The Kaleidoscope Project

A report for Severn Trent Plc by Janet Barber

THE 2000 AMENDMENT TO THE 1995 PENSIONS ACT

Can a financial instrument improve the management of natural ecosystems?

SEVERN TRENT
ENVIRONMENTAL LEADERSHIP

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About the author

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She has close links with the not-for-profit sector including Forum for the Future of which she is a Trustee, and WWF for whom she has undertaken monitoring and evaluation of the effectiveness of its projects and where she was the UK Director of Programmes.

She has been a member of English Nature's Council, and has completed work for both WWF and English Nature on their relationship with industry and commerce.

She was an adviser to the National Lottery Charities Board on grants to overseas social and natural resources projects and a founder member of the government's Darwin Initiative Committee which funds biodiversity projects in many countries.

Executive summary

The 2000 Amendment to the 1995 Pensions Act

This report highlights the opportunities presented by the 2000 Amendment (the Amendment) to the 1995 Pensions Act in the UK to improve companies' management of natural capital, including ecosystems, the services they deliver, and the millions of animal and plant species that constitute biological diversity. The Amendment is an example of how an adroit, low-key, financial instrument can both encourage and take account of corporate social responsibility (CSR) performance in 'investee' companies, now and in the future. As a result, it will also create growing opportunites for investors to choose socially responsible investment (SRI) as an increasingly expanding option as SRI moves from niche to mainstream status.

The 1995 Pensions Act requires pension fund trustees (PFTs) to publish a Statement of Investment Principles (SIP). The Amendment is significant because it requires PFTs, responsible for £800bn of pension funds' investments, to state in their SIP:

a) *the extent, if at all, to which social, environmental or ethical (SEE) considerations are taken into account in the selection, retention and realisation of investments; and*

b) *their policy, if any, in relation to the exercise of rights (including voting rights) attached to investments.*

The key players

Government

The impact of the Amendment will only be felt if those in the pensions investment industry have an interest in making it work as it is supposed to and are convinced that government means it to work. The government's commitment has been demonstrated by the publication of the Pensions Bill in February 2004. Its provisions regarding the role of a pensions regulator and the responsibilities of PFTs in the context of 'knowledge and understanding' of issues relating to pension fund investments are important advances.

Fund managers

There is enthusiasm and expertise residing in a growing number of investment professionals who want to contribute to 'investee' companies improving their impact on SEE issues. This gives fund managers more opportunity to take a broader approach to SRI as they advise investors. Taking account of SEE and other non-traditional criteria, many believe, will increase the financial returns for pension fund beneficiaries over time.

Pension fund trustees

However, despite these propitious signals and activities, PFTs on the whole remain nervous of recommending to fund managers and consultants that SEE considerations should be taken into account in the allocation of pension fund assets. They feel there is more risk associated with applying SEE than not applying these principles. This is in part due to constraints represented by: time limits; a lack of knowledge about the implications of the Amendment; a lack of confidence in their knowledge of the substance of SEE principles; understandable pre-occupation with making sure they fulfill their current obligations to pensions' beneficiaries; the nature of the 'Chinese wall' legally necessary between the PFTs and the Board of the sponsor company; discomfort with handling 'non-traditional criteria' or 'intangible assets' and, concerns about the liability for PFTs if pensions fund investments under-perform.

Companies

There is an anomaly associated with those companies which have an excellent reputation for CSR performance, and the fact that their PFTs may not feel it appropriate to apply similar CSR criteria to the companies in which they invest through their fund managers.

Key areas for discussion

Through the development of this project it became apparent that there are three main areas that require further discussion, expanded in chapters 3, 4 and 5 respectively:

- Determining the potential for the Amendment to achieve positive change for SEE and in particular the 'environmental' principle, in the light of the government's ambitions for its successful implementation; and the concerns, reticence or enthusiasm expressed in the course of the research.

- Exploring the progress made in the economic valuation of wild species and ecosystem services; this is historically a complex area but also a critical one. Much remains beyond the boundary of conventional economic analysis. The issue is to what extent and by what mechanisms can 'natural capital' become part of a market economy, where demand, availability and price determine the levels and time-frames for use of natural resources. The extent to which social and environmental externalities are taken into account in the market pricing is another key aspect of the debate.

- Identifying a much more proactive role for 'not for profit' centres of excellence (CsoE), whether publicly or privately funded, in providing more direct and relevant information on natural resources management and ecosystems. Many CsoE also offer qualified analysis on the valuation of natural, including biological, resources.

Conclusions

The Amendment can play a role in improving the management of natural capital, including ecosystems. The Amendment mechanism is a powerful one. There is widespread understanding of its positive significance, and there is growing capability on the part of many of the professionals involved to address the issues associated with the Amendment's effective implementation. The Pensions Bill is a good instrument for better implementation of the Amendment. However, it will be clear from this analysis that particular encouragement must be given to achieve desired changes in a number of key areas.

While there is a phenomenal amount of analysis and debate taking place, there are too few conceptual and practical links between all the parties capable of using the Amendment to its intended and good effect. There are too many breaks in the chain of critical contact, understanding and perspective between government's (Department for Work and Pensions) intentions and commitment; PFTs; fund managers; analysts; those with the data and experience on natural resources management such as the CsoE who are too often on the edge of, or outside the debate, and the 'investee' companies and institutions such as the Association of British Insurers (ABI) who have produced excellent sustainability guidelines for their clients.

In addition, financial analysts and natural scientists need to find ways of communicating more effectively and meaningfully, and there is already growing evidence that this is beginning to happen.

Recommendations

SRI analysts

- Bring together more frequently, for direct exchange of views, pension fund analysts, consultants and in house pensions managers, with 'Centres of Excellence' specialists. This would help to achieve higher levels of commitment to the issues and confidence and effectiveness in negotiating with colleagues and engaging with 'investee' companies. This could be done through a number of channels including the UK Social Investment Forum (UKSIF) which has already begun to develop relevant networks and, Forum for the Future.

- Conduct specific research, such as that being undertaken by Insight Investment (the Asset Manager of HBOS plc) into the way extractive and utility companies address negative impacts of their businesses on biological diversity. In addition the research by ISIS Asset Management and ProForest on the impacts of palm oil production on tropical forests, is very useful, and other similar projects should be implemented.

- Analyse the contribution the Carbon Disclosure Project (CDP) has made to the level of market activity associated with carbon management and explore how key lessons could be applied to the 'other side of the coin' issue of degrading and mis-management of ecosystems and how progress on valuation techniques for natural resources could be usefully applied.

- Consider replicating the pharmaceuticals project being implemented by UKSIF to develop debate between analysts and pharmaceutical companies, for other sector topics relating to natural resources management in particular. These might include for example forests (with the Forest Stewardship Council) and fisheries (with the Marine Stewardship Council). These particular initiatives all concern direct use of natural resources and result in sustainability accreditation for user companies, therefore raising the CSR performance of companies in these sectors and the relevant supply chains, which might be subject to CSR screening by analysts.

- Analyse and apply the concept of 'risk assessment' using the guidelines issued by the Association of British Insurers in relation to greenhouse gasses (GHG) emissions and other impacts on ecosystems. Interpreting the guidelines in the context of the future stability and supply of ecological services and biological resources and the implications for investors and insurers will be important.

- Determine what aspect of the developing techniques on the economic valuation of natural capital and biological resources could be used to inform debate on the need to achieve wise use of natural resources. Along with the application of cost benefit analysis (CBA) in ways that take account of sustainability, these concepts and practices should be embedded into business planning. The economic value of ecosystems and their capacity to stabilise or sequester atmospheric carbon, and what can be learned from the CDP should be taken particular note of.

Pension fund trustees

- The Pensions Bill 2004 is an important piece of legislation, which endorses the need for PFTs to be better informed about the background issues to the investment decisions they make. PFTs must demonstrate knowledge and understanding of such issues, and the Bill encourages the notion that in practice investment analysts, pensions' consultants and the PFTs themselves should engage in a process to become better informed all round, in relation to topics that impact on the value of pension funds. The proposed Pensions Regulator will be in a position to monitor increased levels of understanding and knowledge demonstrated by PFTs.

