS: Working Together (Interim Report)", PriceWaterhouse Coopers, March 2013

This report considered the following structures – the current structure of 8 funds; enhanced collaboration including joint procurement and shared services; a number of grouped funds; and one all-Wales LGPS fund. The findings of the report were:

• The report referenced a study by Hymans Robertson that analysed 10 year performance figures for LGPS funds (the period under review and the proportion of the LGPS covered were not disclosed) and concluded that there was some evidence of correlation between the size of fund and net of fees performance with larger funds out-performing by 0.6% p.a. with lower levels of relative risk. The report suggested that this was not merely due to size but rather the result of economies of scale that allowed improved governance including more internal management and specialist resources, better diversification, bargaining power on investment management fees, and more responsive governance structures. The report also highlighted that none of the Welsh funds currently employ investment specialists to manage investments in-house. There appears to be significant dispersion around the line of best fit on the graph shown and no statistical data on the correlation between size and performance and so it is difficult to confirm the analysis in the report. In addition, the graph excludes the three largest funds, with the rationale of not wanting to overly influence the results, but the objective is to determine whether larger funds have better performance, and so they should be included.

- The report suggested that there are potentially significant benefits from funds working collectively through a common investment approach. Enhanced collaboration through pooling investment resources and using some form of collective investment vehicle, rather than fund merger, would achieve this goal in a less disruptive way. Although there is no guarantee that this would result in better performance, the improved governance through economies of scale and a more specialist internal resource was considered to be a key benefit.
- The report concluded that investment management fees were not the key determinant in fund manager selection and asset allocation decisions with a greater focus on the risk-return characteristics of the investment strategy. However, the report did suggest that there was the potential for savings from larger investment mandates and referenced a study carried out by WM Company, State Street's performance measurement division. This study concluded that large funds (over £5bn) that were externally managed had investment management fees that were 7bps p.a. lower than smaller funds (£1 2bn) which would result in cost savings of c. £6m p.a. if applied across the Welsh LGPS. The report also highlighted that larger funds that were internally managed had investment management fees that were 20bps p.a. lower than the LGPS average. This suggests that cost savings on investment management are relatively low for externally managed funds although there is an argument that a large fund that was internally managed could generate higher savings.
- The report concluded that there were likely to be significant one-off costs in transitioning the assets of the individual funds to a new organisational structure which could take several years to pay back. The report estimated that transition costs could range from £11 46m which equate to 0.5 2.1x the annual investment management fees incurred by the Welsh LGPS in 2010 11 (£22.3m) and would outweigh any saving in management fees. The transition costs are relatively significant and, assuming potential annual cost savings of £3 7m, would result in a payback period of 3 15 years.
- The report concluded that there was less scope for substantial cost savings in pension administration and that it was more important to retain a local presence for service delivery. The report also highlighted that the absence of common service standards makes it difficult to make a meaningful comparison between funds. This is a similar conclusion to the one reached in the Scottish Pathfinder Project.

The overall conclusion of the report was that enhanced collaboration is the preferred option where the balance of service delivery and efficiency, cost of change, time and resources can be blended in the most effective way. The no-change option was not considered appropriate nor was the assessment of a full merger as the majority of gains could be realised through greater collaboration (including managing Fund investment assets on a collective basis) on a timely basis in a less disruptive manner, and would avoid the loss of local autonomy.

"Lessons from Internally Managed Funds", State Street Investment Analytics (WM Company), March 2013

WM Company monitor the performance of 21 internally managed pension funds which accounted for £174bn of assets (at 31 December 2011) or 37% of the WM All Funds Universe. Of these internally managed funds, 6 are LGPS funds (West Yorkshire, South Yorkshire (including South Yorkshire Passenger Transport), East Riding, Teesside, and Derbyshire) representing £17bn of assets (15% of LGPS assets monitored by WM).

Internal management is defined as those funds where more than two-thirds of assets are invested by an in-house investment team, either through direct or pooled investments. The

internally managed funds identified by WM Company manage an average of 90% of assets inhouse (range of 73 – 100%).

The findings of the report are:

• Internally managed funds have consistently outperformed externally managed funds over the long term, as can be seen in the following table:

	5 YEARS	10 YEARS	20 YEARS	25 YEARS
Internal	3.7%	6.2%	8.6%	8.9%
All Funds	3.5%	5.9%	8.3%	8.6%
Relative	+0.2%	+0.3%	+0.3%	+0.3%

Annualised performance to 31 December 2011

These figures are net of transaction costs (including management fees for pooled investments) but exclude direct investment management costs. When these costs are taken into account the level of outperformance by internally managed funds increases by a further 0.2% p.a.

 Internally managed funds have consistently outperformed externally managed funds across all asset classes, as can be seen from the following table:

	5 YEARS	10 YEARS	20 YEARS	25 YEARS
UK Equities				
Internal All Funds Relative	1.4% 1.1% +0.3%	4.9% 4.8% +0.1%	8.4% 8.1% +0.3%	9.1% 8.9% +0.2%
Overseas Equities				
Internal All Funds Relative	2.4% 2.4% +0.0%	5.3% 5.0% +0.3%	7.8% 7.6% +0.2%	7.4% 7.0% +0.4%
Property				
Internal All Funds Relative	(1.6%) (2.1%) +0.5%	6.7% 6.4% +0.3%	8.1% 8.1% +0.0%	8.5% 8.5% +0.0%
Alternatives				
Internal All Funds Relative	6.3% 4.6% +1.7%	7.0% 6.1% +0.9%	N/A N/A N/A	N/A N/A N/A

Annualised performance to 31 December 2011

N/A - data not available

 The level of performance of internally managed funds has been consistent over time with these funds outperforming the WM All Funds Universe in 17 of the 25 years to 31 December 2011, with the majority of internally managed funds exhibiting a lower level of risk than the Universe. In addition, internally managed funds have out-performed in 5 of the 6 years that have seen negative returns during this 25 year period.

- WM highlight some of the characteristics of internally managed funds which may contribute to this consistent level of outperformance. These include:
 - A long term focus which is less concerned with following the latest trends in investment management or chasing quarterly performance targets, and a tendency to invest on a diversified, low-risk basis with a lower targeted level of outperformance than active external mandates;
 - Minimal exposure to passive mandates (2% of assets in 2011) compared to externally managed funds (27%) but a tendency to hold a broader range of stocks with much lower portfolio turnover than traditional active managers;
 - Overseas equities continue to be managed on a global basis despite the industry move away from regional overseas equities to a global "bottom up" basis;
 - o Internally managed funds have significantly lower levels of turnover in equity markets (25% p.a. for UK equities and 46% p.a. for Overseas equities) which is approximately half the level of turnover in externally managed funds. This is even more noticeable in the LGPS where internally managed funds have even lower levels of turnover (13% p.a. for UK equities and 20% for Overseas equities) compared to externally managed funds (42% and 64% respectively). This reflects a longer term approach to investment which incurs fewer transaction costs;
 - Investment team and sponsors interests are aligned and independent advisers tend to be collaborative; and
 - Funds do not suffer from the costs of changing investment managers that adversely impact the long term performance of externally managed funds.
- Internally managed funds have significantly lower investment management costs (average of 10bps p.a.) compared to externally managed funds (average of 33bps p.a.) which increases the level of outperformance highlighted on the previous pages by a further 0.2% p.a.
- WM highlight that internally managed LGPS funds generally have smaller investment teams (average of 13 with a range of 8 22) compared to other internally managed funds (average of 30 with a range of 7 51).
- WM consider the three main issues for internally managed LGPS funds are keyman risk and succession planning given the small size of internal investment teams, and incorporating a fund management operation into a local authority pay scale given the specialist nature of the investment function. WM use the Canadian public sector pension funds as an example where there has been a move towards an increased level of internal management resulting in an improvement in performance. One of the key factors has been the ability to attract and retain top investment professionals by setting up quasi-independent entities that allow the decoupling of salaries from existing public sector pay scales. If internal management is to be considered a viable option for a wider group of funds or assets in future, the compensation issue will need to be addressed.

