The Actuarial Profession
making financial sense of the future

consultation response

Personal Accounts Delivery Authority
Building personal accounts: Designing an investment approach

Comments from the Actuarial Profession

August 2009

The Actuarial Profession
making financial sense of the future

PADA Investment Consultation Team
St Dunstan's House
201-211 Borough High Street
London
SE1 1GZ

Via email to: pada.investmentconsultation@dwp.gsi.gov.uk

7 August 2009

Dear Sirs

Consultation Paper on *Designing an Investment Approach*

Thank you for providing The Actuarial Profession with the opportunity to comment on this consultation. Our detailed comments, responses to your specific questions and further information about the Profession are attached to this letter.

If you have any questions or would like to discuss any of these matters further, please do not hesitate to contact me (e-mail: patricia.rustem@actuaries.org.uk, direct line: 0207 632 2187.)

Yours faithfully

Patricia Rustem
Practice Manager, Finance and Investment
(on behalf of the Finance and Investment Practice Executive Committee)

Faculty of Actuaries
Maclaurin House
18 Dublin Street
Edinburgh EH1 3PP
Tel: +44 (0)131 240 1300
Fax: +44 (0)131 240 1313
e-mail: faculty@actuaries.org.uk
www.actuaries.org.uk

Institute of Actuaries
Staple Inn Hall
High Holborn
London WC1V 7QJ
Tel: +44 (0)20 7632 2100
Fax: +44 (0)20 7632 2111
e-mail: institute@actuaries.org.uk
www.actuaries.org.uk

Institute of Actuaries
Napier House
4 Worcester Street
Oxford OX1 2AW
Tel: +44 (0)1865 268200
Fax: +44 (0)1865 268211
e-mail: institute@actuaries.org.uk
www.actuaries.org.uk

Introduction to The Actuarial Profession

Actuaries provide commercial, financial and prudential advice on the management of a business's assets and liabilities, especially where long term management and planning are critical to the success of any business venture. They also advise individuals, and advise on social and public interest issues.

Members of the Profession have a statutory role in the supervision of pension funds and life insurance companies. They also have a statutory role to provide actuarial opinions for managing agents at Lloyd's.

The Profession is governed jointly by the Faculty of Actuaries in Edinburgh and the Institute of Actuaries in London. A rigorous examination system is supported by a programme of continuing professional development and a professional code of conduct supports high standards reflecting the significant role of the Profession in society.

This response has been prepared by the Profession's Finance and Investment Practice Executive Committee and the Resource and Environment Member Interest Group.

The establishment of the Personal Accounts Delivery Authority and the associated asset pools affords the opportunity for the UK to establish a world class asset management function. As the assets under management grow over time, then the range and depth of the Authority's activities can become broader, thus:

a. enhancing returns for the benefit of account holders;

b. applying better risk management techniques;

c. demonstrating the highest standards of corporate governance; as well as

d. encouraging new developments in investment management techniques

The investment activities of PADA should aspire to being amongst the most important in the world and serve as an example, role model and provide encouragement to the entire UK fund management sector. We are sure that the entire sector would benefit from such a flagship institution with a true global profile – perhaps along the lines of the Norway Government Pension Fund – Global.

We think that the PADA consultation document is a good overview and discussion document of many of the issues involved in good modern fund management businesses and is a most valuable starting point to establish such an organisation.

Chapter 3 - What should the scheme's investment objective be?

3.18 Index linked gilts are not necessarily risk-free real assets; they can generate significant mismatches from inflation unless bought and held over the relevant period.

3.20 We agree that members putting money into the scheme is absolutely critical. However, we find figure 3.1 and the inferences drawn in 3.20 open to misinterpretation. A single bad year (or day even) in the investment markets near to the date at which the savings are converted into pension can wipe out many years of contributions. In addition, we would expect a significant feedback effect – poor performance will lead to member disenchantment and falls in, or cessation of, further contributions.

3.23 We believe that these first cohorts of members could be important for the long-term success of the scheme. If the first cohorts of pensioners retire with poorer pensions than expected, then this can influence the take-up in successor generations. We therefore agree strongly that it is important not to ignore these members in designing the operation of the scheme and in designing the investment objectives.

