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EFFECTIVE AND ETHICAL INSTITUTIONAL INVESTMENT

BY A. ASHER

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ABSTRACT

Those with responsibility for the assets of institutional investors have a fiduciary duty to attempt to earn the best possible risk adjusted returns and to comply with ethical standards. A satisfactory resolution of these and other conflicting demands requires a coherent intellectual framework. Such a framework can be based on a traditional scheme that analyses the various components of profit in terms of the requirements of justice. The framework provides a basis for discussing the major challenges facing the institutional investors. These relate to their role in rational asset selection, effective corporate governance, job creation and the minimisation of environmental impact.

KEYWORDS

Socially Acceptable Investment; Standards; Justice; Social Criteria; Utility Theory; Utility Functions; Evaluation of Performance; Management Remuneration; Trust Law; Corporate Governance; Entrepreneurial Rules; Employee Share Ownership Plans; Christian Thoughts

CONTACT ADDRESS

A. Asher, B.Bus.Sc., F.I.A., Department of Statistics and Actuarial Science, University of the Witwatersrand, Johannesburg, Private Bag 3, WITS 2050, South Africa. Tel: +27-11(0)-716-2610; Fax: +27-11(0)-339-6640; E-mail: 010ana@cosmos.wits.ac.za

1. INTRODUCTION

1.1 This paper sets out to provide a framework for actuaries to think about effective, and socially acceptable, institutional investment. Although it is not an exclusively actuarial subject — overlapping with philosophy, law, economics and the study of management — many actuaries come across the question during the course of their jobs, and may find other people looking to them for guidance. It is hoped that readers find the framework sufficiently helpful to compensate for the paper's length, its dense style and the cursory treatment of many issues.

1.2 The term 'institutional investors' is used for the policyholders' funds of life assurers, retirement funds and unit trusts. For the purposes of brevity, policyholders, members and unitholders are referred to collectively as beneficiaries, and those occupying the decision-making roles in the institutions are referred to as trustees. Sponsoring employers in defined benefit retirement funds may also be considered to be beneficiaries to the extent that they share in the investment returns.

1.3 Section 2 looks at the standards which ought to be applied to institutional investment management. Most important are the objectives of return and security,

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but trustees also have to behave in a socially acceptable manner. The bulk of this section is devoted to outlining a traditional view of justice as the social standard of behaviour, and applying it, in some detail, to the elements of profit — the source of investment returns. Section 2.3 attempts to defend the traditional view against some widely held, but more extreme, contrary views. The trustees' duties are necessarily intertwined with the concept of fiduciary duty, which is discussed in Section 2.5. Also described in this part are two useful economic concepts that may not be familiar to readers: bounded rationality; and the logic of collective action.

1.4 Section 3 looks at the behaviour of institutional investors and how it appears to fall short — when measured against the standards set earlier. Sections 3.2 and 3.3 outline a coherent logical framework for reconciling return and risk, and for the selection and monitoring of investment managers. Sections 3.4 to 3.6 are based on political critiques of the present practices of institutional investors. The capitalist, or blue, concern is for the best interests of the shareholders; the socialist, or red, burden is mainly for employees and the unemployed; while the environmentalist, or green, stress is on the environment and future generations. Section 3.7 briefly discusses some moral aspects of investment that may impinge on the consciences of beneficiaries.

1.5 Section 4 contains a conclusion and some remarks to Christian readers.

2. The Standards

2.1 *The Main Objectives*

2.1.1 Day & Jamieson (1975) provide a summary of the objectives of institutional investors:

"(1) The liabilities of the fund must be met as and when they arise.
(2) (1) must be met with as much surplus (or as little cost) as possible.
(3) The range of the possible in (2) will be limited by the priority of (1). In other words the risk involved in maximising the return must not be so great as to imperil the fulfilment of the liabilities."

2.1.2 The precise wording has been widely debated in the actuarial and financial literature, but it is generally agreed that maximising the returns, subject to acceptable risk, is the principal objective of investment. The purpose of this section is not to deny the primacy of these objectives, but to point out that they set an unattainable standard of perfection.

2.1.3 Simon's (1979) work on decision-making behaviour suggests that maximising standards will not often be attained. His concept of 'bounded rationality', for which he received the Nobel prize for economics, holds that our rationality is bounded, not only in the sense that we have insufficient information and cannot process all we have, but that the application of our rational facilities to find better solutions normally ceases when the outcome satisfies our

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aspirations. This outcome is likely to fall short of the maximum satisfaction possible, and so people are better described as 'satisficers' — not maximisers.

2.1.4. If true, then it would be surprising to find that institutional investors did maximise their risk-adjusted returns. Behaviour can, however, be improved. Bounded rationality provides guidance as to how this can be achieved by suggesting three sources of improvement: more information, better processing and higher aspirations.

2.2 *Justice: the Social Criterion*

2.2.1 *The art of balancing*

2.2.1.1 Day & Jamieson add a further investment objective:

> (4) The Investment should not be objectionable to the original savers on social or ethical grounds, and subject to rules (1), (2) and (3), investments should be those which can be held most beneficially on such considerations."

2.2.1.2 It might be thought that differences between people are too wide to allow agreement on social and ethical issues. This section, however, attempts to outline the traditional view, held by philosophers and political writers from the earliest times, that the principal social and ethical virtue is justice. (Justice is used here as having wider applications than equity or fairness, but the words are often interchangeable.)

2.2.1.3 The claim that justice is the primary social criterion is not made lightly, nor in an attempt to squeeze a complex problem into a simple answer. It is rather because societies require a balance between the needs, actions and values of different individuals, and justice is the name given to the art of finding this balance. Justice, therefore, rules over other social objectives such as liberty, prosperity, equality or peace, because it functions to balance them against each other.

2.2.1.4 Its key characteristic is a recognition of the dignity and individuality of each member of a society. This is the basis of its concern for a reasonable balance between the particular interests of each individual. It is, as a result, also concerned with desert: with appropriate rewards and punishments. It is also particularly concerned with the protection and dignity of the poor and otherwise defenceless. This personal aspect of justice perhaps explains the anger felt, often on someone else's behalf, when people are faced with injustice.

2.2.1.5 Because it is justice that ought to rule the relationships people have with each other, it can provide a basis for compulsion. This partly explains the many conflicting definitions of justice. Redefining justice in order to favour one's own values and interests not only makes for satisfying, if not constructive, argument, but also provides a justification for overruling the interests of others. There may be differing, but legitimate, interpretations of what constitutes a just balance of interests. Indeed, individuals in different societies do come to different answers, as shown in a summary of empirical work by Le Grand (1991).

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2.2.1.6. A discussion of justice could not be complete without mentioning Rawls (1971). His theory of justice rates liberty highest, and then balances equality, prosperity and need by a rule that requires the interests of the worst off to be maximised. The Rawlsian approach is widely used, but seems eccentric in ignoring desert, which Lucas (1980) would not be alone in considering pre-eminent in distributive justice. It does not rule out alternative rules of distribution, and is thus compatible with this paper's definition of justice.

2.2.1.7 Justice can also be spoken of in terms of right, which can be seen as defining the boundaries of just behaviour. Rights are not absolute; even rights to life and liberty must sometimes be balanced with the rights of others (especially to life and liberty). Claiming a right does not establish its validity. It is regrettable that calls for greater rights are often rhetorical and simplistic. Millennia of legal development have shown that rules that work, and are fair to all, are often complex and require trade-offs.