"Capital Stewardship Programme Briefing Paper", UNISON, January 2010

UNISON analysed data¹ from LGPS fund annual reports and published material by the Department for Communities and Local Government, the Scottish Executive, and the Welsh Assembly. The findings of the report were:

- The LGPS as a whole does not appear to have outperformed passive fund management over the 14 years to 31 March 2009. However, the analysis compares fund performance (which consists of allocations to a number of asset classes including Equities, Fixed Income, Property, Cash, and Alternatives) to the returns from the FTSE 100 which is inconsistent analysis and a meaningless comparison.
- The report suggests that the LGPS is focused on "speculative short term buying and selling of stock" and that "larger LGPS funds are in part penalising smaller LGPS funds that have less aggressive or less responsive speculative market trading". Unfortunately, although the report does raise the issue of whether high levels of portfolio turnover have a negative impact on Fund performance, it does not provide any evidence, such as portfolio turnover data, which backs up a rather spurious claim of speculative investment.
- Smaller LGPS funds typically have higher administration costs on a per capita basis and higher investment management costs in relation to the level of assets. This is correct, to a certain extent, but, according to the graph in the report, there appear to be a significant number of smaller funds with relatively low cost ratios.

"Performance Analysis of LGPS funds", All Pension Group (APG), 2010

UNISON commissioned APG, the fund management arm of ABP, the Dutch public sector pension fund, to evaluate the investment performance of the LGPS over the period 2001 – 09. The findings of the report were:

- Larger funds consistently achieved higher investment returns¹ over the period 2001 09 with the four largest funds outperforming the "generic benchmark" by 2.2% p.a. on average (range of 1.2 2.8% p.a.) However, the LGPS as a whole out-performed the benchmark by 1.0% p.a. and so the relative outperformance of the larger funds is much smaller than the headline figure suggests.
- Rather than compare the performance of the larger funds to the average LGPS return, the report chooses to use a generic benchmark which is weighted for each funds' different asset allocation and then compared to their actual performance in an attempt to control for different asset allocations. However, this ignores the fact that some outperformance derives from different weightings to each asset class and so this would appear to only be analysing stock selection performance of individual funds (this was also found to be the case in the Dyck and Pomorski analysis discussed later in this

¹ There are serious doubts with regard to the methodology used for performance calculation. It is difficult to determine how performance has been calculated as the data for each fund has not been disclosed but there are material differences between the figures provided for two funds mentioned in the report (Hillingdon and Shropshire). According to the report the return for these two funds for the year ended 31 March 2009 were +8.0% and -4.8% respectively whereas the annual report and accounts for these funds show a return of -24.3% and -21.7% respectively. It would appear that the analysis ignores the change in market value of investments during the period which is a fundamental input for performance calculation. Therefore, given the incorrect interpretation of how performance information should be calculated any conclusions reached from analysing this data are null and void.

appendix). It would be more appropriate to compare the actual performance of each individual Fund to determine the impact of size.

- The report highlights that although there is a wider variety of outperformance among smaller funds, the larger funds consistently outperformed the benchmark. However, there are only 4 funds in the "large" pension fund data set and 80+ funds in the "small" (<£2bn) pension fund data set and so it may not be a fair comparison. For example, 8 of the "small" funds have performed at least in line with the 3 best performing "large" funds and a further 30+ have performed at least in line with the worst performing "large" fund. This suggests that size is not the key determinant to performance.
- The report suggested that investment management expenses decrease by 0.3% p.a. and administration costs by 0.15% p.a. when the size of a fund increases from £1bn to £8bn. As with the analysis of fund performance, the report fails to suggest reasons, other than size, for the reduction in investment management and administration costs.

¹ The performance data was sourced from the "Pension Fund Performance Guide – Local Authority Edition 2010". The use of this data appears to ignore the investment of cash flows during the period which, according to the Global Investment Performance Standards (GIPS®), should be accounted for on a time-weighted basis. This omission would result in a lower calculated return when investment markets are positive and vice versa for falling markets. As the overall return for the LGPS was positive over this period the analysis is likely to have under-estimated LGPS fund performance over this timeframe. It is unclear whether this will have affected the relative analysis of individual funds but the reader should be aware of the potential inconsistencies in the performance data.

"Internal management does better after costs", CEM Benchmarking Inc., October 2010

The report analysed the performance data of a large number of global defined benefit funds over the period 1991 – 2009. In 2009 there were 363 funds with assets under management of \$5 trillion. However, the average length of time that a pension fund was included in the dataset is 6 years which suggests that the analysis may not be consistent over time.

The findings of the report were:

- There was no statistically significant difference in gross value added performance between internally and externally managed funds at the asset class level, with relative performance for internally managed funds ranging from -32 to +57 bps p.a. across Equities and Fixed Income. However, the report did not analyse the overall performance of each fund to determine whether there is a performance difference at the aggregate level.
- Once costs are deducted, funds with a greater proportion of internal management outperform due to the lower costs of internal management, with relative performance of 0 to +96bps p.a. across Equities and Fixed Income. As a result, the report suggested that plan sponsors should consider increasing internal management, particularly for asset classes with high relative external management costs.
- The report also considered whether smaller (assets of \$5 20bn) internally managed funds generated the same level of outperformance and concluded that the level of outperformance was greater (an additional 20 30bps p.a. before and after costs) than larger (>\$20bn) internally managed funds. This suggests that there are potential diseconomies of scale for very large funds.

"Is Bigger Better? Size and Performance in Pension Plan Management", Dyck and Pomorski, July 2011

This report performed a more detailed analysis of the CEM Benchmarking data from 1991 – 2009 which is referenced above and so the same potential deficiencies in the data are also relevant with this report. The findings of the report were:

- The largest funds outperform smaller funds by 43 50 bps p.a., with 33 50% of this difference arising from cost savings related to internal management. This cost differential is supported by the WM analysis of internally managed funds in the UK. The remaining outperformance (50 66%) results from an increased allocation to alternative investments and realising greater returns in this asset class through superior monitoring and screening of managers, and the ability to take advantage of co-investment opportunities.
- The higher performance of 43 50 bps p.a. is based on "net abnormal returns" which is defined as gross returns minus actual costs minus plan-specific benchmarks which effectively adjusts for different asset allocations across funds. However, it is questionable whether this is appropriate because it is effectively measuring stock selection performance and ignoring the performance generated from asset allocation. Although the risk profiles of funds should be taken into account when making performance comparisons this is not the most appropriate method with which to measure risk and standard deviation of returns would have been more informative. Therefore, the actual returns of the funds analysed in the study are shown in the table below:

	Mean ¹	Large ²	Small ³	Large - Small
Gross	9.23%	9.42%	9.27%	15bps
Net	8.86%	9.17%	8.84%	33bps

¹Simple average of quintile data

This table demonstrates that the actual net performance differential between the largest and smallest funds is 33bps p.a., with 15bps p.a. generated through better performance and 18bps p.a. through lower costs.

- Although there is an improvement in performance as funds get larger the smallest funds (quintile 5 mean assets under management of \$0.3bn) have gross performance that is on a par with funds in quintile 3 (mean AUM of \$2.1bn) and only 15bps p.a. lower than the largest funds (mean AUM of \$33.1bn). It is only when comparing funds from quintile 4 (mean AUM of \$0.9bn) where there is a more meaningful difference in performance with the largest funds (+78bps p.a.) Therefore, it is not clear that size is the key determinant of performance and the data is only supportive of the authors' conclusions when considering the concept of "net abnormal return" but, as discussed above, it is questionable whether this is the appropriate way to adjust for risk.
- The report highlights that a large number of studies suggest that diseconomies of scale become evident when investment managers within asset classes reach a certain size. The authors contend that large funds would be able to avoid these diseconomies of scale in individual asset classes by altering their asset allocation at the appropriate time. However, this assumes that funds would be able to determine when this point was reached, and be able to react accordingly, which is a significant assumption to make.