Consultation questions

3.1 The trustee corporation may have to strike a balance between what it believes members want and what it believes is the best investment solution for the majority of members. Where do you think this balance should be struck for the personal accounts default fund?

It is important to consider separately the initial cohorts of members as well as longer term 'steady state' membership who might have longer participation periods on average than the initial cohort. If used, target replacement income type objectives will have to be carefully phrased to accommodate the different cohorts without building inappropriate expectations. On balance, we do not think that target replacement ratio objectives would be a good idea because of the strong inter-dependencies between investment, contributions and time to retirement. In addition, salary information is unlikely to be available and hence ongoing communication of the attainment or otherwise of the objectives will be impossible. We would suggest that a simpler objective is needed for such a heterogeneous population.

Ultimately, members want a good income in retirement, but measuring this is fraught with difficulty. The primary tension between an individual member and the 'average' member is that the target income may be further or nearer depending on the contributions made and investment returns achieved to date. An investment solution that enables banking of good returns into 'safe' investments would enable the remaining assets to be invested at a similar risk level across members, irrespective of this historic experience.

A secondary tension is that some members will be more financially 'savvy' than others. The key socio-economic target group for the personal accounts scheme should be those on lower incomes with less financial expertise or experience. The focus, particularly in the construction of the default option, should remain clearly on this group. Having a low level of (downside) risk in the short term is likely to be most beneficial to giving these members the confidence to continue to contribute to the scheme.

It is worthwhile thinking about risk as members will experience it, rather than purely in terms of final outcomes. As well as wanting a good retirement outcome, members will want to have a low level of risk along the path to retirement. The risk metric could be phrased in terms of the value of the accumulated pension pot or (more likely as retirement nears) the projected income level. Managing these twin risks, through portfolio construction and clear reporting, should form the basis for the investment solution.

3.2 How should the different contribution profiles of members affect the scheme's investment objectives?

Different patterns of contributions can impact growth significantly. Generally speaking, contributions that are made sporadically increase the impact of investment risk on the final pension. It may be that members who are likely to have to make irregular contributions would benefit from different investment options. However, for simplicity and clarity of communication, we do not think that it would be possible or desirable to attempt to allocate different default solutions to members.

More generally, we applaud PADA's acknowledgement of the wide diversity of members likely to be in the scheme and encourage it to pay particular attention to designing objectives that will suit the majority of members, rather than an hypothetical member created by taking the average of each dimension/feature/characteristic separately.

Again, at a general level, we would encourage PADA to place flexibility very high on its agenda when setting objectives. As noted, pensions/savings arrangements need to be in place over long periods and the quantitative and qualitative research based on potential members at the current time may not hold true over such long periods. It would be better to enable and promote in the scheme the flexibility for the Trustee Corporation to consider innovations that may only have a passing/time-limited appeal and value at the appropriate time, rather than embedding them as permanent elements in the scheme.

3.3 What should be the overarching objective of the personal accounts default fund and why?
For the majority of members at which PADA has been targeted, an underlying objective couched in terms of income in retirement – desired and 'minimum' levels – seems the most direct. However the apparent simplicity and directness of such an objective are probably not sufficient to outweigh the complexities of multiple cohorts of membership and the relationship with contribution patterns. In order to make communication and operation of the investment arrangement straightforward, there are benefits in the Trustee Corporation converting those aims into benchmark-driven objectives. In turn, any benchmark-driven objectives should be 'investable' directly on a low cost basis. The advantages of such benchmarks are that the investment managers have a clear 'zero relative risk' position against which to be measured and there is no in-built long-term dependency on active management decisions (although such benchmarking does not exclude the use of active management). The benchmarking process will also enable members who do have other savings to compare the strategic nature of their PADA investments against the investment characteristics of other forms and methods of saving.

Any unconstrained 'best efforts', or non-investable benchmarks (such as aiming at inflation + 3%) are doomed by the complexities of deciding on time horizons, start time points, etc., and transitions between active managers, since they will undoubtedly be required.