2.2.2 *Why it is needed*

2.2.2.1 The complexity of finding a balance between multiple objections, sufficiently acceptable to all those concerned, is another reason for differences of opinion over the meaning of justice. A just balance must, however, be found if cooperation is to occur. As Lucas puts it:

> "Justice is the bond of society ... the condition under which I and every man can identify with society, feel at one with it, and accept its rulings as my own."

Certainly the need to eliminate situations where people do not identify with society is more pressing for those who live in places where the alienated more readily resort to violence, but the point has universal validity.

2.2.2.2 Society can be widely or narrowly defined. Those thought to be guilty of injustices are likely to find themselves excluded from all sorts of groups, economic and social. Ignoring the rules of criminal justice can lead to gaol. Failing to address adequately the interests of staff or customers can mean losing them. In personal relationships, not least in marriage, justice guards the trust and friendship that provides much of life's meaning.

2.2.2.3 Justice also provides a (deontological) standard of virtue for those who are uncomfortable with the above argument, based, as it is, on pragmatic (teleological) grounds. Some of the oldest statements of the standard can be found in the prophets:

> "What does the Lord require of you, but to do justice..." (Micah 6:8)

Justice is a characteristic of mature people.

2.2.2.4 Many writers, religious and otherwise, have laboured to show that justice is also based on reason. It is embodied in the balance and consistency of the golden rule: we ought to consider the rights of others as we do our own. The need for consistency also applies to the relationship between ideas and behaviour.

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Justice is also, therefore, a characteristic of reasonable people, behaving reasonably.

2.2.2.5 Reason and religion can both be cowed. Doing justice can be costly, as with the pursuit of all virtue. In the first place, it means refraining from taking unfair advantage of others; in the second, it can mean having to confront unjust actions by people who have some power over us.

2.2.3 *More practically*

2.2.3.1 Justice is concerned with collaboration between people, and so, especially when compulsion is involved, with the agreements they make. Justice means, therefore, conforming to the rules with which any collaborative venture is governed.

2.2.3.2 In society (a venture in which we all collaborate of necessity), justice is concerned firstly that basic human interests, in life and freedom, are defended. This explains the common use of the word to describe the state's fight against crime. Justice, moreover, means obeying all laws, not only those against violence. This may, at first sight, appear trite, but has particular relevance in the application of the common law of trusts, as is discussed later in Sections 2.5 and 3.4.4.

2.2.3.3 This is not to argue that laws are necessarily just. If they are to be changed, however, just processes should be followed. (A just process will not necessarily justify an unfair outcome, nor an equitable outcome compensate for an unjust process.) The process of making laws ought, therefore, to be democratic in the sense that all interested parties should have the right to be heard and their interests considered.

2.2.3.4 This is not to say that laws should never be broken. A law may justifiably be disobeyed if the harm it does outweighs its benefits and the damage created (through uncertainty or lawlessness) by it being broken.

2.2.3.5 Commercial arrangements are governed by contracts, explicit and implicit, and justice ordinarily requires the fulfilment of such contracts. It is usually seen to be one of the responsibilities of governments to enforce contracts that are explicit and sometimes those that are implicit.

2.2.3.6 Contracts too may be unjust to one or other party. It is clearly just to alter patently unfair contracts, but their alteration is likely to create some tension. It is widely agreed that the loss of existing privileges is often suffered more acutely than gain is appreciated. This has been called hysteresis and may not be merely a psychological phenomenon; it may well include the costs of adapting to new circumstances. It underlines that justice will not break contracts without due cause. Justice is, however, neither conservative nor radical, as it reins in the excesses of both.

2.2.3.7 In the absence of any prearranged contracts, some writers suggest that a just recognition of others' interests means not knowingly doing them harm and offering 'easy rescue'. These are difficult to legislate, as each issue requires a proper consideration of the balance of the costs and benefits. (Harming a neighbour's quiet by driving a motor cycle is knowing, but probably insignificant,

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unless the bafflers are off.) Justice cannot compel one-sided sacrifices to be made; they derive from greater virtues.

2.2.3.8 The traditional picture of justice summarises her most important characteristics: blindfolded to special pleading; with a sword in one hand to enforce agreements; and with a balance in the other to weigh the interests and values of each person.

2.3 *Some Objections*

2.3.1 This section briefly responds to a few objections that readers may have to Section 2.2.

2.3.2 *Contra libertarianism*

2.3.2.1 The first of these objections is likely to come from those who believe that a free market will best provide for all society's economic needs without state intervention. The more thoughtful objectors in this line do recognise the importance of justice in defining what, perhaps the most influential of the economists of this school, Friedman (1987), terms 'the rules of the game'. Friedman clarifies his objection to government interference as one against the "present doctrine of 'fairness'", which he likens to a football game where the "referee would be required ... to move the ball backward or forward enough to make sure that the game ended in a draw!"

2.3.2.2 Proponents of the free market often, however, seem to be too single minded in their faith in the power of free markets. Olson (1965) provides a balance when he writes about the 'anarchistic fallacy', which is the "illusion that mutually useful relationships will spontaneously evolve in a free society". He shows that, assuming self interest only, individuals will not work to produce public goods unless their personal benefits exceed their personal costs. Unless each individual can be persuaded to contribute to the cost of the group benefit, the optimal level of public good will not be provided. On the other hand, where the public good is already being provided, if group members are not prevented from free riding (not paying their fair share of the cost, which is the self interested thing to do), then the resources to provide the public good will dry up.

2.3.2.3 Olson does not deny the effectiveness of free markets. His main theme is that small groups that do succeed in organising collectively frequently do so in order to create and maintain sectional interests that obstruct markets and economic growth. The point is that free markets need both to be supplemented by state or volunteer action and to be defended from sectional interference.

2.3.2.4 Applying the standards of justice of judging free markets means evaluating whose interests and which social objectives they foster. On the positive side, it is clear that they enhance freedom. It also appears that free markets provide the best signals and incentives for overall economic efficiency and for development. Other arguments for their freedom can be based on the dubious intentions and competence of governments. On the negative side, free markets offer little protection against uncertainty, are unlikely to produce an

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equal distribution of resources (even after allowing for different inputs and choices of output), nor will they adequately compensate for hardship or effort, nor do they inevitably provide for the basic needs of all participants. It can also be argued that their competitive nature creates unnecessary divisions in society. Shand (1990) discusses the issues in greater depth, and provides references to the better known champions of the market such as Popper, Hayek and Nozick.

2.3.2.5 The case for relying exclusively on free markets does not seem to be overwhelming. It is, therefore, not surprising that all economies are mixed, albeit in varying ways.

2.3.2.6 There is also the danger that an extreme libertarian faith will undermine the effectiveness of the market. Markets depend on the energy and skills of participants in order to function. There is less incentive to apply either energy or skills if it is believed that the market will automatically produce the optimum quantity at the optimum price.

2.3.3 *Contra cynicism*

2.3.3.1 Adam Smith's conclusion that others benefit when business people pursue their self-interest is a keystone of economic thought, but is not remarkable. Business people do claim to satisfy their customers, but seldom profess altruism in doing so. Claiming that charity workers, or those that seek to do justice, are usually self-interested is, however, not observation, but cynicism.

2.3.3.2 Stigler (1982) discusses the cynicism of many economists and the role of self-interest and ethics in some depth, but he descends into cynicism with his prediction that self-interest will normally overwhelm ethical values if and when it is tested. It is suggested that this view is not only uncharitable (which may not be regarded as a criticism at all), but dangerous, in that it promotes selfish behaviour (which Stigler, ironically, argues to be counterproductive), unscientific in that it provides an arbitrary a priori view of behaviour, and mischievous in that it makes frivolous accusations of hypocrisy against anyone who might claim to be altruistic. In support of the dangers, Frank, Gilovich & Regan (1993) present evidence that economists are likely to be more cynical than other graduates, and that their training appears to encourage selfish behaviour.