- Explore with specific pensions consultants and analysts low cost and minimal time ways of achieving greater knowledge, understanding and confidence on in particular the legal framework within which PFTs function; and the application of SEE criteria.

- Maintain the momentum on the debate concerning the fiduciary responsibilities of PFTs in respect of taking account of 'non-traditional criteria' and intangible assets in investment decisions. The new Pensions Bill helps encourage this debate.

- The Combined Code of Corporate Governance, published by the Financial Reporting Council in July 2003, encourages more genuinely collaborative face-to-face contact between companies and major shareholders, therefore providing opportunities for a more thorough debate on key issues.

Companies

- More encouragement, and training if necessary, to implement SEE criteria by PFTs; company pension fund managers, and external fund managers and consultants.

- More initiative by companies to integrate SEE criteria into business strategies.

- Utilising the most progressive elements of the practice of economic valuation of natural resources, and cost benefit analysis approaches, to achieve more in CSR performance.

Centres of excellence

- More proactive engagement and communication by the best centres of excellence, including a more open language and a willingness to engage with the private sector.

Author's note

The content of the report reflects in equal measure, the views of those who participated in discussions with the author, and the results of the author's own research and experience.

The report is written, in particular for those who were good enough to give the time to participate; the sectors and professions they represent, and all others who have an interest in this and related subjects. All readers of this report will appreciate that the issues discussed are complex and part of a fast moving debate. New research is being published and new activities are taking place all the time. However, every effort has been made to make the content of the report as up to date as possible.

Whilst the focus for this research was the 'environmental' principle in the social, environmental and ethical 'considerations', the author recognises that all three principles are closely connected.

Can a financial instrument improve the management of natural ecosystems?

The 2000 Amendment to the 1995 Pensions Act; can it contribute to the improved management and protection of natural ecosystems – woodlands, estuaries, marshes, coral reefs, grasslands, and the countless wild living organisms that ensure their productivity and resilience?

Chapter 1
THE CONTEXT

Ecosystems and their threats

The natural environment includes:

- Biological resources which are plants and animals, and the genetic and species diversity they embody
- The non, or a-biological resources which are media such as the geological component of soil (which also contains numerous species of animals and plants or biological resources), water, and atmosphere
- Ecosystems themselves which are both the biological resources, and, the media they inhabit and which are necessary for them to flourish

Ecosystems are the productive engines of the planet – communities of species that interact with each other and with the physical setting they live in. They surround us as forests, grasslands, rivers, coastal and deep-sea waters, islands, mountains – even cities. Each ecosystem represents a solution to a particular challenge to life, worked out over millennia; each encodes the lessons of survival and efficiency as countless species scramble for sunlight, water, nutrients and space…The world's fertile soils, for instance, are a gift of millions of years of biological and inorganic processes (1).

The importance of ecosystem health as the basis for the global economy cannot be denied. Ecosystems, and the animals and plants which are a part of them, produce food, fibre and water; they purify air and water, control climate, cycle nutrients and re-new soil fertility. Some enlightened economists (still a minority) depict the economic system as positioned within the limits of bio-physical and socio-cultural conditions and criteria, and maintain these constraints should be recognised. The majority would still portray the global market economy as dominant and all-encompassing in its potential to utilise natural resources at unlimited levels of intensity, outside ecological limits, and, they will assume that market corrections can resolve problems of over-use.

Climate change

While the debate on the impact of climate change on future human societies has taken hold, and some 'market' solutions, for example emissions trading, are being applied to reduce CO^2 emissions, links are too seldom made explicit as to the reasons why climate change will have such an impact on economies. The basis for the debate on mitigation strategies and solutions is therefore incomplete if ecosystem integrity and its significance for food security or water supply, for example, is not taken into account at the same time. Policy solutions will therefore be less effective without an understanding of these connections.

Climate change, unless controlled, will severely disrupt the stability of ecosystems and, as part of a feed-back loop, will erode the ability of these systems to absorb and buffer the atmospheric pollution created. Carbon sinks, including the soils and vegetation of the Arctic, are becoming less stable as climate change begins to raise the temperature, which reduces their capacity to absorb CO^2. In fact, as temperatures increase, 'safe' carbon sinks have the potential to release the carbon they hold, becoming dangerous sources of atmospheric carbon instead. Climate change impacts on the capacity of vegetation – trees, shrubs and herbaceous plants – to provide food and habitat within specific breeding time frames for animal and plant species.

Human impacts

Other contributing factors to biodiversity loss are over-fishing, ground and atmospheric pollution by waste and other toxic materials and conversion of natural ecosystems to agricultural, industrial and commercial use. All these factors are themselves closely inter-linked and inter-dependent.

Extinction rates for mammals and birds are believed to be between 1,000–10,000 times what they would be without human-induced pressures. *'Over enormous areas of the earth's surface, humans have replaced complex and species-rich natural habitats with simplified modified habitats…Clearance by fire, burning of fuel wood and charcoal, soil cultivation, and fossil fuel use all increase movement of organic carbon into the atmosphere. Global cycling of nitrogen, phosphorous and sulphur has also been perturbed'* (2). Human beings now appropriate over 40% of the world's natural productivity which would otherwise be available for ecosystem maintenance and evolution. A report from the World Wide Fund for Nature (WWF) estimates that the world has lost 30% of its natural wealth (or capital) in the span of one generation from 1970 to 1995 (3).

The last of five major 'spasms' of species extinctions occurred 66 million years ago when 60% of plant species were lost. This was due to major physical events, including volcanic eruption, and also climate cooling. Some experts believe that a sixth 'extinction spasm' is now possible because of the level of disruption human impacts have caused in respect of natural ecosystems.

Ecosystems and international action

In recent decades governments have introduced many regulations and supported a wide range of important international agreements in order to achieve the wise management of ecosystems and natural resources. Despite significant gains in some areas, progress to date has fallen well short of what is needed. The degradation of natural ecosystems, through pollution, climate change, urban development, and fragmentation continues. The livelihoods of millions of people, in particular the rural poor and other marginalised human communities, are further undermined as a result.

Limits to progress

It has become clear, particularly in the last three decades that there is a limit to what can be achieved by the comparatively modest public expenditure available in less rich countries, on maintaining the extent and quality of forests, wetlands and other key ecosystems. However, as governments have struggled, with limited success, to develop sustainability oriented economies, the increasingly powerful influence and resources of global companies has appeared as an additional or alternative opportunity to bring about sustainable development.

Private sector involvement

In the last 10 years in particular, the private sector and especially international companies have been expected to play a more pro-active role in taking account of sustainability principles, including the wise management of natural resources. While a number of progressive international companies have made a useful contribution in this way, more remains to be done.

Now however, the interests of both governments and private sector companies are beginning to converge more powerfully. This is because the need to achieve more effective co-ordinated management of natural resources, in order to provide the essential basis for sustainable economies and human development, is becoming ever more apparent and urgent. The debate and conclusions reached at the UN Earth Summit in Rio de Janeiro in 1992, and the UN World Summit in Johannesburg in 2002 confirmed the importance of establishing partnerships between the private, public, and independent (or NGO) sector. These will, in the future, be on a more profound basis than has been conceived, or been possible, in the past. Such partnerships will be flexible, truly collaborative, and structured to suit a wide range of specific sustainable development challenges.

Greenhouse gases

The debate leading to more convergence of action and thought has been provoked by the evidence that greenhouse gas emissions (GHG), and in particular carbon dioxide (CO^2), are all increasing as a result of human economic and industrial activity, and are under-mining the resilience and productivity of ecosystems and natural resources. Ways (both through regulation and the market) are being found to control the levels of CO^2 emissions and these initiatives will in the long term reduce deleterious impacts on ecosystems. However, forests, wetlands and marine resources for example, remain under intense pressure due to over use, conversion of land to agriculture, and urban development. This is despite the existence of a great number of public sector regulations designed to safeguard ecosystems of national and global importance, for example in over 100,000 protected areas which cover 11.5% of the planet's surface.