The Trustee Corporation will need to take regular advice on how to convert their underlying objectives into investment benchmark objectives.

With the notion of a matching investment product as a benchmark, objectives can be specified in terms of maximising the return subject to a maximum risk away from the notional benchmark. Such objectives would work particularly well when combined with target date funds where the maximum risk away from the matching investment product changes (probably reduces) as the target date is approached. The maximum risk may also vary depending on past performance within the fund. The Trustee Corporation may wish to take this a stage further, depending on their views on active management.

For example, they may wish to specify a strategic investment benchmark (possibly dynamic, depending on past performance and target date) for each fund that implicitly carries a level of risk relative to the matching investment product. Active managers would be asked to manage relative to that benchmark. In that way the Trustee Corporation will keep control of some of the sources of risk, but could give active managers some scope for tactical position-taking and considerable scope for stock selection. The same arrangement would also work if passive managers were employed except that passive managers would adhere strictly to the investment benchmark. The ability of this format to allow for both active and passive management, as well as strategic risk-taking in pursuit of the investment objective, imbues the framework with flexibility without embedding a particular need for delegation to active managers.

Chapter 4 - How should members' contributions be invested?

4.9 We would take some issue with the claim that mean-variance is 'standard'. Although it is taught as standard in most investment courses, we are not aware that professional advisors would use it without considerable modification in practice. The underlying assumptions are simply not appropriate for the long-term nature of PADA. We would agree that the general principles behind mean-variance analysis are employed, i.e. that there is no return without risk and that diversification can sometimes offer something of a free lunch.

Consultation questions

4.1 In what situations should personal accounts use tactical asset allocation (TAA) and why?

Although there may be some academic evidence that TAA is able to produce excess returns, our experience is that, akin with active management approaches, it is far from being certain. TAA in particular is a 'low breadth' strategy which means that the risks needed to generate the returns can be relatively high. Also, in order to communicate the long term strategy of PADA to members, we would suggest that any TAA would have to be so heavily constrained that it would impair any return generation potential. We would suggest that the use of TAA should be taken only by sophisticated investors able to understand the risks and should be made able via switching opportunities in PADA, but not as part of the default fund.

We applaud recognition of short- and long-term risk characteristics of asset classes. It is too easy to extrapolate the short term into the long term and come to the wrong conclusions. For example, cash may have low short term absolute volatility of returns relative to bonds, but, depending on the persistence (stickiness or serial autocorrelation) of rates, this may reverse over longer periods. Also, cash may have much higher volatility than bonds relative to the price of annuities.

4.2 What are your views on how the personal accounts scheme can use alternative asset classes to benefit from potentially improved diversification and investment performance, while still meeting its needs for liquidity and accurate pricing?

Understanding most of the alternative asset classes (with the possible exception of property) can be very difficult and we would suggest that having them in the default fund would make it complicated for the Trustee Corporation to communicate with members. We would also caution against including such illiquid (as they often are) investments in a default fund that may grow to be very large. It would not be helpful for the Trustee Corporation to become forced investors in illiquid asset classes just because they were part of the investment benchmark allocation. None the less, having a 'diversified' asset mix within the control of the Trustee Corporation would be attractive and members would not need to get involved in the detail. The Trustee Corporation would have to use its judgment on market size and liquidity considerations. In addition, it would have to consider carefully its own ability to understand the asset classes, communicate their broad characteristics to members and judge if they are worth accessing on very large scale (perhaps only on a tactical basis).

4.3 Across which asset classes should diversification of the default fund extend?

We would not set any limits but keep each asset class under review, with specific monitoring of market size; liquidity; transparency; practicability of investment and the diversification benefits that may change over time.

4.4 What should be the balance between active and passive managers in the default fund, and is this consistent with a low-charge scheme?

The introduction of active management will complicate communication efforts with members. Members of PADA may be very confused to see their fund values do badly when they are able to see in the press and elsewhere that markets are doing well. It is well documented that active managers very rarely have a style or approach that works across economic cycles. This will mean that the Trustee Corporation will have to change managers over time. The monitoring and implementation of such changes introduces significant governance costs on top of the higher active management fees charged. In addition, if a change in manager means that the assets have to be transferred from one house to another, there are significant transition costs.