² Top quintile of funds by size

³ Bottom quintile of funds by size

- Larger plans tend to allocate more to Alternatives, which are associated with higher risk and lower liquidity, and different risk appetites or liquidity requirements may correlate with fund size. The report cautions that better performance in alternative assets for larger funds could be simply due to timing arising from both the vintage effect and the j-curve effect. If larger funds have invested earlier than smaller funds the better performance could just be the effect of the timing of the investments. The authors suggest that, within real estate, larger funds have also generated better returns and that the j-curve effect will be less likely. However, this ignores the significant upfront fees that are incurred in property investment, including stamp duty (where relevant) and professional fees.
- Larger funds tend to have lower cost ratios than smaller funds in both investment management (18 bps p.a.) and pension administration (9bps p.a.). The report suggests that this is more to do with the level of internal management in larger funds compared to smaller funds, as the relatively fixed costs of internal management are spread over a larger asset base. As can be seen from the table below, external active managers are significantly more expensive than internal managers for all asset classes. This suggests that there is a greater benefit from having internal management in larger funds, as the cost differential between internal and external active management is greater for larger funds.

	Mean ¹	Large ²	Small ³	Large - Small
Investment	37bps	25bps	43bps	18bps
Equities Fixed Income Alternatives	29bps 16bps 115bps	16bps 9bps 115bps	37bps 20bps 93bps	21bps 11bps (22bps)
Administration	7bps	3bps	12bps	9bps
Cost ratio ⁴ Equities Fixed Income Alternatives	3.1 3.2 5.0	3.2 5.1 6.9	2.8 1.7 3.0	0.4 3.4 3.9

¹Simple average of quintile data

• The report highlights that as funds get larger they tend to increase the level of internal management and also move more towards passive investments, particularly in Equities and Fixed Income. However, the report concludes that the use of internal management, rather than passive management, is the more important driver of overall performance. The report also states that, in order to take advantage of savings from increased internal management, funds need the ability to attract and retain appropriately skilled and experienced staff, to provide the right incentives, and to ensure effective oversight structures that are focused on risk and performance rather than political and other factors.

² Top quintile of funds by size

³ Bottom quintile of funds by size

⁴ Ratio of costs of external active management to costs of internal active management

APPENDIX 2: ANALYSIS OF LGPS INVESTMENT PERFORMANCE AND COST DATA

INVESTMENT PERFORMANCE

This section analyses the performance of the UK LGPS over the 10 and 20 year periods to 31 March 2012. It has not been possible to extend this analysis to include the most recent financial year as not all the performance data is available at the present time. However, a review of the WM Company data for the LGPS (c. 80% of the UK LGPS) suggests that the trends discussed below remain intact.

There are 101 separate LGPS funds in the UK but the analysis has excluded the data from the Environment Agency – Closed Fund due to its status as a closed fund.

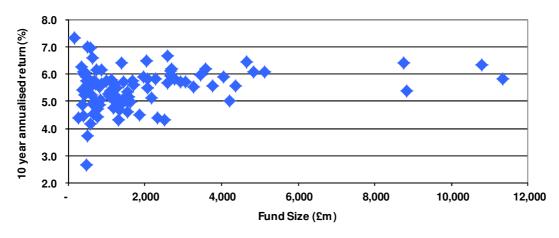
10 years ended 31 March 2012

The performance data was collated from the CIPFA "Local Authority Pension Fund Investment Statistics 2002 – 2012". For those funds whose statistics did not appear in the CIPFA publication, performance data was sourced from the individual annual report and accounts or confirmed with the administering authority.

This resulted in performance data for 92 funds, which accounted for £177bn (95%) of LGPS assets under management as at 31 March 2012. The performance data for each fund is shown in Appendix 3.

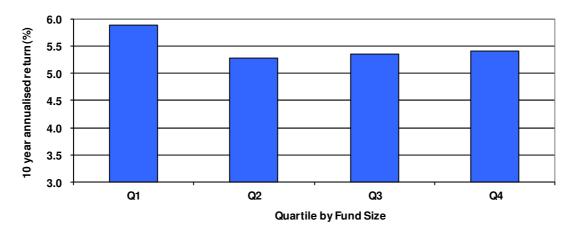
The average fund return over the 10 year period under analysis was 5.7% p.a. (range of 2.7% to 7.3% p.a.). The performance figures are shown net of transaction costs and investment management fees for pooled investments. They do not reflect direct investment costs such as management fees for investment mandates (unless these are reflected in unit prices) or internal resource costs, both of which will be considered later in this submission.

The individual performance of the 92 funds for which data was available is shown on the following graph:



As can be seen from the graph there is no clear evidence that size is the key determinant of fund performance. This is supported by a correlation coefficient (r^2) of just 0.24 between fund size and fund performance over the 10 year period to 31 March 2012.

The following graph shows the performance of the LGPS divided into quartiles based on fund size:

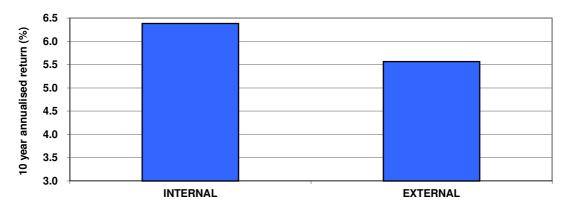


This graph shows that larger funds (Q1, assets under management at 31 March 2012 of £2.5bn+) have outperformed smaller funds by 50 – 60bps p.a. over the 10 years to 31 March 2012. However, as with the first graph, there is no clear correlation between fund size and performance. This is evidenced by the smallest funds (Q4, £0.2 – 0.6bn) outperforming medium sized funds (Q2, £1.3 – 2.4bn) by 13bps p.a. over the same period.

This analysis of performance does not take into account the management arrangements within the different LGPS funds. Internally managed funds are defined as those funds that have managed a large proportion (>70%) of assets using an internal investment management team over the entire period under review. Other LGPS funds have managed a smaller proportion of assets in-house, predominantly within Property and Alternatives, and a number of funds have significantly increased the proportion of assets that are managed in-house in recent years.

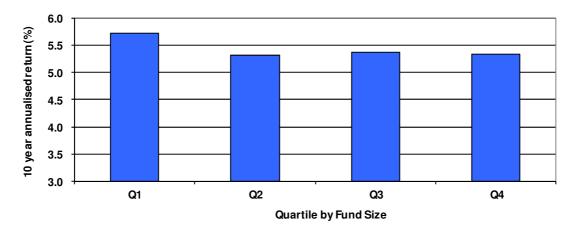
For the purposes of this submission, it is the 5 LGPS funds identified by WM Company in their report "Lessons from Internally Managed Funds" (March 2013) that have been classified as internally managed funds. These funds are West Yorkshire, South Yorkshire, Derbyshire, East Riding of Yorkshire, and Teesside, which accounted for £21.4bn of assets under management (12.1% of the LGPS total) as at 31 March 2012.

The following graph compares the performance of these internally managed LGPS funds with externally managed LGPS funds.



This graph shows that internally managed funds have outperformed externally managed funds by 80bps p.a. over the 10 years to 31 March 2012 which suggests that management arrangements may be a more important determinant of performance than fund size.

This is also supported by the following graph which shows the performance of externally managed funds only divided into quartiles based on fund size.