2.3.3.3 It may provide comfort to see that the views of a thorough going cynic cannot be trusted (because, by his own admission, they are based on his own self interest). This provides a powerful argument to silence cynics, but does not necessarily invalidate their views. A minimal degree of introspection, however, shows the cynical view to be untenable in its extreme form. Almost everyone will sometimes speak truth, even when against their interests to do so, and behave altruistically when dealing with family and friends. While self interest is a motivating force, it is not necessary to jump to the conclusion that all people work solely, or even largely, to achieve their own interests. A juster, and perhaps more fruitful, null hypothesis would be that people are motivated in the way they claim to be. Another precept of justice is that a person is seen as innocent until proven guilty; the onus is on the cynics to prove their accusations of hypocrisy.

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2.3.3.4 People are fallible, and the cynical view can prove accurate, but even when people fail to live up to the standards they set themselves: "it is possible to view social reality with compassion or with cynicism, both attitudes being compatible with clear sightedness" (Berger, 1963).

2.3.4 *Contra false prophets*

2.3.4.1 False prophets take an unwarranted sense of comfort in projecting selected aspects of the past into the future. They fall into two categories.

2.3.4.2 Utopian predictions of perfect societies are easily discredited, but all prognostications based on the inevitability of evolutionary progress fall into the same category. Civilisations do decay and take centuries to recover, if at all. Institutional investors are not necessarily doing a better job than they did last year; trustees will not necessarily learn to behave justly.

2.3.4.3 Statistics describing human behaviour (of which economic and investment data form a substantial subset) also provide temptations to use history for false prophecies. Statistical models, even the most complex, describe what has happened and cannot predict the future.

2.4 *Profits and Justice*

2.4.1 The requirements of justice can be reconciled with the principal investment objective of maximising the return by looking at the contribution of return (profit) to some of the more important social objectives, and then deciding on how they ought to be balanced.

2.4.2 Profit, itself, consists of different elements, some of which are sometimes mistaken for the whole. This section outlines what could be called a traditional scheme for the justice, or otherwise, of profit, where the contracts that govern the distribution of each of the elements of profit are examined in terms of desert, and of their contribution to prosperity, liberty and equality.

2.4.3 In order to avoid any confusion with capital profits, the first four sections of this section consider profits in the context of one time period only.

2.4.4 Profit is taken to exclude payments to individuals for services rendered and adjustments for a change in the purchasing power of money.

2.4.5 *Pure interest*

2.4.5.1 Pure interest provides a consistent way to ration capital resources between uses and over time. It is the means whereby capital is attracted from those who can delay consumption, and made less attractive to those who would spend or invest. An idea of its level is provided by the rate on riskless government instruments. It can be zero if capital is not scarce; and even negative if capital is plentiful, there is little demand for capital, and a cost to finding alternative stores of real value. A perfectly competitive market will set pure interest rates so as to allocate capital in such a way as to provide a Pareto maximum of society's prosperity. (No one can be made better off without others being made worse off.)

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2.4.5.2 Pure interest needs to be distinguished from the common use of the word interest to describe contractual payments from borrowers to lenders. The common usage includes a payment of pure interest, but also inflation adjustments, risk premiums and costs.

2.4.5.3 There are those who see it as unjust for capital to be rationed in this manner. Two alternatives are suggested: allocations based on the strength of personal relationships; or by central planning. Both are utilised extensively.

2.4.5.4 Loans between members of close communities, especially families, are frequently made for purposes other than the earning of interest. They find moral support in the ban on usury found in the Old Testament (Deuteronomy 23:19), in medieval times and under Islamic law. The original assumption seems to have been that the ability to earn interest depends on some personal wealth and ought to be weighed against the needs of the poor, particularly those in close proximity. The original ban expressly allowed the earning of interest from foreigners.

2.4.5.5 It would seem that this argument against the charging of interest relies on both the contrast between wealth and poverty and the personal relationship between lender and borrower. Absent either and it loses force. It would seem wrong to discourage the poor widow from charging interest on a loan to her high earning nephew. On the other hand, it may stretch justice too far to require the wealthy to seek out strangers to whom to lend their money at no interest.

2.4.5.6 When, however, both poverty and relationship are present, the argument may have validity. Institutional investors may justly lend to poorer beneficiaries or their dependents at less than market rates of interest, as long as their needs are balanced against those of the other beneficiaries.

2.4.5.7 A centralised economy could ration investment without charging interest. Schumpeter (1943) makes the point, however, that rational decision making requires the use of notional interest. This is not always appreciated, not least by the many public institutions that have separate accounts for current and capital expenditure and do not allocate interest (or depreciation) in the expense accounts. The advantages of the conventional accounting approach, that converts capital costs into expense charges, is that the capital and running costs are directly comparable. In particular, it becomes possible to make economically rational decisions about benefits to be gained from new equipment.

2.4.5.8 Separate fund accounting (for capital and running expenses) may be of less importance if government pays a market-related interest rate on its borrowings, as the cost of borrowing is then known and can be used. In those countries where investors are required to provide for government borrowing at less than competitive rates, investment decisions must be even less rationally made without knowledge as to the market rate of interest. It is suggested that, in general, irrational decisions are less likely to contribute to equality or benefit the poor than those made rationally; it is the powerful that are most likely to benefit from hidden subsidies.

2.4.5.9 Some governments raise funds by requiring institutional investors to lend to them. Even where the projects concerned may appear to benefit the poor,

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this may still be a regressive action. Poorer people are often net savers in these institutions, because of the greater risks they face and their difficulty in accessing capital from the formal markets. The lower interest rates earned by these institutions may, therefore, cost the poor more than the benefits they receive. Other instruments, such as direct taxation, would be more likely to achieve a redistribution of wealth.

2.4.5.10 Pure interest should normally, therefore, be allocated to the providers of capital on grounds of desert and efficiency. Liberty, too, would be satisfied if this were allowed through a free market. Such an allocation may make no contribution towards equality or the needy, but, loans to close personal contacts aside, no other method would seem, necessarily, to serve this objective.

2.4.6 *Risk premium*

2.4.6.1 The risk premium reimburses the capital providers for uncertainties. The expected value of the risk premium would be zero if providers of capital were entirely risk neutral, but investors are normally assumed to be risk averse and to demand a positive risk premium.

2.4.6.2 The risk premium is a random variable, and the actual value realised in any one period may be negative. Knight (1921) describes the risk premium as the entrepreneurial profit. Knight views "entrepreneurship ... as essentially a device for specializing uncertainty-bearing", where uncertainty is distinguished from risk in that it cannot be measured statistically from previous experience. It is suggested here that his distinction between risk and uncertainty is not entirely helpful, as there is a continuum between risks that are statistically stable and can be subject to extensive statistical testing, on the one hand, and single events where there is no previous experience, on the other. Insurance markets of one sort or another can be found for almost all conceivable risks. These risks need to be distinguished from the creative aspect of entrepreneurship, which is covered in the next section.

2.4.6.3 The risk premium is directly analogous to an insurance premium; it is paid when the risk of random loss is redistributed among the stakeholders in the business (shareholders, employees, customers, suppliers and even government). The theory of insurance is of relevance, in particular the problem of moral hazard.

2.4.6.4 The ancient condemnation of usury, described in Section 2.4.5, could apply to the charging of a risk premium. It has some modern counterparts in legislation prohibiting discrimination between different types of borrowers. Such prohibitions tend to reduce the amount of capital available to the riskier borrowers, and so are often counterproductive. In order to avoid this deadweight loss, such a prohibition would again require differences in wealth and a personal relationship. It is difficult to see how this can be applied to institutional investors, except in the rare case where needy beneficiaries are, themselves, involved in business.