Given those disadvantages, we would have to suggest that the Trustee Corporation will have to find significant evidence of positive excess returns from managers to outweigh the negatives.

Passive management may also be taken in house eventually if the fund gets big enough, which could further reduce costs.

At a macro-economic level, though, PADA will have to consider how big the fund may get and whether the weight of money being invested passively will distort markets, or create opportunities to be traded against.

A more general consideration not mentioned is rebalancing. If a particular benchmark allocation is chosen the Trustee Corporation will need to decide whether new money into the scheme will be invested in a constant proportion or will be used, along with automatic switching, to maintain the allocations to each asset class on the whole of the member's savings. Rebalancing to constant proportions will maintain the same level of short term volatility, provided the volatilities of the underlying asset classes themselves remain constant. In practice, asset class volatilities themselves change dramatically; rebalancing will at least avoid long term drift of the level of risk and will make fund allocations more transparent. The use of target date funds makes this easier to achieve.

4.7 Should the personal accounts scheme participate in securities lending?

4.8 If so, what controls and limits should it impose, if any?

Our view is that securities lending, when properly managed, benefits investors and fosters the good functioning of markets. However, there are risks associated with lending that need to be well understood and carefully managed. Additional governance from the Trustee Corporation will be important. Requiring higher value collateral than the loaned asset; daily marking to market; pricing and processing systems and legal expertise are among the aspects to consider. There are other considerations to take into account as well – for example, an extensive securities lending programme may affect the ability of the Trustee Corporation to exercise its voting rights effectively as discussed in Chapter 6. The ability of the Trustee Corporation to devote sufficient time and energy to the governance required of securities lending will depend on other decisions. It may be that this is a decision that the Trustee Corporation does not ignore, but defers making so that it can focus on the higher priority issues upfront. Thereafter it can judge the extent to which its governance budget will permit these more detailed issues.

Chapter 5 - Approaching retirement

5.30 Our thoughts are that the potential regret risk will be higher for members closer to retirement than those further away from it as it is at older ages that most members pay attention to their potential retirement income. In addition, those closer to retirement will have fewer 'Plan Bs' available to them to supplement retirement income.

5.34 The text in bold seems misplaced. The falls in the market have happened already and investment arrangements should be based around the future and the potential risks and opportunities of the future. The markets will not necessarily bounce back up just because they have just fallen! If the fall itself has been caused by a mispricing, then the market might increase; on the other hand if the fall was the correction to a previous mispricing then it might not. It would be very wrong of the Trustee Corporation to see risk reduction as being related to events that have happened in the past. It might make sense not to invest entirely in bonds if it is believed that members might, in future, regret not having exposure to potential upside, but it is wrong for that decision to be based on the fact that a past risk taken has turned out disadvantageously.

Consultation questions

5.1 Is a traditional lifestyling mechanism appropriate for the personal accounts default fund, and if so why?

5.2 Would a target-date approach be appropriate for the default fund,and if so why?

These two approaches seem to be able to achieve the same goal from the member's point of view. The most cost effective should be used. Impacts on cost will be administrative costs and costs of switching. The target date funds seem to provide a lot of advantages, not least in achieving efficient rebalancing across asset classes. A key benefit of a target date fund is that the member is forced to engage about when they might plan to retire and the investment strategy can then follow from that. Using a notional retirement age is likely to seem increasingly anachronistic in the years to come.

We would endorse the observation that a long lifestyling period facilitates more flexibility about choice of retirement date by reducing potential regret risk.

'Banking' approaches should be investigated, i.e. approaches that automatically trigger a change from an asset class to a more matching asset class in the investment benchmark allocation should that asset class do 'well'.

Chapter 6 – Achieving high-quality corporate governance

1 We believe it is important that PADA are pro-active in their attitude towards corporate governance and it should be treated seriously.

2 There has been a long history of corporate governance in the UK dating back many years. It has been formalised in the Combined Code since it was introduced in 1992. It has been quintessentially British in the sense that it has been based on voluntary codes largely based on principles – it relies relatively little on legislation and regulation.