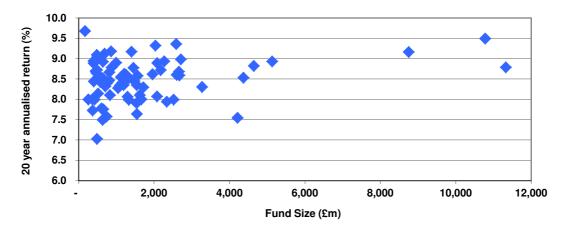
This graph shows that larger externally managed funds have outperformed smaller funds but the performance differential is lower at 30 – 40bps p.a., and the correlation coefficient (r²) between fund size and fund performance falls to just 0.18, suggesting only a weak correlation at best.

20 years ended 31 March 2012

A similar analysis has been performed for the 20 year period ending 31 March 2012 by compounding the 10 year annualised returns from the CIPFA "Local Authority Pension Fund Investment Statistics 1992 – 2002" to the returns for the 10 year period ending 31 March 2012 analysed above.

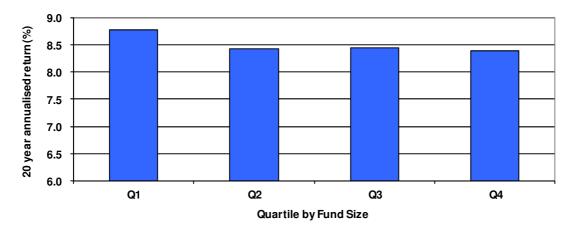
This resulted in performance data for 75 funds, which accounted for £131bn (70%) of LGPS assets under management as at 31 March 2012. The performance data for each fund is shown in Appendix 4. The level of coverage of the LGPS for the 20 year data is lower than for the 10 year data and so the reader should be aware that the analysis may not be directly comparable.

The average fund return over the 20 year period under analysis was 8.6% p.a. (range of 7.0% to 9.7% p.a.). As with the 10 year analysis, the performance figures are shown net of transaction costs and investment management fees for pooled investments but do not reflect direct investment costs such as management fees for investment mandates (unless these are reflected in unit prices) or internal resource costs. The individual performance of the 75 funds for which data was available is shown on the following graph:



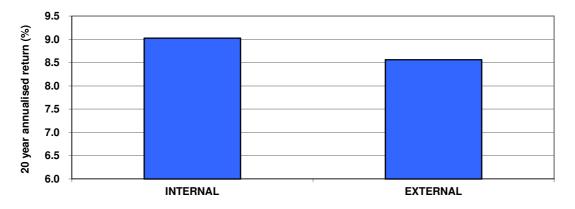
As with the analysis of the 10 year data, there is no clear evidence that size is the key determinant of fund performance. This is supported by a correlation coefficient (r^2) of just 0.27 between fund size and fund performance over the 20 year period to 31 March 2012.

The following graph shows the performance of the LGPS divided into quartiles based on fund size:



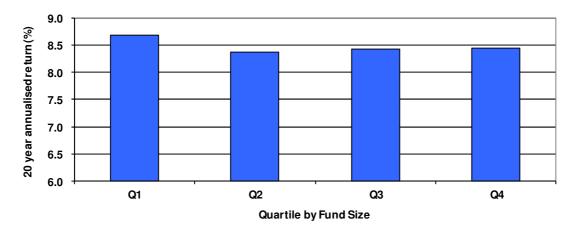
This graph also confirms the 10 year analysis in that larger funds (Q1) have outperformed smaller funds, albeit by a smaller magnitude (30 – 40bps p.a.), over the 20 years to 31 March 2012. Unlike the 10 year analysis there is no real variation in performance in the other quartiles over this longer timescale.

The following graph compares the performance of internally managed LGPS funds with externally managed LGPS funds over the 20 year period.



This graph shows that internally managed funds have outperformed externally managed funds by 50bps p.a. over the 20 years to 31 March 2012 which again supports the assertion that management arrangements may be a more important determinant of performance than fund size.

This is also supported by the following graph which shows the performance of externally managed funds only divided into quartiles based on fund size.



This graph shows that larger externally managed funds have outperformed smaller funds but the performance differential is lower at 20 – 30bps p.a., and the correlation coefficient (r²) between fund size and fund performance falls to just 0.20, again suggesting only a weak correlation at best.

KEY FINDINGS

- There is no clear correlation between fund size and performance for externally managed funds.
- Internally managed funds have outperformed externally managed funds by 80bps p.a. over 10 years and by 50bps p.a. over 20 years, before the deduction of direct investment management costs.

Additional information that would assist in a more detailed analysis:

 Split between internal and external investment management in each LGPS fund to determine whether the correlation between internal management and performance holds for funds with a lower level of internal management.

Asset Allocation

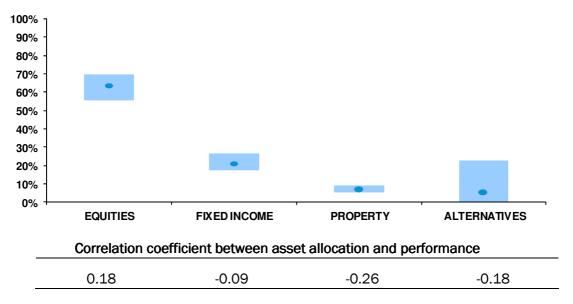
The published data that is currently available only permits a comparison of absolute performance over the long term and doesn't reflect the relative risk that funds have assumed in order to generate these returns. Therefore, certain funds may have outperformed simply because they have adopted a higher risk profile.

An analysis of the standard deviation of returns for funds would highlight whether funds that have generated higher returns have done so due to a higher risk profile. This data is not available at present but a broad comparison of asset allocation should highlight whether fund performance has been overly influenced by risk appetite.

The following graph shows the weighted average asset allocation of the LGPS in the four main asset classes – Equities, Fixed Income (including Cash), Property, and Alternatives – as at 31 March 2012. It also shows the inter-quartile range (shaded area), in order to exclude outliers

which may unduly skew the analysis. As the analysis of asset allocation is based on a fixed point in time it will not take into account changes to asset allocation over time.

The data is sourced from the CIPFA "Local Authority Pension Fund Investment Statistics 2002 – 2012" or the individual annual report and accounts for those funds not included in the CIPFA publication.



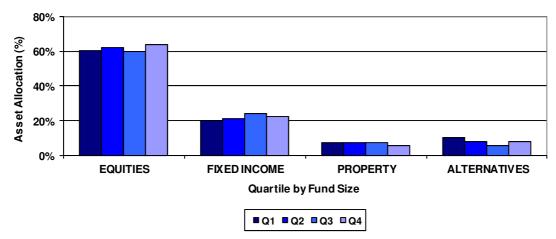
This analysis shows that, in general, LGPS funds have broadly similar asset allocations and, therefore, the analysis of performance data does not appear to be materially affected by different risk appetites.

Although the inter-quartile range has been used for the above graph for presentational purposes, the data for all funds has been used to calculate the correlation between performance and asset allocation.

There is a small positive correlation between the allocation to Equities and performance and a small negative correlation between the allocation to Fixed Income and performance. These relationships would be expected as funds with a higher allocation to Equities would expect to outperform over the long term given the additional risk that is being assumed. However, these relationships are not significant which again confirms that the performance data is not being materially affected by different asset allocations.

There are mildly stronger negative correlations between the allocation to both Property and Alternatives and performance but they are still not significant. These correlations could be due to the significant up-front costs (stamp duty and professional fees in Property and the j-curve effect in Alternatives) in these asset classes and also the tendency for performance data to be lagged compared to Equities and Fixed Income. This could mean that funds that have recently increased their allocation to these asset classes may exhibit weaker performance in the short term.

The following graph shows the asset allocation of funds divided into quartiles based on fund size:



This graph shows that although larger funds tend to have a slightly smaller exposure to Equities and Fixed Income with a higher exposure to Alternatives, there is not a material difference in the asset allocations of different sized funds. Therefore, it can be concluded that variations in asset allocation within LGPS funds are not a key determinant of the difference in performance between large and small funds.