2.4.6.5 The possibility of state provision of risk-bearing capacity also has analogies with the discussion of pure interest. A charge would have to be made

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for the provision of insurance capacity in order to provide a rational basis for its allocation. The charges should be comparable with those charged in the private sector in order to be economically optimal. There is a difference between pure interest rates and risk bearing in that governments will frequently be able to make a contribution to risk-bearing capacity, and so to overall economic well-being. Their issue of stock guaranteed in nominal or real terms, support for the banking sector, and the provision of insurance and risk benefits are all consistent with this thought.

2.4.6.6 In terms of desert and efficiency, the risk premium is due to those exposed to the risks. It recompenses for the job of evaluating the risk and the worry that money might be lost. It is not due exclusively to the providers of capital nor in proportion to that employed. Risks borne by employees also require compensation.

2.4.6.7 Of particular concern, in this context, is the breaking of implicit employment contracts that had implied that fluctuations in a firm's income would be born by the providers of capital and not by the layoff of workers. This breaking of an implicit contract is a typical distributional injustice, the exploitation of a weaker partner in a collaborative venture.

2.4.6.8 The risk premium will normally accrue to the more wealthy, and is unlikely to reduce equality or provide resources to those in need. Its random nature may, in fact, create inequalities in wealth. While government action might reduce the size of the premium, it is difficult to see how the state could distinguish the random element and deal with it fairly. Letting the risk profit accrue to the bearer of the risk, therefore, appears to be the most just.

2.4.7 *Innovation*

2.4.7.1 Knight's definition also confuses because it does not correspond to the etymology of entrepreneur, nor to its general usage. Enterprise means doing something, and implies innovation and energy as well as risk. Schumpeter (1961, first edition 1911) may be closer to the more common meaning of the term when he describes the reward for innovation as entrepreneurial profit.

2.4.7.2 There is a difference between innovation and risk bearing. An innovator will frequently need to find a partner to assume the financial risks surrounding a new project. The division of the spoils between the partners is a subject for distributive justice. Other things being equal, the innovator deserves to be paid the reward of innovation, the risk bearer deserves the risk premium.

2.4.7.3 Innovation may derive from individual genius, in which case the genius should be remunerated. Schumpeter (1943) suggests that the potential for innovation can be built into the structure of an organisation. If the profit from innovation derives from this structure, or from luck, the proceeds are due to shareholders: in the first case as a reward for creating innovative structures; in the second as a reward for business risk.

2.4.7.4 If not kept secret or otherwise protected, innovations become a common good, and may not be remunerated at all. This lack of either incentive

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or just reward can be seen as a collective action problem, and explains the development of the laws of intellectual property.

2.4.7.5 Innovations are likely to increase inequality, and may contribute to greater neediness amongst those whose technology becomes outdated. This may be aggravated by intellectual property laws which inhibit the copying of new techniques. Baumol (1993) discusses the important contribution that copying makes to economic growth. He favours the Japanese patent system, which encourages the patenting of inventions by awarding the patent to the first to file, not necessarily the inventor. It also precludes patentholders from preventing the copying of the innovation, but allows the courts to award reasonable royalties.

2.4.7.6 The destructive short-run consequences of innovation can present major problems: the unemployment effects particularly so. In addressing these problems, it would not be unreasonable for governments to place some short-term restrictions on innovation or limit the profits to be made. The openness of modern economies to foreign competition make it likely, however, that such interventions will prove ineffective, and may aggravate the total costs of adaptation to the new technology.

2.4.7.7 Part of the profits from innovation, therefore, can accrue, justly, to the innovator. The balance belongs to all users of the innovation.

2.4.8 *Rent*

2.4.8.1 Profits may also include economic rents. Rent can be defined as that proportion of the payment to an input that elicits no increase in output. This means that it describes, not only payments for the use of natural resources, but also the extra price extracted by monopolists. (A monopoly charges more than charged in a freely competitive market, and will usually produce less.)

2.4.8.2 Monopoly rents are controversial. Some feel that they are practically insignificant in Western economies. Excessive rents are unlikely, because competitors will soon enter any inefficient market; rents that can only be appropriated in the short run are not properly so described, because they serve as incentives for entrepreneurs to seek out inefficient markets. Many economists take this view, and go to some pains to prove the efficiency of particular markets.

2.4.8.3 It would, however, be absurd to argue that all markets were always perfectly efficient. People's perceptions of the significance of economic rents depend, to a degree, on whether they pay, or receive them. If the power to charge more without giving more is seen to be illegitimate, then economic rents can lead to anger and social unrest.

2.4.8.4 There may be innocent reasons for the absence of perfect competition in a market. Indivisibilities (where the market is too small) and transaction costs (of setting up in a new market) may be responsible. There are other less innocent sources of monopoly power: fraud (misleading customers), conspiracy (with other producers to keep prices high) and force. These are unjust, and most jurisdictions act against them. A state's use of force to extract rents from non-citizens is also unjust, but this leads us beyond the scope of this paper.

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2.4.8.5 Whether derived unjustly or not, it is suggested here that monopoly rents belong, by desert, to the overcharged customer. The just man may increase his charges to reduce the demand for his goods or services to that which he can readily produce, but it would be unjust to become rich at the expense of his fellows merely on the grounds that it was possible to do so. It is suggested that there is no social or economic justification for charging monopoly prices, and other members of society, therefore, have no reason to conform to contracts that permit monopolies, except a concern not to change contracts lightly. According to de Roover (1985), this view has been the traditional view of Christian theologians.

2.4.8.6 This makes it unjust for an investor to participate in a company that extracts monopoly rents, either by paying workers too little or by charging customers too much. This does not imply the impoverishment of the just investor, for she is still entitled to a market return. In a one-year period world it means foregoing the period's extra return.

2.4.8.7 From a policy perspective, the state must balance the monopolist's right to freedom with the evils caused by the charging of rent. Rent that is sufficiently large and persistent, however, would be a legitimate target for taxation; if taxation is seen as a necessary evil, then it would be better to visit it on miscreant monopolists than other, more innocent, citizens. It is, however, practically difficult to separately identify that portion of profit attributable to monopoly rent, and few attempts are made to do so. The easier approach is to encourage competition.

2.4.8.8 As natural resources are not contributed by any individual, the benefits that accrue should be equally distributed to everyone in society. Seabright (1993) points out, however, that the institution of private property is an efficient solution to the 'tragedy of the commons' (the degrading of land through lack of collective action). This is because each person is given an incentive to develop his land.

2.4.8.9 Monopoly rents are, therefore, unjust, but rent on land and natural resources appears acceptable.

2.4.9 *Capital profits*

2.4.9.1 In a multiple period world, changes in the expected future level of each of the elements of profit can lead to capital profits or losses. Capital profits or losses that arise from changes to the expected future level of interest rates, or of risk premiums, arise from unforeseen changes in the supply and demand for capital or risk, and are business risks. They are due to those who previously agreed to take the risk, even if implicitly.

2.4.9.2 Future entrepreneurial profits will be capitalised to the extent that it becomes probable that they will be earned. This capital profit is due to the entrepreneur (whether genius or institution). It must not be confused with capital profits or losses that arise from changes to future expectations. These are business risks, and include the risk that the innovation may be copied and become a common good.

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2.4.9.3 The same applies to capital profits or losses that arise from changes to the expected level of rents. That part which arises from expectations of higher (or lower) rent payments is also rent, the rest are business risks.