3 However, in the light of recent challenges facing the financial sector and other corporate issues, it seems highly likely that there will be some changes in this area in future. In particular, Government is awaiting the final reports of the Walker Review into the corporate governance in UK banks and other financial industry entities and the FRC's Review of the Effectiveness of the Combined Code.

Consultation questions

6.1 To what extent can the personal accounts scheme deliver high-quality corporate governance at a low cost?

We believe that the scheme can deliver a high quality corporate governance regime at an acceptable cost. The objective should be to do this from the outset by setting out a transparent and clear philosophy and implementation approach. The degree of sophistication would be varied over time so that as the assets increased, so more extensive and detailed situations could be undertaken.

Even at the outset, there will need to be some in-house Trustee Corporation expertise. Policy will have to be formulated; implementation will have to be co-ordinated; actual implementation will have to be scrutinised against the policy objectives. We are doubtful that corporate governance can be effectively delegated to the fund managers either in theory or in practice if the Trustee Corporation aspires to the highest standards. In ¶6.18 reference is made to potential conflicts of interest that could arise if investors took different stances on an issue. Whilst the dangers of this would be reduced if there was detailed co-ordination within the Trustee Corporation, it may not totally eliminate the potential for conflicts. So, for example, the range of unitised investment vehicles that are made available may have built-in conflicts of interest.

The formulation of policy at the outset is particularly important and, at the same time, challenging. We believe that the Trustee Corporation will have to be involved in establishing the policy and detailed working procedures.

Costs can be managed and reduced by getting technical and information inputs from the external managers, perhaps under the rules of the investment manager agreements.

6.2 How will this evolve over time as the scheme's assets under management grow?

We believe that the corporate governance regime should evolve over time both as the assets grow and 'best practice' in the area. For example, for cost reasons, the initial phase may be confined to exercising corporate governance responsibilities and exercising its voting rights to UK companies. Subsequent phases may be to extend this to global companies or corporate engagement, for example. The costs of establishing an in-house corporate engagement capacity when the assets of the scheme are relatively small may prove prohibitive.

6.3 How do we achieve high-quality corporate governance where assets are managed passively?

Assets that are managed passively tend to driven by a "buy-and-hold" strategy – if the company is included in the benchmark index, then it will typically be held in the asset portfolio in an appropriate proportion. Therefore, some of the more aggressive aspects of corporate engagement may prove more difficult to implement. However, there is no reason why the exercise of voting rights etc should not be applied to companies held in passively managed funds.

6.4 What approach should the Trustee Corporation take to voting of shares, both overseas and in the UK?

The Trustee Corporation must discharge its responsibilities in accordance with the policies set out by the Trustees. The process should be transparent and be seen to be implemented in a consistent and fair way. We would support a policy that, at the very least, ensured that the scheme exercised its voting rights where practicable.

As we mentioned earlier in our submission, we would welcome a leadership role by the Trustee Corporation in this area. The Trustees may feel that this is aided by setting a public example also incorporating an element of ongoing public accountability. If this is so, the proxy voting will not assist this policy objective.

Chapter 7 – Responsible investment and its role within the personal accounts scheme

1 The discussion paper sets out some background to the vexed issue of fiduciary responsibility and member's interest. In our view, this must be driven by legal advice. However, the legal situation appears to be unclear both in the UK and globally in this area.

2 In 2005, the United Nations Environment Programme Finance Initiative ("UNEP FI") commissioned Freshfields Bruckhaus Deringer ("Freshfields") to write a report [1] clarifying the legal limits of institutional investors' discretion to consider ESG issues in investment decisions. Freshfields examined the issue across both common law and civil law jurisdictions and set out not only to identify the legal rules regarding institutional investors' ESG consideration in several jurisdictions, but also highlighted a number of misconceptions. Freshfields found that institutional investors do have some discretion to consider ESG issues when making investment decisions. They concluded that in the jurisdictions they considered (including the UK)–

> *"… integrating ESG considerations into an investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions."*

3 The Freshfields report has then been followed up in 2009 by a further report [2] from UNEP FI that provides "a legal roadmap for fiduciaries looking for concrete steps to operationalise their commitment to responsible investment."