KEY FINDING

 Asset allocation is not a key determinant of variation in performance between LGPS funds.

Additional information that would assist in a more detailed analysis:

- Quarterly portfolio information for each LGPS fund over the period under review in order to calculate a standard deviation of returns. This will permit the calculation of riskadjusted returns and determine whether there is a correlation between risk and performance.
- Average asset allocation for each LGPS fund over the full period under review to determine the impact on performance.

Transaction costs

The performance analysis above is based on performance figures which are net of transaction costs and investment management fees for pooled investments. Data on transaction costs and pooled investment management fees is not readily available for the LGPS and, therefore, it is not possible to determine whether the funds that have experienced better performance also have lower transaction costs.

In the analysis in "Lessons from Internally Managed Funds" (March 2013), WM Company provided data on equity portfolio turnover and suggested that one of the reasons that internally managed funds have outperformed could be due to lower transaction costs as a result of lower portfolio turnover.

WM calculated that internally managed LGPS funds had significantly lower turnover in Equities than externally managed funds, as can be seen from the following table:

	UK Equities	Overseas Equities
Internally managed	13%	20%
Externally managed	42%	64%
Ratio	0.31	0.31

This means that, other things being equal, externally managed funds would have incurred transaction costs that are more than three times higher than internally managed funds in Equities. The typical transaction costs for Equities are as follows:

UK Equities	Overseas Equities
15 - 20bps	15 - 20bps
50bps	0 - 20bps
5 - 20bps ¹	5 - 30bps ²
90 - 130bps	40 - 120bps
	15 - 20bps 50bps 5 - 20bps ¹

 $^{^{}m 1}$ Based on average bid-ask spreads for FTSE 100 and FTSE 250 stocks in May 2013

The following table summarises the potential difference in annual transaction costs in Equities between internally managed and externally managed LGPS funds, based on historic portfolio turnover and estimated transaction costs.

	UK Equities	Overseas Equities
Internally managed	12 - 17bps	8 - 24bps
Externally managed	38 - 55bps	26 - 77bps
Difference	26 - 38bps	18 - 53bps

The performance analysis earlier in this appendix demonstrated that internally managed LGPS funds have outperformed externally managed funds by 80bps p.a. over the last 10 years and 50bps p.a. over the last 20 years. The analysis of transaction costs suggests that, when applying the average LGPS fund allocation to Equities of c. 65%, c. 20 – 25bps p.a. of the outperformance is due to smaller transaction costs as a result of lower levels of portfolio turnover in Equities.

There may also be an additional impact from lower levels of portfolio turnover in the other major asset classes, particularly as transaction costs are likely to be higher than Equities in both Property and Alternatives. However, as there is no published data showing LGPS fund turnover levels in these asset classes it is difficult to accurately measure this impact.

In addition, internally managed funds would also be expected to have a lower level of exposure to pooled investments by virtue of a greater level of direct investments. There is a wide variation of investment management costs in pooled investments within Equities but they tend to average c. 50 – 100bps for active funds. However, as there is no published data showing LGPS fund

² Based on average bid-ask spreads for large and mid-cap US and European stocks in May 2013

 $^{^{3}}$ Assumes a purchase and a sale, incurring the transaction tax on the purchase only and commission and bid-ask spread on both the purchase and the sale

investments split between direct and pooled investments it is also difficult to accurately measure this impact.

KEY FINDING

- Internally managed funds have lower transaction costs compared to externally managed funds due to:
 - Significantly lower levels of portfolio turnover, particularly in Equities; and
 - Lower level of exposure to pooled funds.

Additional information that would assist in a more detailed analysis:

- Portfolio turnover for each major asset class to determine whether funds with lower turnover tend to have better performance.
- Annual costs of pooled funds to determine the impact of external management costs on performance.

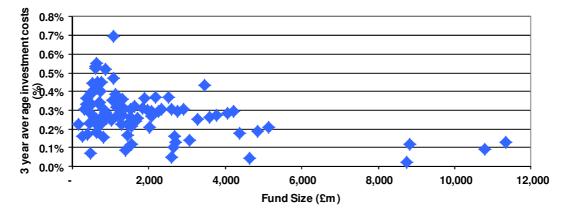
INVESTMENT MANAGEMENT COSTS

The majority of the existing studies (Appendix 1) concluded that larger funds tended to have lower investment management costs as a percentage of assets under management.

This section analyses the average investment management costs of the LGPS funds over the three years to 31 March 2012. The cost data was collated from the individual annual report and accounts of each LGPS fund and divided by the assets under management at the end of each financial year to provide a 3 year average figure for investment costs. This resulted in cost data for all 100 funds within the UK LGPS with the data for each fund shown in Appendix 5.

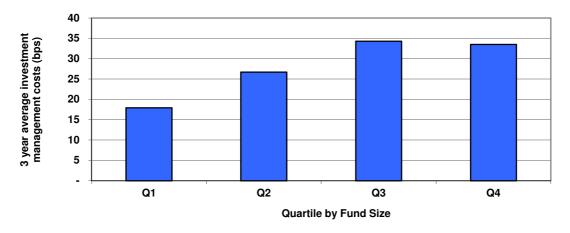
The average annual cost of investment management over the 3 year period under analysis was 23bps p.a. (range of 2bps to 70bps p.a.). The cost figures include management fees for investment mandates and internal investment resource costs but exclude transaction costs and management fees on pooled investments.

The individual costs of the 100 LGPS funds are shown on the following graph:



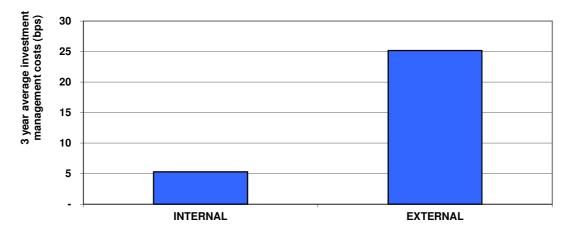
As can be seen from the graph, it does appear that there is some correlation between fund size and investment management costs with larger funds enjoying lower management costs as a percentage of assets. This is supported by a correlation coefficient (r^2) of -0.44 for the 3 year period to 31 March 2012.

The following graph shows the investment management costs of the LGPS divided into quartiles based on fund size:



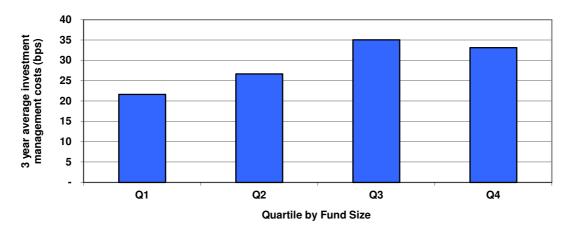
This graph shows that larger funds have investment cost ratios that are, on average, 10 – 15bps lower than smaller funds, although there is a wide variation within each quartile.

There is a significant difference in investment management costs when comparing internally managed funds to externally managed funds.



This graph shows that internally managed funds have investment management costs that are 20bps p.a. lower than externally managed funds, which again suggests that management arrangements are a more important determinant than fund size.

This is also supported by the following graph which shows the investment management costs of externally managed funds only divided into quartiles based on fund size.



This graph shows that larger externally managed funds have lower cost ratios than externally managed smaller funds but the differential (5 - 15 bps) is smaller, and the correlation (-0.37) is lower.

A number of existing studies (Appendix 1) have highlighted the potential for savings in investment management costs through the merger of funds in order to benefit from economies of scale, although some of the studies acknowledged that there would be significant transition costs which would mitigate a proportion of the savings.