2.4.9.4 Owners of capital hold their assets by virtue of contracts recognised by society. Accepting that contracts should be set aside only reluctantly, arguments can be made, firstly for the confiscation (or taxation) of capital unfairly derived from, and secondly of capital now invested in, economic rents. The confiscated capital could be restored to those oppressed by the monopoly or used for general purposes, if this is more practical.

2.4.9.5 In the first case, the argument is based on the injustice of contracts that give rise to the rents. They gave value to some parties to the contract without any compensation to the other side. There is, therefore, little advantage to society (economic or social) in recognising such contracts, except, perhaps, in maintaining a quieter life. Confiscation of the proceeds will, however, provide an incentive for businesses to focus on innovation and not on monopoly profits.

2.4.9.6 The argument for the confiscation of capital invested in rents is related to efficiency; states must be free to replace monopolies with competition without having to compensate the monopolist. Competition would eliminate future rents and their present capital values, and so amounts to confiscation. Owners of such capital may plead the innocence of the means whereby they obtained their money, and ignorance as to its uses or the risk of confiscation. The first plea is irrelevant; the tools used for crimes are often innocently produced. Their ignorance is culpable; using a tool without proper thought for the consequences. Again, the risk of such losses provides an incentive not to pursue monopoly gains.

2.4.9.7 Capital profits and losses can, therefore, be fitted into the same categories as the profits in a one-year period world.

2.4.10 *The labour theory*

2.4.10.1 Although most Marxists, such as Meek (1973), deny that the labour theory of value is a theory of justice, the moral indignation that pervades their writing gives credibility to the views, such as those of Schumpeter (1943) and Polanyi (1958), that it is its sense of injustice that makes Marxism so appealing to many. Mandel (1965) suggests that Marx's approach of subsuming the elements of pure interest, risk premium and rents into a single category of surplus involves a scientific advance, in that it provides a more parsimonious explanation for the function of profit. It is suggested here that his own defence requires too many adaptations to make it any simpler than the above scheme.

2.4.10.2 It is also suggested that the Marxist critique fails to distinguish between just and unjust capital formation and ownership. The importance of the institutional investors, representing the capital of ordinary individuals, demonstrates that capital can derive from innocent savings, and not only from the exploitation of others. Pure interest and risk premiums, therefore, can be seen to be justly earned by savers and risk bearers respectively.

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2.4.10.3 Seabright's insights into the place of private ownership in providing a just answer to the question of the commons, illustrated by the apparent failure of collective farming, further takes the sting out of the Marxist critique.

Table 1. A traditional scheme for the just allocation of profit.

	Alternative objectives			
Elements of profit	Desert	Efficiency and prosperity	Equality and need	Completely free markets
Pure interest	Capital	Capital	Related poor	Capital
Risk premium	Risk bearer	Risk bearer	Related poor or Government	Capital
Innovation:				
By genius	Entrepreneur	Entrepreneur	Everyone	Everyone
Institutional	Capital	Capital	Everyone	Everyone
Rent:				
Natural	Everyone	Capital	Everyone	Capital
Monopoly	Customer	Everyone	Everyone	Capital

Considering differing social objectives one at a time, a case could be made for allocating profit to the different classes shown. The task of justice is to find a balance.

2.4.11 *Summary*

2.4.11.1 Table 1 summarises this section. The scheme it outlines provides little that is startling, as it can account for the similarities and differences between modern mixed economies. It does provide a basis for analysing such differences and of proposing changes to policy. It also gives an indication of the legitimate arguments that might be made for and against such proposals.

2.4.11.2 It is not suggested that contracts that justly allocate profit are all that is required for a just distribution of wealth in a society. Governments may well wish to redistribute assets and income in order to promote equality, for instance, but this would go beyond the scope of this paper.

2.5 *Trusteeship*

2.5.1 The standards to which trustees should aspire include the fulfilment of their common law fiduciary duties. If the assets were directly owned, there would be little to say about their investment. The owners could do as they please. Trustees, however, have a delegated authority (a collaborative agreement) to control the assets of others; they are, therefore, subject to the constraints of justice.

2.5.2 Their legal duty is to act strictly in the interests of beneficiaries and to eschew personal gain beyond a reasonable remuneration. They must avoid

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conflicts of interest. The first part of Bayne (1986) sets out fiduciary obligations in great detail, although not in the context of institutional investment.

2.5.3 That fiduciary duties ought to govern the behaviour of those who purport to look after the interests of others, is barely considered in the economic literature of what Ross (1973) described as the principal-agent problem. This omission again appears in the fifth objective suggested by Day & Jamieson:

> "(5) When rules (1) to (4) are satisfied, the investment manager should choose the investments which do most to further the other objects of his business."

2.5.4 Bayne quotes a nineteenth century judgment worth repeating:

> "no agent in the course of his agency, in the matter of his agency, can be allowed to make any profit without the knowledge and consent of his principal; ... that rule is an inflexible rule, and must be applied inexorably by this Court, which is not entitled ... to receive evidence .. as to whether the principal did or did not suffer any injury ..; for the safety of mankind requires that no agent shall be able to put his principal to the danger of such inquiry as that."
>
> Parker v McKenna 10 LR Ch 96, 124-25 (Ch APP 1874) (James L J)

2.5.5 Actions taken to follow Day & Jamieson's fifth objective would, therefore, be illegal if each case was not disclosed to the trustees and approved by them. In some cases, it might be appropriate to extend such knowledge and approval to the beneficiaries. This does go to illustrate that the fulfilling fiduciary responsibilities is not always obvious, and the need to obey the law is not a trite requirement.

3. The Critiques

3.1 *The Technical Critique*

3.1.1 Whatever their other responsibilities, the trustees' primary investment responsibility is economic, and is the allocation of capital to where it will contribute most to the prosperity of their beneficiaries. This is achieved by attempting to maximise returns, which means the appropriate selection and pricing of assets.

3.1.2 This will also make the greatest contribution towards the prosperity of all if investment markets are free and efficient. Sections 3.4, 3.5 and 3.6 deal with some possible inefficiencies in the market, and to that extent will modify the conclusions of this section. Other things being equal, however, the social responsibility of trustees is the maximisation of returns.

3.2 *Setting The Strategy*

3.2.1 *The justification for utility theory*

3.2.1.1 Von Winterfeldt & Edwards (1986) provide the supporting arguments for using utility theory to analyse whether objectives are consistent with each other. Their book discusses the problems of using utility theory in the light of

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extensive evidence that people do not always act rationally. They make two claims:

> "One is that rationality of inference and rationality of decision are obtainable goals... The second is that the technologies needed to attain rationality are more often than not demanding to learn and difficult to use ... The cost of systematic, careful thought using formally appropriate tools is high enough that even experts do not routinely or casually incur it. ... careful analysis is worthwhile when the stakes are high *and* the inference or decision is intellectually difficult or insecure."

3.2.1.2 Those influenced by rational expectations theory, which assumes that people always behave rationally, may balk at these conclusions. Evidence of investor behaviour is divided. O'Barr & Conley (1992), in a careful two-year study of the culture and behaviour of nine large pension funds in the United States of America confirm the author's experience of 'surprising and sometimes disturbing' evidence of 'an unsystematic approach' to investment decisions. On the other hand, Miller (1991) provides compelling evidence of efficiency and rationality in the investment markets.