---

[1] *A legal framework for the integration of environmental, social and governance issues into institutional investment*, 2005, United Nations Environment Programme Finance Initiative

[2] *Fiduciary responsibility: Legal and practical aspects of integrating environmental, social and governance issues into institutional investment*, 2009, United Nations Environment Programme Finance Initiative

4 Despite these reports, we understand that there is a body of legal opinion that agrees with the view expressed in the last paragraph of Box 7.1 that an element of ambiguity remains “as to where responsible investment sits with the fiduciary duty to act in the best interests of members.”

5 The arguments for the costs and benefits of responsible investment are set out in ¶7.19 – 7.22. The paper concludes that the financial benefits for scheme members of responsible investment is unproven. In ¶7.22 it is suggested that this may be due to the fact that the increased fund management costs may erode the additional returns that are achieved by socially responsible firms. We would point out that other reasons may exist including the following:

a. As explained in the report, the definition of ESG investment is not uniformly agreed in the industry and it may mean different things to different investors. This lack of homogeneity may mean that inter-fund comparisons, particularly over time, produce inconclusive results.

b. In a series of papers[3] published in 2002, it was shown that passively managed socially responsible indices may incur substantially higher levels of risk than a comparable unconstrained broad market index. So, in an efficient market, the returns on the socially responsible index would have to compensate for this increased risk, before the manager took incremental risk for active decisions against the socially responsible index. Perhaps managers were not taking sufficient additional risk in order to achieve the incremental returns.

c. Nevertheless, there is not conclusive proof that ESG indices have consistently outperformed broader market comparable indices.

Therefore, for the Trustee Corporation, the legal aspects of fiduciary responsibilities and members’ interests are particularly important.

6 The discussion in ¶7.10 on the evidence on climate change is very different. The majority of serious scientists, economists, policy makers and politicians believe that the effects of climate change are one of (if not the) most important phenomenon confronting mankind in the medium to long-term – certainly well within the timeframe of PADA. It is not a local or regional phenomenon – it is global. Many commentators believe that it is such a serious problem that if it is not effectively tackled, then it will cause great dislocation to world economic activity, trade flows, health, food and water, human migration patterns and maybe even social and military uncertainty.

7 Given the different backdrop between climate change and the wider definitions of ESG set out in the paper it might be clearer if a demarcation line is set out between the environmental (i.e climate change) on the one hand and the social and governance issues on the other. This is not to devalue the importance of the social and governance issues at all – rather that progress can be made on climate change immediately.

8 In his pioneering 2006 report, Lord Stern examined economic effects of this likely climate change. He persuasively argued that the world needed to transition from a high carbon led growth economy to an economic model driven by low carbon growth, as well as mitigate against the effect of the historic accumulation of greenhouse gases in the atmosphere. Lord Stern’s report set out how this could be achieved, provided some indicative timelines, as well as setting out the economic costs and benefits of taking action now.

---

[3] *Green with Envy* and *Boxing against Green Shadows*, 2002, Commerzbank Securities

9 In ¶7.10, it is noted that Lord Stern estimated that the markets for low-carbon energy products could be worth at least $500bn per annum by the year 2050. In order to confirm how rapid the investment changes in climate change are, it has been estimated 4 that a conservative figure of low-carbon investment spending in 2007 was already in excess of $300bn.

10 We believe that the historic relationships between risk and return of all asset categories will be changed; all companies are impacted, both listed and non-listed. The challenge is how to build the macro investment model that captures the entire low carbon economic cycle.

11 Some observers believe that the magnitude of these changes to global investment markets will be on an unprecedented scale, even greater than those experienced in the industrial revolution. Climate change will inevitably have wide-ranging impacts on economics and financial markets as the system reallocates assets and funds and makes huge investments as the global economy becomes driven by low carbon (rather than high carbon) growth. This has far reaching implications for managers and those responsible for large asset pools working to manage the assets and liabilities in the long term. It is both prudent and imperative that to consider the implications of climate change for strategic asset allocation decisions. Traditional asset and liability modelling approaches have historically not taken the climate risks and opportunities into account. Indeed, it is not clear that we have the necessary investment tools, techniques and models to handle effectively this unprecedented and difficult change at present. PADA could provide very valuable leadership in this area.