It is possible that a large proportion of these cost savings could be generated without having to resort to the costly and complex process of merging funds, with the associated loss of local accountability, such as:

- Greater collaboration between funds, in a similar way to that seen in recent framework agreements for custodian services and actuarial, benefits, and investment consulting. A framework agreement would certainly increase the level of competition on costs from investment managers. However, it may be harder to develop a framework agreement for investment management services due to the wide ranging and somewhat bespoke nature of the services provided. Nevertheless, it could still be useful for more generic services such as index tracking.
- As part of the tender process for investment management mandates within the LGPS, investment managers could be required to provide that particular service to all interested LGPS funds with a sliding fee scale, to which all participating funds would benefit from, depending on the total assets under management. This would enable LGPS funds to retain the responsibility for asset allocation and manager selection but still benefit from the wider economies of scale within the LGPS.
- A number of LGPS funds have considerable experience and strong performance track records in direct investment in certain asset classes via in-house management. These funds could offer their expertise to other LGPS funds possibly via a unitised or pooled vehicle. Costs are likely to be significantly lower than traditional asset managers, with no detrimental impact on performance, whilst still covering the costs of additional resources that would be required and permitting a modest profit incentive for the host authority.

KEY FINDINGS

- Larger funds tend to have lower investment management costs.
- Internally managed funds have significantly lower investment management costs.
- There are a number of alternative methods of achieving cost savings in investment management.

Additional information that would assist in a more detailed analysis:

- Split between internal and external investment management in each LGPS fund to determine whether the correlation between internal management and investment management costs holds for funds with a lower level of internal management.
- Investment management cost data for the entire period under review to determine the trend in costs.

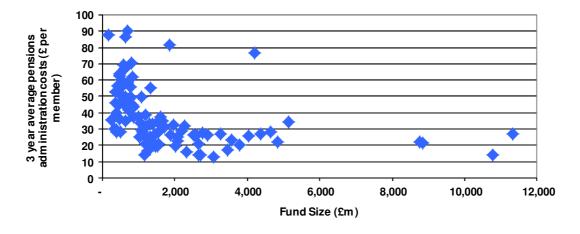
PENSION ADMINISTRATION COSTS

The majority of the existing studies (Appendix 1) concluded that larger funds tended to have lower pension administration costs per member.

This section analyses whether larger funds have lower pension administration costs per member than smaller funds and to identify the causes of any differences by analysing the average pension administration costs of the LGPS funds over the three years to 31 March 2012.

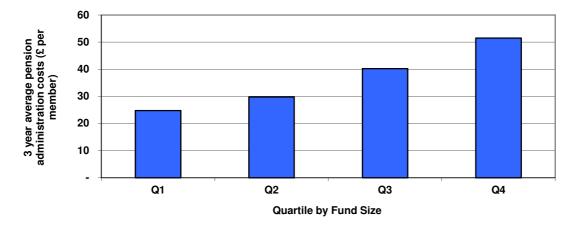
The cost data was collated from the individual annual report and accounts of each LGPS fund and divided by the assets under management at the end of each financial year to provide a 3 year average figure for pension administration costs. This resulted in cost data for all 100 funds under review with the data for each fund shown in Appendix 4.

The average annual cost of pension administration over the 3 year period under analysis was £29.49 per member (range of £12.98 to £89.93). The individual costs of the 100 LGPS funds are shown on the following graph:



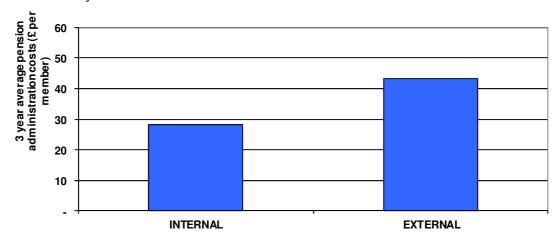
As can be seen from the graph, it does appear that there is some correlation between fund size and pension administration costs with larger funds enjoying lower administration per scheme member. This is supported by a correlation coefficient (r^2) of -0.39 for the 3 year period to 31 March 2012.

The following graph shows the pension administration costs of the LGPS divided into quartiles based on fund size:



This graph shows that larger funds have pension administration costs that are, on average, £5 - 25 per member p.a. lower than smaller funds, although there is a wide variation within each quartile.

The majority of the LGPS funds (91% of assets) are internally administered and there is a significant difference in pension administration costs when comparing internally administered funds to externally administered funds.



This graph shows that internally administered funds have pension administration costs that are, on average, £15 per member p.a. lower than externally administered funds which suggests that, in addition to fund size, administration arrangements are an important determinant of relative costs.

There are a number of potential issues that the reader should be aware of when comparing administration costs across LGPS funds:

 There are significant variations in service levels across LGPS funds which may have a substantial impact on costs;

- There is no standard methodology for reporting pension administration costs across the LGPS; and
- LGPS funds with a materially different member (i.e. proportion of active, deferred and pensioner members) or employer (i.e. large number of small employers) profile could have a significantly different cost structure.

KEY FINDINGS

- Larger funds tend to have lower pension administration costs.
- Internally administered funds have significantly lower administration costs.

Additional information that would assist in a more detailed analysis:

- Service levels in each fund to determine the extent to which the level of service provided correlates with administration costs.
- Pension administration cost data for the entire period under review to determine the trend in costs.
- Fund member data analysed by active, deferred, and pensioner and employer information for the entire period.
- Evidence of the benefit of current collaborations between LGPS funds in pension administration.

APPENDIX 3: LGPS INVESTMENT PERFORMANCE FOR THE 10 YEARS ENDED 31 MARCH 2012

	Fund	Size (£m)	Performance (% p.a.)
1	Strathclyde ¹	11,327	5.8
2	Greater Manchester ¹	10,781	6.3
3	West Midlands ²	8,834	5.4
4	West Yorkshire ¹	8,752	6.4
5	Merseyside ¹	5,130	6.1
6	Tyne and Wear ¹	4,841	6.1
7	South Yorkshire ¹	4,647	6.5
8	Lancashire ¹	4,370	5.6
9	London Pension Fund Authority ³	4,214	5.0
10	Northern Ireland ²	4,052	5.9
11	Hampshire ⁴	3,777	5.6
12	Lothian ¹	3,581	6.2
13	Essex ¹	3,464	6.0
14	Kent¹	3,273	5.5
15	Nottinghamshire ¹	3,072	5.7
16	Cheshire ¹	2,920	5.7
17	Avon ¹	2,762	5.8
18	Derbyshire ¹	2,709	6.2
19	Devon¹	2,673	6.0
20	East Riding of Yorkshire ¹	2,659	6.1
21	Staffordshire ¹	2,600	5.7
22	Teesside ¹	2,587	6.7
23	Hertfordshire ¹	2,521	4.3
24	Leicestershire ⁴	2,337	4.4
25	North East Scotland ²	2,269	5.8

	Fund	Size (£m)	Performance (% p.a.)
26	Norfolk ¹	2,176	5.1
27	East Sussex ¹	2,082	5.8
28	Surrey ¹	2,079	5.5
29	West Sussex ¹	2,037	6.5
30	Tayside ⁴	1,959	5.9
31	Environment Agency – Active ¹	1,852	4.5
32	Rhonda Cynon Taff ¹	1,714	5.6
33	Torfaen ¹	1,666	5.7
34	Cambridgeshire ¹	1,624	5.0
35	Dorset ¹	1,562	5.2
36	Buckinghamshire ¹	1,544	5.0
37	Suffolk ¹	1,540	5.3
38	North Yorkshire ¹	1,535	4.6
39	Worcestershire ¹	1,479	5.1
40	Cumbria ¹	1,454	5.7
41	Carmarthenshire ¹	1,403	6.4
42	Northamptonshire ¹	1,331	5.0
43	Wiltshire ¹	1,329	4.7
44	Lincolnshire ¹	1,328	4.8
45	Bedfordshire ¹	1,301	4.3
46	Oxfordshire ¹	1,296	4.9
47	Falkirk ¹	1,252	5.5
48	Warwickshire ¹	1,205	5.6
49	Gloucestershire ¹	1,198	5.2
50	Somerset ¹	1,192	4.8
51	Cornwall ¹	1,165	5.1