Recognition by governments in 1992 that the challenges presented by climate change were inextricably associated with the likely disruption of ecosystems and animal and plant species interactions, encouraged them to agree to both the UN Framework Convention on Climate Change (UNFCCC) and the international Convention on Biological Diversity (CCBD) at the Earth Summit held that year. However, 12 years later, while there is increasing recognition of the threats posed to the global economy by GHG emissions, there is only slowly growing public understanding of what the widespread impacts of emissions on ecosystems are going to be, whether this is on water resources, fisheries, or soil fertility. Research shows these impacts will be serious and should be factored into forecasts of natural resources' and land productivity.

Valuation

Research and practice proceeds on how to price natural resources and to integrate them into the functioning of the market economy, and to value, price, and approach the management of natural resources that have a wide range of non-market values. The application of cost benefit analysis to natural resources and their use remains problematic but ways to address 'the missing market for the many outputs and values of biological diversity' will continue to be debated and refined. This will ultimately enable companies to be more realistic when planning, and reporting on business achievements that take account of sustainability. Respected tools for assessing a company's turnover and profits taking account of external environmental and social costs are emerging and being used.

Global companies in all sectors have increasingly been adopting CSR strategies, and there are examples of some using the Millenium Development Goals (MDGs) agreed at the UN World Summit in Johannesburg in September 2002 as a framework for business strategies. Integration of CSR into business planning and reporting is increasingly the objective for companies.

All these private sector efforts can be underpinned and further stimulated by the right kind of legislation at the right time, particularly if it is a high-leverage instrument, with direct implications for the financial services sector.

Comparing government-led agreements and direct regulation to the voluntary approach of the private sector

A very great number of government, or public sector agreements to protect biodiversity and ecosystems have been introduced at global to local levels in the last 30 years; for example, the international Convention on Biological Diversity,

and at the local level, in the UK, Local Biodiversity Action Plans. In addition, there are global agreements to protect endangered animal and plant species from international trade, migratory animals during seasonal migrations and specifically, to protect wetlands of international importance – especially critical in view of the degradation to watersheds, and growing scarcity of fresh water in many countries and regions. Each of these international conventions has well over 100 national government Parties; in addition there are numerous other regional and local instruments. Governments of democratically run countries, in agreeing to implement these instruments, represent at least the tacit wishes of millions of citizens.

Some government agreements are regarded as 'soft' law; there are no financial penalties for failure to observe them, while non-observance by EU member countries of instruments such as the 'firm' EU Species and Habitats Directive incur fines. In the first case effective implementation arises mainly from governments' disinclination to be exposed internationally and nationally for failure to comply. It would suffer loss of credibility and reputation, which might have serious consequences in respect of other international issues, important for its economy, which it hopes to negotiate successfully.

Voluntary approach

The private sector, by and large, acknowledges the importance of ecosystem services and biological resources by voluntary codes and other non-regulatory means. If individual sites or species are specifically protected, under EU 'firm' law for example, companies will observe these restrictions on land use and development. However a host of other 'soft' agreements, such as a country's National Biodiversity Action Plan, following the CBD, or its National Sustainable Development Strategy, will often be ignored.

Partnerships

Another category of voluntary activity by companies occurs when the UN obtains the agreement of the private sector to a formal global code. The UN Global Compact, which includes principles on a precautionary approach to environmental challenges and promoting environmental responsibility, is an example. More recently the Millenium Development Goals provide another framework to 'Develop a global partnership for development' (Goal 8). This invites the private sector to co-operate on providing new technologies to developing countries and has a specific focus on the role of pharmaceutical companies to provide access to essential drugs in developing countries.

Most qualified and experienced observers would agree that the government negotiated instruments, despite the thousands of human hours of high quality expertise devoted to their drafting and implementation, have not been adequately effective in protecting ecosystems, with or without the voluntary collaboration of the private sector.

Regulation

The engagement of the private sector and its advisors via a financial instrument like the Amendment means that new disciplines, cultures and skills are involved in the search for solutions. Therefore, the importance of regulation directed at companies, cannot be denied: *'the conclusion to be drawn is that the stronger the regulatory system (vis-a-vis companies) in relation to environmental and social performance, the more likely there will be a differentiation made by financial institutions between companies on the basis of these issues. The business case depends on the regulatory system and cannot be a substitute for it'* (4).

Chapter 2
THE IMPLICATIONS OF THE AMENDMENT

The 2000 Amendment to the 1995 Pensions Act – a good financial instrument, in principle

If the potential for the right kind of corporate intervention in pursuit of sustainable development is to be realised, appropriate legislation is usually needed to stimulate the required level of activity. If the legislation is directed at the financial services sector, it is even more welcome, because of the very significant direct leverage that becomes possible on investment decisions entailing billions of pounds. This is why there was an optimistic response from many stakeholders in July 2000, when the British government, introduced a 'sustainability-positive' Amendment to the 1995 Pensions Act. This requires the pension fund trustees, as part of their publicly communicated Statement of Investment Principles, required under the 1995 Pensions Act, to include:

A. 'the extent, if at all, to which social, environmental or ethical considerations are taken into account in the selection, retention and realisation of investments; and

B. their policy, if any, in relation to the exercise of rights (including voting rights) attached to investments'.

Pension fund trustees must report annually on the application of the Statement of Investment Principles, and whether it does address SEE considerations.

The introduction of this legislation has been described as having *'transformed the socially responsible investment (SRI) landscape'* (5) since it had the potential to broaden dramatically the application of SEE to the investments made by pension funds, which total £800bn in the UK. This figure compares to the infinitely more modest, but policy-significant, 'niche' SRI retail investments of £4.2 bn at the end of 2003.

A developing arena

Apart from the Amendment, a host of supporting and constructive initiatives are appearing in the public domain which should give encouragement to all those in the fund management industry, not least PFTs. In addition to the new Pensions Bill there is the prospect of a new Companies Act; the Myners Principles; the Combined Code of Corporate Governance, based on the Higgs Review; the statement by the Institutional Shareholders Committee; the report from the Carbon Disclosure Project (CDP); and excellent guides for PFTs published by JustPensions and the Advisory Committee on Business and the Environment (ACBE). These are only a few of the positive supporting and context setting initiatives now being implemented.

(See Appendix A)

Inter-connectedness of SEE principles

It is important that the SEE principles at the heart of the Amendment are both conceptually and practically regarded as an integrated set of issues. There can be no social equity without effective management and distribution of the benefits and products of natural resources such as food or natural medicines, and eco-system services like clean air and water. The human expression of ethical and spiritual feelings can depend on natural resources, and aid their protection, whether in relation to particular landscape features such as sacred woodlands, freshwater springs, mountains, or a host of individual animals and plants with 'totemic' cultural status as well as utilitarian value.

The 'environmental' principle

For the purposes of this research, focus has been on the 'environmental' principle and seeks to demonstrate that it has great potential, in combination with the 'ethical' and 'social' principles, to achieve, over time, worthwhile change through companies becoming more responsive to investors' questions. This is why the Amendment to the Pensions Act 1995 – a piece of legislation relating to what are often regarded as 'soft' issues – is particularly significant. It offers interesting potential to influence, in particular, 'investee' companies with global reach to incorporate SEE principles into their business planning and operations. This gives them the opportunity for example to work more with governments, who are instituting National Sustainable Development Strategies at the behest of the UN Commission on Sustainable Development. Such action should also lead ultimately to better financial results for pension fund beneficiaries whose investments are in these companies.

This project set out to examine the impact so far – and the expected future impact – of the Amendment by putting the following questions to over 40 experts in the field, who are listed in Appendix B:

- Should we expect legislation such as the Amendment, to deliver positive change over time with regard to the management of ecosystems and biological resources?
- What will it take for this Amendment to have the necessary impact?
- What skills and information are missing – who needs them?
- What should be our expectations of those in a position to use the Amendment for the objectives it was intended to serve?

The answers led to a focus on three areas for further exploration, which are presented in the following chapters.