3.2.1.3 Smith (1994) provides a resolution of the paradox. He describes laboratory-type experiments that have shown how competitive markets can help even muddled individuals to make wise decisions. This is because the presence of a few rational arbitrageurs brings about a convergence of the market price to the real value of the items traded, which protects ill-informed participants from selling too cheaply or buying too dearly. The experiments show that continuous double auctions (published bid and put prices) and derivative instruments contribute to efficiency.

3.2.1.4 Another of Smith's findings is that markets are more efficient when participants are repetitively involved; they do not work particularly well with once-off decisions. This may explain the common finding, such as by Coggin, Fabozzi & Rahman (1993), that, while investment managers make good decisions about stock selection, they usually fail on questions of market timing. As the market seldom repeats itself, timing is usually a once-off decision.

3.2.1.5 The experiments described by Smith have also produced evidence that participants' actions often result in an optimal outcome when they are relying on intuition that cannot be fully explained. Although this might be explained as doing the right thing for the wrong reason, even Von Winterfeldt & Edwards do not dismiss intuition as an input in the decision process. Perhaps it is better explained using Polanyi's concept of 'tacit knowledge'. Tacit (or subconscious) knowledge can be demonstrated, but not explained: one example he gives is the teaching of medical diagnoses where there are too many, almost imperceptible, clues to be explained, but not too many to be, subconsciously, observed and learnt by observing an experienced doctor. This would imply that talk about the 'feeling' of the market may not be irrational.

3.2.1.6 Subjective utility theory denies neither reason, the market nor intuition; it provides a basis for using them all more fruitfully. The stakes are

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surely high enough, and the problems intellectually demanding enough, to justify its use.

3.2.2 *An explicit model*

3.2.2.1 Utility theory is applied to investment decisions by assigning a utility value to each possible outcome (ultimate surplus amount) at the end of a given period. The probability distribution of the outcome of different investment strategies is also determined over the same period. The best strategy is the one which maximises the expected total utility when weighted by the probability of each outcome being achieved.

3.2.2.2 Trustees have to derive common organisational objectives that blend their personal views. It is somewhat disconcerting that O'Barr & Conley (1992) find that this question was not debated in the organisations that they examined, and that trustees tended unquestioningly to follow 'tradition': what happened last year. The application of the utility approach can provide an explicit basis for discussing and evaluating objectives.

3.2.3 *Properties of utility functions*

3.2.3.1 The graph of total utility as returns increase will be increasing, although, possibly at a declining rate. A few discontinuities of special importance can be identified. Most important for a life office would be the point (or perhaps segment) between statutory solvency and insolvency, but also those points below which it would be necessary to provide additional comfort to the regulators, to alter materially the investment mix, to reduce new business or benefit expectations, or to raise capital. Retirement funds would have discontinuities at the first two points, and again where additional contributions were required or where benefits would be reduced.

3.2.3.2 These discontinuities arise, partly from the discrete nature of outside interventions, but also from hysteresis. The point of insolvency is particularly important for these reasons, and also because it forms a boundary marking the beneficiaries' legal rights. Another point, at a higher level of return, will mark their reasonable expectations. This point is more difficult to define, but is also an important boundary between justice and injustice, and has legal force in South Africa and the United Kingdom.

3.2.3.3 There is another curve (confirmed by the interviews of O'Barr & Conley) which measures utility to investment managers by measuring performance relative to that of their competitors. Its shape may display greater risk aversion (a small outperformance may be worth almost as much as a large one), and it will have discontinuities at those points where remuneration is affected, in particular where people can be fired or relationships terminated.

3.2.3.4 A third, and perhaps fourth, curve measures the utility of returns in nominal terms or relative to inflation. Hysteresis creates discontinuities at zero, measured in nominal and in real terms.

3.2.3.5 The optimal investment strategy would be one that maximised a

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weighted sum of the utilities produced by multiplying the utility mapped by each of these curves with the corresponding probability of achievement. Von Winterfeldt & Edwards (1986) discuss some of the approaches that can be taken in these 'multi-attribute' problems in more detail.

3.2.3.6 If all this were not complex enough, there is also the principal agent problem. Beneficiaries may have utility functions (of all three types) that differ from those of the trustees and of the investment managers. It would be comforting if the utility functions of the agents and principals could be matched by the appropriate design of benefits and remuneration. This is not, however, essential. The case is similar to that against cynicism, and is bolstered by the law of trusts; trustees, and investment managers, are required to act in the interests of beneficiaries even if they are given the opportunity, and face financial incentives, to act otherwise. In the author's experience, many do place the interests of beneficiaries first.

3.2.4 *Approximations*

3.2.4.1 The complexity can appear overwhelming and O'Barr & Conley find that retirement fund trustees do have difficulty in coping with it. They are often thrown back on an approximation of the utility function that will, in bounded rationality terms, satisfice.

3.2.4.2 The investment objectives set out by Day & Jamieson (1975), in ¶2.1.1, are such an approximation. The discontinuity at the point of ruin is so exaggerated that utility can be seen as negative and infinitely large below it and linearly increasing above. Maximising the expected return, means maximising:

$$\int x\, f(x)$$

where $f(x)$ is the density function of the return — which must be chosen so that it has zero value for x less than the return required for solvency. This is equivalent to maximising a utility function $U(x)=x$. This may well exaggerate the problems associated with ruin, and is clearly unsatisfactory to the extent the other discontinuities are important. The straight line above the point of ruin implies a risk neutrality in this range that also should be tested against the aims of the organisation concerned which may well be risk averse. (Von Winterfeldt & Edwards do suggest that, while risk aversion makes sense in the context of single gambles where the subject faces ruin, it is less needed if the gamble is repeated often, because the distribution of the sum of payoffs from all gambles is so clustered around the expected. Institutional investors may well fall into this category once solvency is assured.)

3.2.4.3 Modern financial theory takes another approach to approximating the utility curve, and reduces the question to a trade off between expected returns and risks, usually measured by the historical variance of investment returns. Justifications for this approach in the early days of the development of this theory can be found in Moore (1972). There is a link between the probability of ruin,

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and the mean and variance of the investment return distribution, but the nature of the link requires simplifying assumptions about the distribution of the returns of the utility function. Dinenis & Scott (1993) and Ramsay (1993) and discussants provide an explicit treatment of the assumptions, and show how the two approaches can be compatible. It seems unlikely that the assumptions provide a sufficient foundation for the mountain of mathematics—published and unpublished—that has been built upon them. In the absence of a demonstration that modern financial theory provides the same results as utility theory, it is suggested that the latter is a more appropriate tool.

3.2.4.4 Trustees might like to consider the methods suggested by Von Winterfeldt & Edwards (1986), but might find them too complex. It is suggested that individually and corporately, trustees and their advisers should at least consider the mean and the cumulative distribution function of alternative investment strategies, and, in particular, the values at each of the points of discontinuity.

3.2.5 *The distribution of the outcomes*

3.2.5.1 Deriving the cumulative distribution functions of the outcomes is itself complex. In the past, actuaries might have gained some idea of the variability of investment returns by determining the value of the institution's surplus under a range of investment assumptions. Computers have changed that. Stochastic modelling of the distribution of investment returns (and their relationship with the emerging liabilities) now allows actuaries or investment managers to create a credible probability distribution of outcomes with which to match a utility function. Wilkie's (1995) paper is the latest published development in this field, which he has pioneered over the past 15 years. His work uses time series techniques to describe the historical movement of some economic and investment variables that take into account lagged and simultaneous correlations between a number of variables relevant to investment markets. (Neither its sophistication, nor lack of familiarity with the concepts, should mask the reality that this work is descriptive and not predictive. Care must still be taken in modelling the future.)

3.2.5.2 Wilkie suggests that the incorporation of exogenous variables (such as government policy and the state of investment markets) into models of this type may be one of the more fruitful areas of future research.