	Fund	Size (£m)	Performance (% p.a.)
52	Cardiff and Vale of Glamorgan ¹	1,150	5.7
53	Swansea ¹	1,124	5.8
54	Flintshire ¹	1,091	5.4
55	Shropshire ¹	1,087	5.2
56	Gwynedd ¹	1,048	5.3
57	Camden ¹	996	5.8
58	Southwark ¹	873	5.6
59	Wandsworth ¹	861	6.2
60	Tower Hamlets ¹	830	5.1
61	Hackney ¹	815	5.5
62	Islington ¹	808	4.9
63	Lewisham ¹	773	4.4
64	Greenwich ¹	759	4.7
65	Northumberland ¹	744	6.2
66	Newham ¹	740	5.0
67	Barnet ¹	709	5.7
68	Ealing ¹	691	5.8
69	Haringey ¹	653	4.5
70	Enfield ¹	644	5.6
71	Hammersmith and Fulham ¹	638	6.6
72	Croydon ¹	635	4.9
73	City of London ¹	604	5.2
74	Hounslow ¹	591	7.0
75	Barking ¹	577	4.2
76	Waltham Forest ¹	539	5.6
77	Dumfries and Galloway ¹	515	3.7

	Fund	Size (£m)	Performance (% p.a.)
78	Bromley ¹	500	7.0
79	Harrow ¹	489	5.4
80	Brent ¹	485	2.7
81	Bexley ¹	483	5.9
82	Redbridge ¹	469	5.8
83	Richmond ¹	448	6.0
84	Kingston ¹	423	5.3
85	Havering ¹	401	4.5
86	Merton ¹	397	6.1
87	Scottish Borders ¹	392	6.0
88	Powys¹	372	5.4
89	Sutton ¹	366	4.9
90	Isle of Wight ¹	335	6.3
91	Shetland Islands ¹	260	4.4
92	Orkney Islands ¹	169	7.3
		176,938	5.7

 $^{^{\}rm 1}$ CIPFA "Local Authority Pension Fund Investment Statistics 2002 – 2012"

² Individual fund annual report and accounts

³ Performance data is a combination of 65% Active Sub-Fund and 35% Pensioner Sub-Fund based on average fund sizes over the period 2009 – 12 – individual performance data for the 10 year period is 4.1% p.a. for the Active Sub-Fund and 6.7% p.a. for the Pensioner Sub-Fund

⁴ Confirmed by administering authority

APPENDIX 4: LGPS INVESTMENT PERFORMANCE FOR THE 20 YEARS ENDED 31 MARCH 2012

	Fund	Size (£m)	Performance (% p.a.)
1	Strathclyde	11,327	8.8
2	Greater Manchester	10,781	9.5
3	West Yorkshire	8,752	9.2
4	Merseyside	5,130	8.9
5	South Yorkshire	4,647	8.8
6	Lancashire	4,370	8.5
7	London Pension Fund Authority	4,214	7.6
8	Kent	3,273	8.3
9	Derbyshire	2,709	9.0
10	Devon	2,673	8.6
11	East Riding of Yorkshire	2,659	8.7
12	Staffordshire	2,600	8.6
13	Teesside	2,587	9.4
14	Hertfordshire	2,521	8.0
15	Leicestershire	2,337	7.9
16	North East Scotland	2,269	8.9
17	Norfolk	2,176	8.7
18	East Sussex	2,082	8.9
19	Surrey	2,079	8.1
20	West Sussex	2,037	9.3
21	Tayside	1,959	8.6
22	Rhonda Cynon Taff	1,714	8.3
23	Torfaen	1,666	8.1
24	Cambridgeshire	1,624	8.1

	Fund	Size (£m)	Performance (% p.a.)
25	Dorset	1,562	8.6
26	Buckinghamshire	1,544	7.6
27	Suffolk	1,540	8.4
28	North Yorkshire	1,535	7.9
29	Worcestershire	1,479	8.5
30	Cumbria	1,454	8.8
31	Carmarthenshire	1,403	9.2
32	Northamptonshire	1,331	8.5
33	Wiltshire	1,329	8.0
34	Oxfordshire	1,296	8.1
35	Falkirk	1,252	8.6
36	Warwickshire	1,205	8.6
37	Gloucestershire	1,198	8.5
38	Somerset	1,192	8.4
39	Cardiff and Vale of Glamorgan	1,150	8.4
40	Swansea	1,124	8.6
41	Flintshire	1,091	8.3
42	Gwynedd	1,048	8.3
43	Camden	996	8.9
44	Southwark	873	8.8
45	Wandsworth	861	9.2
46	Tower Hamlets	830	8.1
47	Hackney	815	8.7
48	Islington	808	8.5
49	Lewisham	773	8.4

	Fund	Size (£m)	Performance (% p.a.)
50	Northumberland	744	8.4
51	Newham	740	7.6
52	Barnet	709	8.3
53	Ealing	691	9.1
54	Haringey	653	7.8
55	Enfield	644	8.9
56	Hammersmith and Fulham	638	8.5
57	Croydon	635	7.5
58	City of London	604	7.8
59	Barking	577	8.4
60	Waltham Forest	539	8.6
61	Dumfries and Galloway	515	8.1
62	Bromley	500	9.1
63	Harrow	489	8.7
64	Brent	485	7.0
65	Bexley	483	9.1
66	Redbridge	469	8.7
67	Richmond	448	8.7
68	Kingston	423	8.0
69	Havering	401	8.4
70	Merton	397	8.9
71	Scottish Borders	392	8.9
72	Powys	372	7.7
73	Sutton	366	8.0
74	Shetland Islands	260	8.0

	Fund	Size (£m)	Performance (% p.a.)
75	Orkney Islands	169	9.7
		131,215	8.6

All data in this table uses 10 year annualised performance data from the CIPFA "Local Authority Pension Fund Investment Statistics 1992 – 2002" compounded with the data in Appendix 1 for all funds that had available data for both periods.

APPENDIX 5: LGPS INVESTMENT MANAGEMENT COSTS FOR THE 3 YEARS ENDED 31 MARCH 2012

	Fund	Size (£m)	3 year average (% of assets)
1	Strathclyde	11,327	0.13
2	Greater Manchester	10,781	0.09
3	West Midlands	8,834	0.12
4	West Yorkshire	8,752	0.02
5	Merseyside	5,130	0.21
6	Tyne and Wear	4,841	0.19
7	South Yorkshire	4,647	0.04
8	Lancashire	4,370	0.18
9	London Pension Fund Authority	4,214	0.30
10	Northern Ireland	4,052	0.28
11	Hampshire	3,777	0.27
12	Lothian	3,581	0.27
13	Essex	3,464	0.43
14	Kent	3,273	0.25
15	Nottinghamshire	3,072	0.14
16	Cheshire	2,920	0.30
17	Avon	2,762	0.30
18	Derbyshire	2,709	0.14
19	Devon	2,673	0.16
20	East Riding of Yorkshire	2,659	0.10
21	Staffordshire	2,600	0.30
22	Teesside	2,587	0.05
23	Hertfordshire	2,521	0.37
24	Leicestershire	2,337	0.31