Chapter 3

THE VALUE OF THE AMENDMENT TO ACHIEVE POSITIVE CHANGE IN RELATION TO SOCIAL, ENVIRONMENTAL OR ETHICAL CONSIDERATIONS

Since the passing of the Amendment, a number of assessments have been made by individuals and institutions as to the extent to which it has been implemented. Some results show that overall there has been a moderately positive response by pension fund trustees. However, some commentators have come to the conclusion that *'poor practice in relation to socially responsible investment is the norm'* and that *'most pension funds reluctance or inability to monitor the activities of their investment managers in assessing social, environmental and ethical investment issues is one of the most disturbing findings…'* These were part of the results of a survey by JustPensions published in July 2002 *(5)*.

The basis of SRI

One of the subsequent reports by JustPensions, published in January 2004 on PFTs' approach to social, ethical and environmental issues, also focuses, as the July 2002 report did, on six issues which constitute responsible corporate behaviour and therefore the basis for SRI. Once more the one which elicited the least positive response was the importance of 'respect for local needs in the developing world'. This removes from the radar many millions of people, future suppliers, customers and stakeholders who could influence the long term success of businesses. It indicates how unfamiliar those involved in the pensions industry are with assessing the importance of understanding the value of taking account of poverty reduction and social inequity when working to support better natural resources management.

Commenting on these most recent findings, the Association of British Insurers offers the view that *'while companies have begun to grasp both the risks and the opportunities, investors, financial analysts and pension fund trustees have been slow to recognise the importance of these… (SEE) …factors.'*

This new survey is a useful reminder that more effort is needed to make the connection between social responsibility and value creation'

The most sceptical views of the Amendment obtained in the course of this research were that its introduction gave the government and those required to respond to it, such as PFTs, something to state, rather than something to do; and that the Amendment was '*a sop to environmentalists'*.

Another view was that the Amendment was crafted as a 'soft' regulation, which would (the government believed) improve performance over-time, and it was a *'step along the way'* to achieving positive change.

The Amendment was felt to be inadequate because while it requires all PFTs to include in the publicly communicated Statement of Principles what their position is with regard to SEE, they are not obliged to have a positive statement about SEE.

Regulations

A minority of correspondents felt that it was going to be very important for the government to firm up this legislation by making it a legal requirement for PFTs to instruct, through the SIP, their fund managers to take account of SEE criteria in taking decisions on investments. Also it is important to require regular reporting from the fund managers on the results of their engagement with 'investee' companies on key SEE issues. In addition, the fund managers' performance in respect of investment decisions made on the basis of these results should be evaluated.

Despite a fair amount of interest expressed in the Amendment, there was not too much evidence, except in a minority of cases, of any real intention on the part of fund managers and PFTs either to become engaged in the issues that the Amendment addresses or to commit to making the Amendment work.

Obstacles raised

- the capacity of PFTs to understand the SEE issues embedded in the Amendment, and therefore their ability to apply it; they feel they are not qualified to interpret these issues in terms of investment decisions.
- insufficient time to give to the comparative luxury of intellectual debate in concentrated PFT meetings.

- the fees base for fund managers and analysts which doesn't always allow for or include specific additional work on engagement with 'investee' companies, or other work in relation to the Amendment *'we aren't getting paid for it, so we won't be doing it'*.

- PFTs had serious topics to debate, in particular at the current time, concerning how they were going to meet their current obligations to the beneficiaries of their pension schemes.

- the fact that most PFTs are not paid, unless by the sponsor company, for example if they are a non-executive director.

- an interpretation of PFT liability by some in respect of SRI in particular, in the event that pension investments under performed.

- linked to this concern was the nervousness of being seen to instruct or guide pension fund consultants and managers.

The main and fundamental obstacle is nervousness on the part of PFTs in taking account of SEE principles, because they feel these are in direct conflict with the required financial performance targets for investments and their fiduciary duty to beneficiaries. This has important consequences because PFTs instruct fund managers and at the same time rely heavily on their advice, and that of pensions funds consultants, ('we are very hands off' one PFT correspondent said). An unsatisfactory stalemate results if PFTs lack confidence and knowledge and therefore give no guidance to advisers on SEE issues, who themselves don't feel inclined to propose more active ways forward to the PFTs on implementing the Amendment.

In general PFTs are uncertain about the legal boundaries of their relationship with both the board of the sponsor company, and external investment managers and consultants.

Developing expertise

The point was made that following the passing of the Amendment, some fund managers anticipated a growth of business in the SEE area, and staffed up with people whose backgrounds were natural resources management, international policy making on biodiversity, social sciences and sustainable development, or were prepared to inform themselves in order to be equipped for more thorough negotiations with 'investee' companies. A correspondent commented that a great deal of effort by fund managers, analysts and government has already gone into preparing to make the Amendment work; this investment can only be realised if the legal framework is strengthened.

Investment strategies

There are interesting and obvious comparisons to be made between those pension funds being managed for beneficiaries in older-style industries now drawing pensions, and those where the beneficiaries profile is much younger and more inquiring and who won't be drawing pensions for thirty years. The Universities Superannuation Scheme (USS) is the example most often cited. In 2003 the USS, which is 25 years old, launched a hypothetical competition for the management of a £30bn pension fund, in the hope that a group of fund managers would come forward capable of conceiving and implementing a long term visionary strategy for pension funds investments *(6)*. One of the objectives of the USS competition was to overcome 'short-termism' strategies in the management of pension funds. The competition was won by Henderson Global Investors.

As other correspondents commented, they looked to USS for a lead on pensions' strategy and pointed out that those needing to meet obligations to beneficiaries now could only manage pension investments on a three year rolling basis, while USS and local authorities could take a 20 year planning time horizon. This indicates that the comparative maturity of a pension fund will dictate how the Amendment is interpreted by PFTs – those with the most mature beneficiary profile are likely to be most cautious, while those with a younger profile will feel able to be bolder.

Fiduciary duties

The view was offered by some correspondents that the definition of 'fiduciary responsibility' needs fresh examination. Currently it is constraining the ability of PFTs to look at the long term. If SEE factors have a bearing on future returns on investments, which it appears they are increasingly likely to have, then the 'fiduciary responsibility' of Trustees should surely take these factors into account.

An 'investee' company's CSR targets do not remove the directors' overriding fiduciary duty to shareholders, rather they introduce the need to recognise and manage other relationships as a way of responding to this duty. The consequence is that PFTs should perceive such responses by companies as a positive advantage in terms of the investment decisions they are making. A call has been made for the Government to undertake an urgent consultation process on the whole question of PFTs' fiduciary responsibilities, with particular regard to involving members of pension fund schemes in decisions that may have an impact on financial returns.

The management of the FTSE4Good index believe that *'Financial and non-financial risk analysis is becoming increasingly integrated'* and *'"fiduciary duty" includes taking account of societal and commercial considerations as an integrated set of issues'* (7).

Relationship between the sponsoring company and its pension fund trustees

Contradictions

Members of PFT boards always state firmly that they must, by law, retain independence from the main board in terms of the decisions they make on investments. However, some contradictions were revealed in debate with correspondents concerning the CSR performance of a company and, the relationship between the company and its PFTs.

These were:

- A company may achieve a good reputation through the way it addresses, and accounts for its own sustainability performance, but, its PFTs may choose to issue a SIP that specifically says SEE will not be taken into account. If there is evidently a business case for the company itself developing a good reputation on sustainability issues, why do PFTs not believe there is value in the 'investee' companies for its pension funds achieving the same CSR standards?

- Some commentators believe that the degree of independence either PFTs or fund managers can establish from the main sponsoring company board is rather limited anyway, bearing in mind both groups are dependent on the CEO for appointments and remuneration, and for the level of employer contribution to staff pensions.

- The fact that *'the growth in the size of company pension funds over two decades meant they have become an important factor for corporate profitability and even solvency'*, must mean that at some point it is essential that pension fund investment strategies are co-ordinated in some way with the mainline business plan of the company. One correspondent said that it was certainly the case that this happened.

- The introduction of the regulation FRS17 means that any pension deficit must appear on the balance sheet of the company.

- At least one board of company PFTs use the FTSE4Good Index as a guide for pensions investments. In this case, the company itself is included in the Index and it feels it has squared the sustainability circle by this straightforward policy to only invest in companies represented in the Index.