3.2.5.3 He particularly focuses on the long-term tendency of equity markets to revert to an average dividend yield. A recent example of a bubble bursting is the Japanese share market of the early 1990s, which fell at one time to some 40% of its peak level. He suggests that a wider realisation of this tendency might help reduce the size of market bubbles. If the models used to set investment objectives took the possibility of bubbles into account, such wider realisation would follow sooner rather than later. Interestingly, one of the experiments mentioned by Smith (1994) is of a model market of shares paying dividends for a finite period only. Bubbles frequently occurred, even though they can have no logical basis, when

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all the players were new to the game (although not necessarily to investments). Participants did, however, learn quickly, and no bubbles occurred when all the players had played twice before.

3.2.5.4 Wilkie's models, and probably most that are currently used, only distinguish between different classes of assets and between currencies. Future developments may make finer distinctions.

3.2.6 *Best practice*

3.2.6.1 It is, therefore, contended that best actuarial practice is to use an asset liability simulation approach together with an explicit utility model. Reports from the Institute of Actuaries 2nd FIMAG Asset Liability Convention (1995) provide some support for this contention. Of U.K. funds, apparently 25% use asset/liability techniques to monitor investment strategy, while the recognition that pension fund risks are 'multi-dimensional' suggests that models are more closely following the structure of utility described in this paper.

3.2.6.2 Of concern are the 75% of funds in the U.K. (and probably a similar percentage elsewhere) that have not adopted the latest technology. In bounded rationality terms, aspirations could be higher.

3.3 *Choosing the Managers*

3.3.1 However technical the image of investment management, and in spite of its enormous costs, O'Barr & Conley (1992) observe that "relationships are often more important than managing the bottom line in evaluating and deciding whether to retain managers." As anthropologists, they welcomed the recognition of the human element in circumstances where significant objective measures were hard to obtain, but also recorded their feeling that, in the situations they had observed, "the balance had tipped too far".

3.3.2 There is no need to debate the overall validity of their observations. What is sought here are reasonable criteria to apply to the selection and evaluation of investment managers.

3.3.3 *Fundamental analysis*

3.3.3.1 A significant proportion of the share portfolios of pension funds, especially in the U.S.A., are formally indexed. (Shareholdings in each company are proportional to the company's weighting in a selected stock exchange index.) If markets are efficient, and can be relied upon to remain so, then no prices are cheap or expensive. Indexation is then a type of free riding that will save investment management expenses. If markets are truly competitive there is no reason to systematically index a portfolio, a random selection of shares will provide the same free ride.

3.3.3.2 An indexed portfolio will earn the same return as the index being followed, only to the extent that it is not necessary to deal. It may, however, lose money at times when money needs to be realised or invested, of when the portfolio requires rebalancing because of a change in the index. The amount lost

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will depend on the dealing strategy used by the investment manager and the imperfections in the market at the time. Indexation may, therefore, be expensive if the market is not efficiently pricing shares.

3.3.3.3 If the market is efficient, then fundamental research will yield no revenues and arbitrageurs may leave the market. On the other hand, too many free riders will increase the costs of indexation and the profits from good fundamental analysis, and so provide incentives for more arbitrage and more efficient markets. History will, however, provide little guide as to the future costs of indexation. The more rapid the change in the structure of investment markets, in our day caused by computerisation and globalisation, the less predictable they may become.

3.3.3.4 Lowenstein (1991) is one who criticises indexation as being too reliant on the efficient market hypothesis and also as a 'metaphor' for the over reliance of modern financial theory on formulae. The other formulae-based approach is technical analysis, whether it involves the interpretation of charts or the most sophisticated financial theory. It appears to have a fascination for some people that distracts from comprehensive, fundamental analysis. The latter, however, can provide information not present in the variables (often only the historical prices) considered by the technicians.

3.3.3.5 The formulae-based approaches that ignore large amounts of the information available are, therefore, gambles. Trustees' fiduciary responsibilities rule them out as being inconsistent with due care. Assets should be purchased only after their value has been carefully and fundamentally appraised.

3.3.4 *Timing and the herd*

3.3.4.1 As mentioned earlier, Coggin, Fabozzi & Rahman (1993) note the failure of American pension fund managers to time their entry into different asset markets. This implies that they buy when prices are high because everyone else is buying. Fuller, Huberts & Levinson (1993) have found that, although analysts fairly accurately predict the relative earnings growth of companies, the market in the U.S.A. has tended to overprice growing companies in the periods they have investigated. They also reported a tendency to undervalue less successful companies that have a high ratio of book value to share price. These, together with Wilkie's comments on share bubbles, all seem to illustrate a tendency of investors to be insufficiently critical of some common wisdom and to herd together.

3.3.4.2 Following the herd has its cost when prices resume their fundamental value, but this takes time. Wilkie reports that it takes some 7 years in the data series he has analysed. Profits in the intervening period may be lost; if prices are going to rise, then it pays to buy, even when there is little fundamental value on offer, as long as you are ahead of the herd.

3.3.4.3 The contrast between the analysis and decisions required in stock selection and those required in timing decisions may not always be fully appreciated. Timing is a judgement made once in time, and requires knowledge of international macroeconomic trends and of market psychology. It is a degree

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of magnitude more complex than stock selection, where a single individual can provide a really thorough analysis of an individual company. It would seem, therefore, that timing would be more likely to be mistaken than stock selection.

3.3.4.4 It is impossible to ignore the problem, even using asset/liability techniques. Some conscious decision should be made about the 'bubble' elements in a market before simulating its future direction. Actuaries and investment managers should, perhaps, have a common view of the level of investment markets if the institutional investor is to have a coherent investment strategy.

3.3.4.5 It is suggested that timing decisions should be made consciously, with a view to both fundamental and psychological factors, and that their complexity and international nature requires a team approach that includes members from different markets and disciplines. Foreigners might also help to add perspective to other herding tendencies in local markets.

3.3.5 *Evaluation of performance*

3.3.5.1 Investment managers are normally evaluated on the aggregate return, and sometimes on some measure of variability of return over a period, as in Knox & Prowse (1989). They ought, also, to be subject to attribution analysis, which measures the relative contribution of timing (strategy) and of stock selection.

3.3.5.2 Day, Green & Plymen (1994) describe a more detailed model, that examines the contribution of each decision to the manager's relative performance. Their model should make it easier to judge decisions within a shorter period than the three years usually suggested for the evaluation of aggregate performance.

3.3.5.3 Certainly it can only help the investment manager concerned to be aware of the success or otherwise of each of his or her decisions. It makes sense, therefore, to prepare the schedules that would be required for this type of evaluation, and to make them available to those wanting to assess the manager's ability. It will seldom be entirely clear whether these failures were due to inadequate analysis or to bad luck, but explanations given to justify incorrect decisions should help satisfy whether the initial analysis was sufficiently thorough.

3.3.5.4 An investment management organisation is normally organised into three sections: analysis, portfolio management and dealing. The performance of the dealing function also needs to be evaluated. It is suggested that it should be measured by comparing the price of purchases and sales with intra-day, and perhaps weekly, highs and lows. (This comparison would also serve to check the integrity of the investment manager.)

3.4 *The Blue or Capitalist Critique*

3.4.1 At stake in the capitalist critique is whether trustees have adequately husbanded the property rights of the beneficiaries. As Lowenstein (1991) puts it:

> "Power without accountability to someone in particular is not accountable at all, and our entire economic system is organised in a way that makes shareholder interests primary ... In a capitalist system there is no substitute for the capitalists."