	Fund	Size (£m)	3 year average (% of assets)
25	North East Scotland	2,269	0.30
26	Norfolk	2,176	0.37
27	East Sussex	2,082	0.27
28	Surrey	2,079	0.29
29	West Sussex	2,037	0.21
30	Tayside	1,959	0.30
31	Durham	1,889	0.36
32	Environment Agency – Active	1,852	0.31
33	Rhonda Cynon Taff	1,714	0.25
34	Torfaen	1,666	0.24
35	Cambridgeshire	1,624	0.32
36	Dorset	1,562	0.12
37	Buckinghamshire	1,544	0.22
38	Suffolk	1,540	0.36
39	North Yorkshire	1,535	0.31
40	Worcestershire	1,479	0.23
41	Cumbria	1,454	0.22
42	Berkshire	1,453	0.17
43	Carmarthenshire	1,403	0.08
44	Northamptonshire	1,331	0.30
45	Wiltshire	1,329	0.31
46	Lincolnshire	1,328	0.27
47	Fife	1,317	0.36
48	Bedfordshire	1,301	0.32
49	Oxfordshire	1,296	0.22
50	Falkirk	1,252	0.27

	Fund	Size (£m)	3 year average (% of assets)
51	Warwickshire	1,205	0.33
52	Gloucestershire	1,198	0.27
53	Somerset	1,192	0.32
54	Cornwall	1,165	0.35
55	Cardiff and Vale of Glamorgan	1,150	0.32
56	Swansea	1,124	0.39
57	Flintshire	1,091	0.47
58	Shropshire	1,087	0.70
59	Gwynedd	1,048	0.36
60	Highland	1,033	0.25
61	Camden	996	0.26
62	Southwark	873	0.52
63	Wandsworth	861	0.29
64	Lambeth	839	0.26
65	Tower Hamlets	830	0.26
66	Hackney	815	0.31
67	Islington	808	0.16
68	Westminster	774	0.45
69	Lewisham	773	0.23
70	Greenwich	759	0.26
71	Northumberland	744	0.22
72	Newham	740	0.40
73	Barnet	709	0.35
74	Ealing	691	0.34
75	Haringey	653	0.45
76	Enfield	644	0.18

	Fund	Size (£m)	3 year average (% of assets)
77	Hammersmith and Fulham	638	0.55
78	Croydon	635	0.25
79	Hillingdon	610	0.54
80	City of London	604	0.52
81	Hounslow	591	0.23
82	Barking	577	0.41
83	Kensington and Chelsea	541	0.40
84	Waltham Forest	539	0.44
85	Dumfries and Galloway	515	0.33
86	Bromley	500	0.40
87	Harrow	489	0.07
88	Brent	485	0.39
89	Bexley	483	0.28
90	Redbridge	469	0.34
91	Richmond	448	0.23
92	Kingston	423	0.29
93	Havering	401	0.32
94	Merton	397	0.17
95	Scottish Borders	392	0.32
96	Powys	372	0.37
97	Sutton	366	0.33
98	Isle of Wight	335	0.30
99	Shetland Islands	260	0.16
100	Orkney Islands	169	0.23
		185,393	0.23

APPENDIX 6: LGPS PENSION ADMINISTRATION COSTS FOR THE 3 YEARS ENDED 31 MARCH 2012

	Fund	Size (£m)	3 year average (£ per member)
1	Strathclyde ¹	11,327	26.66
2	Greater Manchester ¹	10,781	14.03
3	West Midlands ¹	8,834	21.25
4	West Yorkshire1	8,752	22.24
5	Merseyside ¹	5,130	33.99
6	Tyne and Wear ¹	4,841	21.69
7	South Yorkshire ¹	4,647	27.84
8	Lancashire ¹	4,370	27.12
9	London Pension Fund Authority ¹	4,214	76.94
10	Northern Ireland ¹	4,052	25.65
11	Hampshire ¹	3,777	20.09
12	Lothian ¹	3,581	23.42
13	Essex ¹	3,464	16.87
14	Kent ¹	3,273	26.70
15	Nottinghamshire ¹	3,072	12.98
16	Cheshire ¹	2,920	26.42
17	Avon¹	2,762	27.62
18	Derbyshire ¹	2,709	13.71
19	Devon ¹	2,673	14.25
20	East Riding of Yorkshire ¹	2,659	20.92
21	Staffordshire ¹	2,600	26.24
22	Teesside ²	2,587	25.40
23	Hertfordshire ²	2,521	26.44
24	Leicestershire ¹	2,337	16.15
25	North East Scotland ¹	2,269	31.65
26	Norfolk ¹	2,176	28.65

	Fund	Size (£m)	3 year average (£ per member)
27	East Sussex ²	2,082	25.26
28	Surrey ¹	2,079	22.81
29	West Sussex ¹	2,037	19.75
30	Tayside ¹	1,959	32.72
31	Durham ¹	1,889	26.40
32	Environment Agency – Active ²	1,852	81.75
33	Rhonda Cynon Taff¹	1,714	31.10
34	Torfaen ¹	1,666	34.68
35	Cambridgeshire ¹	1,624	37.31
36	Dorset ¹	1,562	20.61
37	Buckinghamshire ¹	1,544	28.30
38	Suffolk ¹	1,540	34.46
39	North Yorkshire ¹	1,535	19.66
40	Worcestershire ¹	1,479	19.38
41	Cumbria ¹	1,454	26.49
42	Berkshire ¹	1,453	20.32
43	Carmarthenshire ¹	1,403	32.76
44	Northamptonshire ¹	1,331	55.32
45	Wiltshire ¹	1,329	25.04
46	Lincolnshire ²	1,328	18.08
47	Fife ¹	1,317	33.07
48	Bedfordshire ¹	1,301	22.71
49	Oxfordshire ¹	1,296	23.63
50	Falkirk ¹	1,252	16.62
51	Warwickshire ¹	1,205	38.60
52	Gloucestershire ¹	1,198	30.99
53	Somerset ¹	1,192	21.01

	Fund	Size (£m)	3 year average (£ per member)
54	Cornwall ¹	1,165	13.85
55	Cardiff and Vale of Glamorgan ¹	1,150	26.21
56	Swansea ¹	1,124	28.25
57	Flintshire ¹	1,091	49.70
58	Shropshire ¹	1,087	29.60
59	Gwynedd ¹	1,048	33.77
60	Highland ¹	1,033	25.20
61	Camden ¹	996	37.49
62	Southwark ¹	873	43.48
63	Wandsworth ¹	861	37.35
64	Lambeth ¹	839	44.58
65	Tower Hamlets ¹	830	62.16
66	Hackney ²	815	42.51
67	Islington ¹	808	70.41
68	Westminster ²	774	55.69
69	Lewisham ¹	773	49.37
70	Greenwich ¹	759	48.34
71	Northumberland ¹	744	45.74
72	Newham ²	740	41.76
73	Barnet ¹	709	89.93
74	Ealing ²	691	58.13
75	Haringey ¹	653	34.84
76	Enfield ¹	644	49.33
77	Hammersmith and Fulham ²	638	67.14
78	Croydon ¹	635	86.61
79	Hillingdon ¹	610	44.73
80	City of London ¹	604	47.73

	Fund	Size (£m)	3 year average (£ per member)
81	Hounslow ²	591	69.27
82	Barking ¹	577	45.70
83	Kensington and Chelsea ²	541	59.93
84	Waltham Forest ²	539	55.53
85	Dumfries and Galloway ¹	515	28.23
86	Bromley ²	500	51.17
87	Harrow ¹	489	51.35
88	Brent ²	485	63.60
89	Bexley ²	483	62.75
90	Redbridge ¹	469	36.09
91	Richmond ¹	448	44.54
92	Kingston ¹	423	56.18
93	Havering ¹	401	40.10
94	Merton ¹	397	28.12
95	Scottish Borders ¹	392	29.60
96	Powys ¹	372	46.11
97	Sutton ¹	366	52.95
98	Isle of Wight¹	335	30.03
99	Shetland Islands ¹	260	35.68
100	Orkney Islands ¹	169	87.66
		185,393	29.49

¹ Internally administered funds² Externally administered funds