Intangible assets

Taking account of non-traditional criteria make PFTs and their advisers nervous. Recent research concludes, *'It is forward looking information on the sustainability-related risks and opportunities facing a company that is most needed. Perhaps the most important barrier for financial institutions to take account of sustainability is the uncertainty involved in identifying environmental and social risks and assessing their financial implications'* (4).

There have been a number of attempts in recent years to quantify the value of non-financial criteria. One assessment concludes that 27% of the market value of the FTSE 100 can be attributed to intangibles. Another analysis has resulted in the estimate that intangible assets of publicly traded companies in the US and UK constitute 55% of their market valuation, and this has grown rapidly in the last 40 years (4). In the UK also, the expected Operating and Financial Review (OFR) requirement will recognise explicitly the value of non-traditional criteria, because of the increasing importance of risks such as climate change and supply chains and intangible assets like networks,

relationships and stakeholder approval in the modern economy. These *'are more susceptible to damage than traditional assets from inadequate attention to social, ethical and environmental matters'* (4). Managing non-traditional risk is a growth area and is contributing to changes in the role of fund managers who need to challenge the corporate social responsibility (CSR) standards of 'investee' companies, in order to make confident choices on behalf of clients requiring social responsible investment (SRI) criteria to be used in the deployment of their investments.

With regard in particular to the investment of company pension funds one manager said *'SRI is part of good corporate governance – if attention isn't paid to this issue the company will damage itself'* and from the same manager, *'pensions funds have a responsibility to set an example'*. Another report states *'the way a company deals with sustainability issues may provide a good indication of its management capability, which is one of the most important factors in any financial decision. A company's effectiveness in dealing with complex environmental challenges implies an ability to handle other management areas as well'* (4).

PFT training

In discussion with correspondents there were only a few instances of a programme of training for PFTs, an issue highlighted by the Myners Report and referred to in recent assessments of the implementation of the Amendment. One of these found that PFT training was very instrumental in persuading them that *'pension fund activism would result in a substantial improvement in the way companies manage (SEE) areas'* (5). A minority view was that the training issue had become a serious topic with PFTs to which they had responded.

Conclusions:

- The management of occupational pension fund assets is a complex business. The integration of SEE considerations to the management of pension funds contributes to that complexity and represents a long term task.
- PFTs feel they don't have the knowledge to make decisions based in part on SEE issues, and consequently have a tendency to see far greater risk attached to applying them than having a policy not to.
- The importance of SEE principles to future viability of companies is unlikely to diminish, and is almost certainly bound to increase. This being so, all those involved, particularly PFTs, fund managers and consultants and senior management in 'investee' companies need to continue to build capacity to understand and apply them.
- The better informed all those most immediately involved become, the better 'investee' companies will respond to SEE, and the more accurately fund managers and PFTs can assess the importance of SEE in terms of safeguarding the future incomes of pension fund beneficiaries.
- It is very important that the momentum of the debate on fiduciary responsibilities and their relation to the non-traditional criteria is maintained, and that the issues become refined more helpfully, for the benefit of all those involved in the pensions industry.
- The provisions of the Pensions Bill directed to strengthening knowledge and understanding of the contexts for investment decisions should be implemented with commitment.
- An important opportunity, not to be missed, now exists to take biodiversity and biological resources into calculations and discussions on the importance of the 'environmental' principle in particular.

Chapter 4
ECONOMIC VALUATION OF NATURAL RESOURCES AND ECOSYSTEMS SERVICES

Attempts to value natural capital (natural resources and ecosystem services) have become increasingly sophisticated. Providing a market context that fully recognises and prices the contribution natural resources make to economies and societies, including their role in absorbing pollution, is becoming ever more important, and possible.

Global values

There is now an awareness amongst economists and biologists that there is the potential for, *'the development of market instruments that capture at a private level the social and global values of relatively undisturbed ecosystems, for example through the issue of carbon or biodiversity credits, or through premium pricing for sustainably harvested wild caught fish or timber'* (8).

From an international company's point of view, a senior executive said recently that *'not enough research, or development of concepts has been done in terms of what sustainability means in economic terms'*. He went on to say that *'the market does not anticipate effectively, and long term phenomena are too complex to handle internally, while externalities are too many to untangle'*. In addition, *'management tools don't exist to translate concepts'* (7).

Economists are prepared to demonstrate that *'the global stocks of biological diversity generate a flow of services to all societies on earth'* even if recent attempts to price the value of natural resources have come up with some forbiddingly big numbers, for example: *'the capacity of natural systems to deliver goods and services upon which we depend is decreasing markedly…The estimate of Total Economic Value (TEV) lost through…a single year's habitat conversion costs the human enterprise, in net terms of the order of US $250 bn for that year and every year in the future'* (9). The same paper estimated that the overall benefit: cost ratio of an effective global program for the conservation of remaining wild nature is at least 100:1.

However, economic valuation approaches are still controversial, and full of uncertainty because ecological processes are highly complex. While some commentators feel:

'Wildlife species…are…refuges from the international economic system…(but) it is important to integrate these resources of value into the economic process rather than shield them from it', others put forward the view that *'it remains contentious, at best, whether everything people "value" in the broader sense can or should be "priced" in the narrow quantitative sense'* (8).

Research in this complex area has to date focused on global values for ecosystem services, for example the forests of the Amazon have been given a value for carbon sequestration (in 1992) of approximately US$13,000 per hectare.

Many local studies have taken place, particularly in relation to the valuation of forests. The Centre for International Forestry Research (CIPOR) (10) has recently conducted research into local communities' use of forest goods and services for purposes including ornamentation and ritual, firewood, recreation, food and medical products, in areas of Bolivia, Mozambique, Indonesia, Cameroon. See the case studies later in the chapter for further examples.

These examples highlight a challenge for such valuation exercises, which is a need for them to be structured to distinguish between the economic choices made by individual resource users and those often non-economic choices, made by communities and society as a whole.

Costing

The debate about economic valuation is often based on the conventional framework of: *direct* and *indirect* use; and *existence* and *option* values. *Direct* use relates to the economic use of resources, whether timber, fish, land development or genetic material for medicines for example. *Indirect* use concerns the value of natural resources for water supply via watershed protection, mitigation of pollution, micro-climate control and tourism. *Existence* values are non-economic, their cultural or spiritual value isn't 'paid for'. *Option* values relate to decisions not to use a resource because to do so would create irreversible consequences, for example loss of

unique animal and plant species or because of its value to future generations. The *opportunity* costs of adopting one form of use rather than another is a further dimension of necessary analysis.

It is widely recognised that establishing existence, option, and the indirect values of ecological services over the long term present the most testing challenges. This is perhaps why it is seen as the role of government to protect these values, leaving commerce to establish the direct use value of natural products and raw materials through markets. Governments do of course deploy valuation techniques as a pre-cursor to regulation on management or protection (as in Belize, below).

Dialogue

Some interesting work has been undertaken by the UK Government's Department for Environment, Food and Rural Affairs (DEFRA) on the Social Cost of Carbon *(11)* which examines how an increase in Global Mean Temperature (GMT) as a result of increasing carbon in the atmosphere will affect society in the long term. The analysis infers the difficulty of taking account of biodiversity and concludes *'the impacts of climate change on biodiversity and ecosystem functions have begun to be systematically covered only (recently)… recent impacts literature shows that the impacts of climate change on ecosystems could be severe even for small changes in GMT, and the total economic value (TEV) of the associated damages could be substantial'*.

Certain trends can be discerned in the debate on the wisdom of using the valuation of natural resources as a tool to achieve sustainable use:

- The largely academic research has been conducted on natural resource use at the global to local scale.
- Research results have for the greatest part been applied either directly or indirectly to regulation by government, rather than being made available directly to the private sector.
- The more research is published, the more the results are enfolded in nervous caveats about the uncertainties, the complex process of valuing resources, how difficult it is to be objective and how the results mustn't fall into the wrong hands and be misapplied.
- Research on valuing the social impacts of climate change present an opportunity to include valuation of impacts on biodiversity and ecosystem services.

Why then should the private sector use its resources to wrestle with the complexities of economic valuation which seem to involve at present inter-governmental organisations, regulatory bodies, and academics?