12 However, it is important not to underestimate the complexity of this task as it will effect the structure of the fund, asset allocation, benchmarking, risk management, security selection etc that we have already commented on earlier in our submission.

13 The following analysis shows the generic positive and negative impacts on industry and commerce; these in turn will be transmitted to the risks and opportunities in asset portfolios. Clearly, this is likely to affect the expected returns on existing as well as new assets that are accumulated in the future.

a. Positive impact on industry and commerce

i. Increased revenue - for companies that are focused on addressing, combating and developing solutions, products, goods and services to offset and overcome the effects of climate change.

b. Negative impacts on industry and commerce

i. Physical impact - changes such as increased / reduced precipitation, evolving temperature patterns, increased and strengthening storm patterns;

ii. Carbon cost - the pricing of carbon into the economic cycle, how will this impact on operating expenses;

iii. Substitution risk - investing into early stage processes which are exposed to rapid technological change;

iv. Regulation and litigation - evolution of new legislation and case law which may invalidate certain processes, expose them to litigation or create new class action challenges;

[4] *Climate Change Index Quarterly Review*, September 2008, HSBC Bank plc

v. Insurability - location of operating assets and access to cover will increasingly become an issue as insurers re-evaluate their risk appetite and desire to provide cover.

14 In September 2007, Lord Stern stated that "we have the time and knowledge to act, but only if we act internationally, strongly and urgently". Irrespective of personal beliefs held as to the existence and causes of climate change, we believe that the phenomenon will affect all global assets in the future. We recommend that the risks and opportunities are not ignored by the Trustee Corporation in the investment of the assets.

Consultation questions

We believe that the balance between the risks and opportunities of engaging in responsible investment strongly favour engagement. Indeed, in relation to climate change, we would go so far as to suggest that engagement is imperative since its effects will pervade all asset classes. As the discussion paper points out, the legal background to the social and governance aspects is less clear.

Many commentators – and perhaps even policy makers – believe that there is no choice as far as adapting to and mitigating climate change is concerned.It is something that simply has to be done and many estimate that the costs are quite modest if action is started now.

7.1 How can the personal accounts scheme engage in responsible investment in a cost-effective way?

The Trustee Corporation will need to draw up a set of guidelines that establish its policy and how it is to be implemented. Implementation will have to be through the fund management process. Part of the investment manager appointment process should include a detailed examination of the prospective managers skill, commitment, ability and resources devoted to responsible investment.

7.2 Should responsible investment be a matter for the default fund alone, or for all fund choices, as far as it is practical and relevant?

No, it has to be applied to all funds and asset categories. In the case of managing the effects of climate change it affects all assets and has to be taken account of, irrespective of any view taken towards the wider aspects of responsible investment.

7.3 How should the Trustee Corporation interpret its fiduciary duty in relation to responsible investment while maintaining a commitment to low charges?

We believe this is largely a legal matter and the interpretation of the Trustee Corporation to that legal opinion. As actuaries, we are not best qualified to offer an opinion or advice.

7.4 If responsible investment is pursued, will the members be best served by building in-house capability or outsourcing?

In our view, a strategic policy has to be drawn up by the Trustee Corporation, but implemented wherever the assets are managed, be it internally or externally. The Trustee Corporation may feel that it has to monitor the implementation of its policy from a central skill base within the corporation.

8 Choice - how much is enough?

8.14 Although equal weighting may appear naive, academic evidence would suggest that it is not necessarily a bad strategy and it has several advantages[5]. The practical issue associated with this is to specify sensible building block asset classes (funds).

Appendices on asset classes

We commend the analysis of the asset classes over both short and long terms.

Finally, if further discussion would help clarify any of the points raised above, we would be very happy to assist.

[5] *DeMiguel, V., L. Garlappi and R. Uppal, 2007, Optimal versus Naive Diversification: How Inefficient Is the 1/N Portfolio Strategy?* Forthcoming in *The Review of Financial Studies.*