The reasons may be as follows:

- Losses of habitats or ecosystems continue at a great rate, compounded by the impact of climate change, which now poses as much of a threat if not more than habitat degradation and loss *(12)*.
- Wild animal and plant species have economic value for companies, through *direct* natural resource use, or *indirect*, for example soil fertility, flood control and buffers to human disease. This means they also have value for the customers companies need to satisfy, and therefore their shareholders. Increasing numbers of stakeholders, as we know, informed and urged on by thousands of citizen groups and NGOs, are more aware of and sensitized to the existence and *option value* of wild species and habitats.
- It is in everyone's interest to consider the *option value* of species-rich areas of the planet, for example, the important 25 global biodiversity hotspots *(13)*.
- The private sector is more and more being exhorted by prestigious and forceful professional institutions, and through legislation by governments, to look at risks to their business. This is because unaddressed risks can mean financial losses directly through investment in ecologically unsustainable projects, or through loss of reputation once the environmental impacts of a company's activities are made public.

Company risk

There are two main areas of risk for a company in respect of biological diversity and ecosystems, which are:

- The direct and indirect impacts generated by its own activities on the resources of the ocean, coastal areas, forests or freshwater. This is either through its own business, whether this is land development, fishing or use of timber products, or through financing by banks of unsustainable projects and those institutions, such as insurance companies, which underwrite the investment. The supply chain is therefore a very important part of a company understanding its impacts.
- The direct and indirect impacts created by third parties on the resources on which a company depends in short to long term. These can sometimes be addressed by collaborative work between companies, government bodies and NGOs, producers and suppliers.

Opening the debate

A respectable convention deployed in the face of uncertainty, particularly in relation to social and ecological dimensions of natural resource management issues, is to open up the debate to more participants, in the belief that answers will be found to difficult problems if more people play a role in finding solutions. Such an approach has its own risks because finding solutions in this way will take longer, but they may be novel, unexpected and relevant.

Building capacity

Many of those employed in the financial services sector have already played a pro-active part in finding ways of creating bridges between the market economy and society's concerns. It is vital that investment analysts, consultants and all involved in screening companies on behalf of investors become as skilful as possible in encouraging the kind of company performance on natural resources use, which address this kind of risk. The companies can themselves therefore reassure shareholders and build trust with stakeholders. This means that those recommending investment options to investors of all kinds can do so with confidence.

Implications

It is very likely that economic valuation of natural resources will continue for some time to be difficult, inconclusive and problematic.

However if new approaches aren't tried and different skills and experience aren't applied, such as those offered by financial services professionals, the implications for ecosystems are serious. The still relatively intact forests of the Carpathian mountains in the Czech Republic, Hungary, and Romania will be logged (there are estimates of an unsustainable 1m cubic metres to be extracted by 2007) (14). Hundreds of thousands of marine animals, including whales, sharks, turtles and albatrosses, will continue to be drowned on the estimated one billion hooks on long line fishing equipment (15). All these impacts will take place with no thought for the value they have whether indirect in maintaining food webs, existence or option values to the general public now and for future generations.

Case studies

Valuable timber in Belize – options for the future

35,000 hectares of steep and forested land in Belize, Central America, with a good diversity of high quality mature trees, much in demand for by timber trade, including mahogany, cedar, pine, and rosewood and many other species, was assessed for its value as a production site for timber. The direct income from the timber was compared to the long term option value of the resource. The government decided to declare three quarters of the area as a nature reserve for research, tourism and its biodiversity value thus confirming its option value

Local long term diverse direct and indirect use needs versus logging for timber in Malinau district

The Maninau district, East Kalimantan, Indonesia is covered with lowland tropical rainforest and pressure is mounting to log the valuable trees. However 27 local communities along the Malinau river depend on the area for a wide range of forest products and services. 1,500 species of animals and plants are used locally by people, or have non-use cultural value. As part of the Centre for International Forestry Research's (CIFOR) surveys, people were asked what direct and indirect value they placed on resources. The results will be used to secure protection for the area.

Frogs in the clouds

The high cloud forests in Costa Rica, so called because they are often clothed in fog and rain, have

provided habitat for a unique group of animals, also found in South America, the harlequin frogs – there are 70 species in the genus Atelopus. Under normal conditions a lethal fungus develops on the skin of the frogs which perishes if the frog can move to sunlit warmer parts of the forest. Cloud cover has been more persistent in recent times due to climate change, and the fungus therefore, can kill the frogs. This may be one of the reasons why throughout their range, all the harlequin frogs have 'vanished or declined markedly' (12).

The world's most important 'hotspots' for wild animals and plants

At least 25 'hotspots' for wild animals and plants have been identified. These genetically very diverse and rich assemblages of biological diversity are concentrated in tropical forests. They are threatened by development and climate change, and are unique to the restricted areas where they occur. The 'hotspots' cover 1.4% of the planet's terrestrial surface. Key countries where they are found include Madagascar, Tanzania, Indonesia, and Brazil which has 50,000 individual plant species, 10% of which are found no where else. Countries in the Mediterranean and the Caribbean are also very significant for threatened and unique wild animal and plant species. Coral reefs are also very diverse in animal and plant species, and are also threatened by development and climate change.

Fish and Timber

Fish and timber are two major globally traded raw materials. Two organisations, the Marine Stewardship Council (MSC) and the Forest Stewardship Council (FSC) were established to develop sustainability standards for the use of these resources. Scientific assessments are made of the appropriate utilization levels for individual fish stocks and tree species, taking into account the ecological impact of 'by-catch' (dolphins, sharks and marine turtles for example) in the case of fisheries. In the same way, forests managed sustainability will provide high value non-timber products and services as well as well as timber. Transparent and well communicated compliance throughout the supply chain of these materials should mean that investment analysts can identify those companies processing, manufacturing, and retailing fish and timber products from sustainable sources, and, be confident of recommending them, in principle, to investors.

Conclusions:

- The economic valuation of natural resources has proved a very challenging avenue of research and analysis to follow. Emerging valuation tools can support, by appropriate pricing of natural resources, important but often weakly implemented government regulation. This has become even more relevant because of the close links between habitat type, extent and viability and its carbon stabilising and sequestering potential.
- A decade ago when the UN Framework Convention on Climate Change was agreed, there was much scepticism concerning how markets could contribute to the reduction of Greenhouse Gas emissions (GHG). Now as the very comprehensive report on the Carbon Disclosure Project made clear, market mechanisms including emissions trading, provide the basis for some of the sensible actions that are now being taken.
- One of the emerging mitigation strategies for the impacts of carbon dioxide (CO^2) emissions on natural ecosystems is to strengthen and enlarge the many areas, representative of all biomes, receiving some level of legal protection. National parks and many other 'protected' definitions have been developed in the last 40 years by IUCN, The World Conservation Union. Most countries have made efforts, often with limited funds, to protect a representative example of different habitats in their countries (16).
- 'Pricing' of these areas, and payment for protection at some level, is likely to be necessary if governments can't deliver legislation and enforcement on the ground to achieve the necessary protection levels, and if they are not prepared to forego the development options these resources temptingly represent.
- If 'protected areas', using the widest interpretation, can be additionally valued in relation to mitigating the effects of CO^2 emissions; this will at the very least stimulate badly needed better enforcement of protection legislation by public authorities whether national or international organisations. An excellent debate was held on these issues at the IUCN World Parks Congress, 2003 (17).

Chapter 5
THE ROLE OF THE 'CENTRES OF EXCELLENCE'

'Centres of excellence' (CsoE) in this context are those specialist not for profit 'independent' organisations including academic institutions which gather data on ecosystem health, natural resources management and the status of biological diversity. Examples include the International Institute for Environment and Development (IIED), IUCN The World Conservation Union and the UNEP-World Conservation Monitoring Centre *(18)*. They have a key role in guiding or assisting governments on policies designed to address the issues that emerge from data gathering and analysis. In this way, local to global natural resources management strategies, including the creation of national protected areas, are drawn up and enshrined in formal agreements which are first signed in principle and then ratified by governments once capacity has been developed to achieve effective implementation.

CsoE are staffed, in the main, with 'pure' scientists, but also often have other specialised staff highly skilled in policy negotiation and applied science, whether this is in the fields of anthropology, environmental economics, biology, or social sciences. CsoE usually see themselves as first and foremost supporting governments and the international multi-lateral agencies of the UN, for example.

Working with the private sector

However, in view of the wide range of relevant natural resource management skills, high quality intellectual capital and long experience with which the CsoE are equipped, it seems logical and even essential that they play a more direct role in supporting analysis and policy formation amongst fund managers and analysts, and company pension fund trustees and managers. If they don't perform this important role, other organisations and individuals less well equipped to participate in this debate, but with more networking knowledge and access, will gain levels of influence not matched by their expertise and experience.

'Scientists have traditionally operated in silos surrounded by the boundaries of their sub-disciplines. Mindsets need to change. Some forward looking universities now have a more trans-discplinary culture at their heart, in recognition of the need to communicate to a multiplicity of audiences' Professor James Longhurst, Associate Dean, Faculty of Applied Sciences, University of the West of England.

'It is important for all specialists to apply their knowledge of natural resources management to policy and economic issues, however challenging. We must communicate effectively, and collaborate with others in finding solutions to the huge problems of over use of wild marine species and the accidental destruction of many thousands ocean living birds, and mammals like dolphins and other cetaceans'. Professor John Croxall, Head of Conservation Biology, British Antarctic Survey.

Applying specialist knowledge

Discussions in the course of this research revealed that at one end of the spectrum, a minority of CsoE were advising, for the first time, banks and insurance companies on criteria for loans and insurance, based on an assessment of the long term sustainability of use of a particular resource. At the other end, some CsoE felt diffident about using their skills to assist the private sector directly. This is partly, it was suggested, due to the 'absolutism of science', and the pre-occupation that many scientists have with 'publishing excellent work in prestigious places'. Nonetheless, the view of others was that the multi-skilled, inter-disciplinary environmental specialists, prepared to advise third parties, like companies, had a critical role to perform. Some practical scientists in the CsoE have established relationships with governments that have led to government agencies in eastern Europe and Latin America establishing indicators of biological diversity and communicating these directly to the extractive industries to guide their operations.

However, funding streams and the nature of grants systems do make it difficult for scientists to apply their skills more broadly, unless they are specifically paid to do so by a contracting company, or other organisation.

Conclusions:

- Without more support and activity from pragmatic natural scientists and other specialists in CsoE, efforts to make the Amendment and similar high-leverage financial instruments more effective will be unsuccessful.
- The time is surely right for more direct exchange of data and perspectives between the financial services sector and CsoE. This will require a willingness to learn each others' language and to work flexibly in the context of the big picture. Time will need to be allotted to develop common approaches and activities designed to find solutions.
- With regard to the positive and growing relationships CsoE have directly with companies, whether banks, insurance companies or the retail sector for example, the more fully companies can report back to researchers on how they are using data and with what results, the better staff in CsoE can build experience and confidence in supporting and negotiating with the private sector.
- There is growing collaboration between investment analysts from different fund management companies in order to address issues of growing and global concern, for example the issue of access and pricing with regard to pharmaceuticals. 12 investment companies are working with UK SIF as the Pharmaceutical Shareowners Group to review business models used by the pharmaceuticals sector in both emerging and mature markets, so that a range of short and long term risks that face the sector can be addressed *(19)*.
- There are good opportunities to bring interested parties together to examine critical background issues, such as the current state of debate on valuation of natural capital including biological resources.
- Efforts must continue to find a way of making practical use of analysis, by establishing a common language to be used by the financial services and CsoE. The proper interpretation and implementation of the 'environmental' principle of SEE will depend on this happening.

Chapter 6
NEXT STEPS

Forests, wetlands and marine ecosystems are just some of the key wild habitats that on a global basis, continue to be degraded, or lost completely. Along with thousands of wild species of animals and plants they provide services and materials which are the foundation of societies, cultures and economies.

The recent population declines and extinctions affecting the 70 member harlequin tree frog family found in the mountain cloud forests of Central and South America (see case study on page 18–19) may not shake the foundations of national economies, nor directly reduce the profits of companies. However their loss, almost certainly due to changes in climate, is an example of the complex, subtle and often unrecognised impacts of conventional economic development.
The decline and elimination of tree frog species could have implications for cloud forest ecosystems as a whole in the region, in terms of impacts on other predator or prey species. Consequently and ultimately the characteristics of the vegetation may change, affecting the ecosystem services these forests can provide.

The public has traditionally expected governments to use their own revenue to protect for the public good what the market fails to, particularly with regard to natural areas and wild animals and plants. Now the expectation is that the government responsibility is shared with the resource rich and influential private sector.

A high-leverage legal instrument, such as the 2000 Amendment to the Pensions Act, which is directed at the financial services sector, can and should be used more purposefully to improve in the long term the sustainable use of natural resources.

Pension Fund Trustees need to engage effectively with their in-house and external advisers on Social, Environmental and Ethical issues (which to implement the Amendment they need to do). The advisers themselves, due to a growing number of networks, are given increasing opportunity to discuss SEE with 'investee' companies. The result could be that 'investee' companies receive additional impetus to change their approach to the development of their businesses, in the light of the issues this paper explores. If this happens the Amendment will begin to serve its useful purpose.

Against the complex background of the inter-dependency of economies and ecosystems, this paper aims to inform and stimulate debate on how to improve, over time, the outlook for economies and societies (and for harlequin frogs) by deploying the Amendment to the Pensions Act, with particular reference to the Environment.

Appendices

Appendix A
OTHER REPORTS, CODES AND PROJECTS

Association of British Insurers

The strategic and usable 'Disclosure Guidelines on Social Responsibility' produced by the Association of British Insurers (ABI) 2001 provide additional material on how companies should take account of SEE issues in developing their Corporate Social Responsibility (CSR) principles *(20)*. These, like many other analyses covering the same or similar subjects, draw on UN, OECD or EU policy statements which seek to provide governments and the private sector with sustainability analysis frameworks, and, also provide the opportunity for the public and private sectors to collaborate. ABI has done an excellent job in keeping up the pressure on companies to apply the Disclosure Guidelines.

Institutional Shareholders Committee

A voluntary code of conduct published by the Institutional Shareholders Committee – a body which includes ABI and the National Association of Pension Funds (NAPF) and represents most institutional funds in the UK, entitled: *'The Responsibilities of Institutional Shareholders & Agents – New Statement of Principles'* advocates more activity and engagement by institutional shareholders on SEE with regard to the 'investee' companies, and monitoring and reporting on what has been the outcome of discussions *(21)*.

Millenium Development Goals

At the global level, the Millenium Development Goals (MDGs), one of the main outputs of the World Summit on Sustainable Development (WSSD) 2002 are now being taken up by governments, including the Department for International Development (DFID) in the UK, in particular. In this context, DFID is supporting, through the UK Social Investment Forum (UK SIF) *(22)* a three-year programme to raise awareness within the investment community, specifically the UK pensions industry, about the importance of social, ethical and environmental investment criteria, making the links between SEE principles and poverty reduction (a key focus of the MDGs), reputational risk, the business case for SRI and fiduciary duty. Outcomes will highlight the need for public policy change to support the adoption of SEE policies. Also, companies, for example Procter & Gamble, have framed their business strategies (in this case in the field of home and personal care products) around the MDGs *(23)*. There is some evidence that fund managers would be interested in knowing the extent to which companies have taken account of the MDGs, as a positive initiative within CSR performance.

Environment – direct initiatives and action by investment companies

A number of investment companies are taking a direct look at 'investee' companies activities in relation to their impacts on biodiversity and are investing time and resources in careful and comprehensive analysis with the object of motivating companies to examine, and ultimately improve, their performance in relation to biological diversity.

Insight Investment (the Asset Manager of HBOS plc) debated the impacts on biological diversity of the extractive and utility sectors in mid-2003 with 41 representatives of the companies, and NGOs. This initiative has developed very usefully into the application of a benchmarking system which enables Insight and the companies in the sectors to assess their performance in biodiversity. The benchmark covers governance, policy and strategy, management and reporting. The individual companies themselves take part in an interactive process to arrive at a fair and true picture of their response to the need to manage the reputational and operational risks associated with biodiversity *(24)*.

ISIS Asset Management (25) collaborated with a Centre of excellence, ProForest, to examine supply chain issues relating to the production of palm oil in south-east Asia, and, the severe impacts in terms of loss of biodiversity and degradation of ecosystems that can result from oil palm plantations. Much future planting will be on marginal peat soils, which will require greater volumes of agri-chemicals for optimum production, and will impact even more severely on forests and biodiversity.

Greater risks in terms of cost, meeting production targets, and biodiversity impacts will have to be recognised. 27 major international companies were identified as using palm oil. ISIS Asset Management will be holding discussions with relevant companies on the findings of the excellent report, jointly produced with ProForest (26).

The Carbon Disclosure Project

The Carbon Disclosure Project report – *'Carbon Finance and the Global Equity Markets'* is the result of canvassing, in 2002, 500 of the largest companies in the world for information about their carbon dioxide reduction strategies. It makes some useful, if oblique references to the need to take account of the impacts of carbon dioxide emissions on the productivity of natural systems. It makes clear that *'forestry, food, agriculture, real estate, tourism'* are all likely to suffer if emissions aren't controlled.

However, despite *'the strengthening evidence about the reality, gravity and causes of climate change'* the Project report states there is an *'information deficit for investors – which is of fiduciary concern'*, and *'there is poor overall strategic awareness relating to the impacts of climate change'*. The report continues *'financial services companies (should) have systematic portfolio-wide information'* on climate change.

In a further compelling statement the report says there is a danger of *'vulnerability to reputation damage relating to the extent to which a company's reputation is affected by popular sentiment in support of positive action to address climate change'* (27).

Appendix B

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** Also helpfully reviewed parts of the draft report*

Appendix C

References and notes

Numbers given relate to those in the text

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(22) UK Social Investment Forum: www.uksif.org

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Other useful references and notes

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- Social, Environmental and Ethical (SEE) principles reflect the range of issues companies should take into account in their Corporate Social Responsibility (CSR) strategies, and Socially Responsible Investment (SRI) decisions are made by investors to invest in companies demonstrating CSR.
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Severn Trent and Biodiversity

Severn Trent is an environmental services group and sustainable development, including the health of ecosystems, is vital to our current and future viability. Our businesses include Severn Trent Water, a major regulated UK water business, Biffa Waste Services, the UK's largest integrated waste management group, and Severn Trent Laboratories, an environmental testing group operating in the US and UK. Both Severn Trent Water and Biffa are major landholders, and have an important responsibility to protect and enhance biodiversity. Severn Trent Laboratories plays a crucial role in testing contaminated land, helping to identify what needs to be done to rehabilitate such land back into suitable habitats.

Severn Trent Water has invested over £2bn in river water quality improvements since 1999. This investment has been rewarded with the return of breeding salmon to the River Trent for the first time in over 70 years and by the rapid return of the otter across the Severn Trent region. The company launched its Biodiversity Action Plan in 1999 and has so far carried out extensive ecological assessments of nearly 1,800 sites, identifying 63 target species under the UK Biodiversity Plan. Severn Trent Water has 18 nature reserves on its land, totalling over 6,700 hectares, usually maintained in partnership with local wildlife trusts. Further best practice includes the 4,554 hectare organic farm at Lake Vyrnwy, among the largest organic farms in England and Wales, run in partnership with the Royal Society for the Protection of Birds, and extensive FSC certified forests on the Vyrnwy estate and in the Upper Derwent Valley, the most visited area of the Peak National Park. Severn Trent Water's biodiversity work was recognised in 2003 with first and second places in the Green Apple Awards (National Water Company category).

Biffa, which has a stewardship responsibility for over 160 sites, published its Biodiversity Action Plan in 2002/2003 to demonstrate its commitment to biodiversity, which will guide nature conservation and enhance biodiversity value at its sites. This is already being put into practice at the new landfill site at Skelton Grange, near Leeds, where there is a wealth of plant and animal life, and at a restored landfill site at Howden Clough, on the edge of Leeds. Biffa is committed to conserving important habitats and species and to developing appropriate management regimes to maintain and where possible enhance the biodiversity of their sites. During 2003 Biffa generated 8 species and 11 habitat action plans, in addition to a number of generic action plans, completing surveys for over half of its landholdings. Biffa intends to complete the remainder of these sites by summer 2005. Biffaward, the company's landfill tax credit scheme, has made 45 grants worth over £3.5 million to biodiversity projects since its establishment in 1997.

During 2003 Severn Trent Water was involved in the pioneering Biodiversity Benchmark project, in partnership with the Wildlife Trusts, which enables businesses to assess their impact on the natural world, improve their contribution to the environment and demonstrate their commitment to biodiversity. The ten-point system includes a self-assessment process followed by an independent verification, adding value to existing management systems and integrating within systems such as IS0 14000 and EMAS.

For further information on Severn Trent's biodiversity programme, please email: sue.painting@stplc.com.

A statement concerning the investment principles of Severn Trent's Pension Funds as they relate to social, environmental and ethical issues, is included opposite.

The Severn Trent Pension Scheme

The Severn Trent Pension Scheme has taken the subject of socially responsible investment and shareholder activism very seriously. There have been several agenda items on these issues in recent years, usually informed by reports from our investment consultants Watson Wyatt. Trustees have been mindful in these discussions of the impressive record of their sponsor company on environmental issues and the whole concept of sustainable development.

They have also had at the forefront of their minds their responsibility under trustee law to act in the best interests of the members of the Scheme. They see their primary responsibility in the investment area as the need to maximise the long term returns of the funds assets, albeit against a background of seeking to ensure high standards of company behaviour. Indeed, it may be argued that attitudes have moved considerably over the recent years, and that the long term interests of companies are now best served by having in place excellent corporate governance together with good social, environmental and ethical practice.

Trustees have used their power in this area to emphasise to their investment managers the importance to them of this subject. Whilst they delegate responsibility for selection, retention and realisation of investments to their investment managers, they require them to report on a quarterly basis how they have used their voting powers. They have also reviewed the investment managers' policies and keep these under review, and indeed have been successful in modifying these. The Trustees are required by the Pensions Act to maintain a Statement of Investment Principles, and within this they are further required to include a section on 'social, environmental and ethical issues'. The current section is included in full below. Trustees also believe that their current position on these issues is a stage in a journey along the road to pension funds generally being expected to play a more active role in maximising the long term value of their investments through responsible company behaviour in all fields.

Ian Phillips
Chairman
Severn Trent Pension Scheme

Statement of Investment Principles

Social, environmental and ethical issues

The Scheme Trustee regards it as its primary responsibility to act in the best financial interests of the member of the Scheme whilst recognising the desire to ensure high standards of social, environmental and ethical practice.

The PIF Trustee has delegated responsibility for the selection, retention and realisation of investments to the Investment Managers within certain guidelines and restrictions.

For the actively managed part of the Scheme assets, the PIF Trustee's policy is that the extent to which social, environmental or ethical considerations are taken into account in these decisions is left to the discretion of the Investment Mangers. The PIF Trustee has reviewed the Investment Manager's policies with regard to social, environmental or ethical considerations and these will be kept under periodic review.

For the assets of the Scheme which are managed on a passive basis, the PIF Trustee does not consider it appropriate for a passive investment manager to take account of social, environmental or ethical considerations in the selection, retention and realisation of investments.

It is the Scheme Trustee's intention to make available and ethical AVC option to members who wish to invest on this basis.

The Kaleidoscope Project

The research included in this report is part of a larger programme which seeks to analyse and make recommendations concerning the interactions between the corporate world, the stakeholders it relates to, and global biological diversity and biological resources.

This is the second report in the Kaleidoscope Programme published by Severn Trent. The first report, *The Conservation of Biological Diversity and Biological Resources within the Sustainable Development Context – The Corporate Response*, was published in November 2001 and is available at www.severntrent.com

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This publication is printed on Greencoat Plus Velvet paper by Howard Smith, which contains 80% recycled fibre and 20% virgin pulp (totally chlorine free).