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3.4.2 This section looks at various ways that trustees should exercise their voting responsibilities, individually and collectively, and especially at their potential role in a better system of corporate governance.

3.4.3 *Management remuneration*

3.4.3.1 Trustees cannot avoid the controversy over management remuneration, as it touches them twice: in determining their own; and in approving that of the directors and management of the companies in which their institutions have invested. Many people serve as both. Berle & Means (1968, first edition 1932) discuss the divorce of ownership from control in modern public corporations, pointing out that the interests of "owners most emphatically will not be served by a profit-seeking controlling group" unless appropriate restraints are imposed. It is clear that trustees have some responsibility (and their votes at shareholders' meetings give them the power) to ensure that such restraints are exercised in order to protect the value of the assets in their care.

3.4.3.2 If all markets were free and efficient, directors would be paid the market rate: the price sufficient to encourage enough competent people to serve in their positions. The company does not need to pay them more, nor can it afford more because of competition with firms that do not pay more. Although this can be a source of unhappiness (to directors and workers alike), it is the logic of the market which does not guarantee a reward for merit, but only the matching of supply and demand.

3.4.3.3 Fama (1980) suggests that there might be a market in directors, but there is general agreement that it is too small and specialised to be completely efficient. Directors are often in a position to determine their own remuneration, and may vote themselves incomes in excess of the market rate, the excess being an economic rent.

3.4.3.4 Many argue that a link between the remuneration of management and the profits paid to shareholders will provide better incentives. This may be true, but is often a smoke screen for greed; studies of the relationship between pay and performance frequently fail to show any positive link. A link needs to be carefully designed in order to identify those aspects of profit under the control of management: business risk and innovation. Approaches to executive reward, such as EVA (economic value added in excess of risk adjusted cost of capital), reported by Monks & Minow (1995), have a logic which is absent in incentives that depend on share price increases, most of which are beyond management's control. Worse still, these incentives often offer one-sided options that give management an incentive to increase the business risk. (The more risk, the greater the expected value of a one-sided option.) Sharing in business risk must mean exposure to both profits and losses in order to be just and to provide proper incentives.

3.4.3.5 Some executives do possess a genius that should be paid a great deal in order to retain their services. A significant increase in profits after the appointment of a new chief executive officer (CEO), may not, however, be due to such genius. It may be that the previous incumbent was incompetent. It may

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be luck. Evidence strongly suggests that many directors are paid more than their market wage. Anecdotal evidence is sufficient to prove the point, and Crystal (1992) provides detailed accounts of a number of extreme cases. He describes some of the ways that chief executives are able to manipulate the reports of consultants, and to browbeat their fellow directors.

3.4.3.6 He also gives evidence that over-payment has increased over the past 30 years. The average remuneration package of CEOs in the U.S.A. has increased from 35 times the average wage in 1974 to 120 times in 1991. Comparative figures for the later date are 35 times in the U.K. and 20 times in Japan and Germany. It would be difficult to reconcile these figures with a free market in directors, as the supply of competent and educated people would appear to have increased; more probable is a growing ability to extract economic rents from shareholders.

3.4.3.7 Crystal believes that the loss to the shareholders is not limited to the direct costs, quoting Murphy of Capital Cities/ABC: "if the boss is chiselling, everyone else will feel they have a right to chisel."

3.4.3.8 Drucker (1985), the doyen of management consultants and long an opponent of excessive executive remuneration, suggests a limit of 25 to 1 on the ratio between the highest and the lowest wage within a company, with each person earning of the order of 40% more than their subordinates. His suggestions provide a rule of thumb for limiting remuneration when it is not governed by market considerations.

3.4.3.9 Trustees need to recognise that the interests of management are, in this respect, opposed to those of their beneficiaries, and that there are no just reasons why management should earn a monopoly rent.

3.4.4 *Trust law*

3.4.4.1 The common law of trusts also applies to directors; they have a fiduciary duty to shareholders. Berle & Means accept that "the common law has at its command tools adequate to meet the situation in sufficiently competent hands", but conclude that "the extreme expense and difficulty of litigation still leave the stockholder virtually helpless." They also suggest that passive shareholders have rendered themselves unworthy of the profits created by the active management of the corporation, and that these should accrue to the managements who create them. They, therefore, find trust law inadequate: neither practical nor just.

3.4.4.2 It is suggested, in the light of the previous section and the earlier discussions of justice, profit and conformity to the law, that they misunderstand the problem because of their inadequate view of profits. At stake, it appears, is the shareholders' share of the profits from innovation, because shareholders must deserve pure interest and a premium for the risks they bear, while neither they nor management can be said to deserve economic rents. The argument of Section 2.4.7 was that rewards for innovation were not rents, in that they provided incentives for creativity. These entrepreneurial profits partly derive from the

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structure of firms, created over time by managements who were paid for their labour. The structures are, therefore, part of the capital assets of the firm and belong to shareholders. Managements' just reward is the market price of their creative and administrative genius, as is the case with all employees. They have no greater moral entitlement to other elements of profit than the cleaners.

3.4.4.3 The reason advanced by Berle & Means for the practical failures of trust law also needs challenging. The law does frequently fail to redress injustices because of the expense and difficulties of litigation, but these are not obstacles to larger institutional investors. O'Barr & Conley (1992) put their finger on a more likely reason why the common law has not been more vigorously applied in the defence of shareholders' interests. They define the golden rule of pension fund investment: "Do unto other companies as you would have their pension funds do unto your company." Call it fellow feeling or class interest, or whether it stems from complicity in similar offences, idleness, ignorance or fear (especially of losing potential customers), trustees of institutional investors do appear reluctant to enter into litigation against the directors of companies. Bayne (1986) does give examples of where trust law has been used to force miscreant directors to disgorge their gains, but none appear to have been initiated by an institutional investor.

3.4.4.4 As argued above, it is not that the problem is seldom encountered. There are many examples of the unbridled looting of companies by management; Lowenstein (1988) provides a few more that are almost entertaining. The business press provides new illustrations frequently.

3.4.4.5 Where the investments in their care have been impaired, it is suggested here that trustees have an obligation to obtain legal counsel as to the possibility of recovery from the management concerned. To be realistic, fewer cases will be prosecuted than ought to be; much will depend on the determination of the people concerned to do justice.

3.4.4.6 More generally, trustees have the legal right as shareholders, and consequently the fiduciary obligation, to take possession of all the profits earned by the companies in which they invest. Those profits that arise from monopoly power are included; although unjustly earned, the proper response is to reduce prices and increase production, and not to pay management extra.

3.4.5 *The contractarian view*

3.4.5.1 Fama (1980) and others would rely less on trust law and more on the law of contract. Companies are seen as a complex set of contracts, explicit and implicit, between the various stakeholders. The profits of an enterprise are seen as not belonging to any of the stakeholders, and so may be appropriated by management as a reward for its co-ordinating role. Shareholders are seen to be entitled to a reasonable return in the same way that lower-ranked employees are entitled to a reasonable wage.

3.4.5.2 Kaufman, Zacharias & Karson (1995) ask, in the light of this theory, whether "investors need *ex ante* protection of their contractual rights by proper information or the *ex post* protection of fiduciary law?"

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3.4.5.3 It is not clear that this is a dilemma; investors ought to want both, and often can have both. Why should shareholders wish to enter into contracts with managements that free the managers from the constraints of trust law? To do so would mean that they would surrender a number of rights (such as those to information, and protection against conflicts of interest) that have been developed over centuries, arguably in such a way that they do not inhibit agents from fulfilling the ambitions of their principals. To do so would be incongruent with their own fiduciary role.

3.4.5.4 The fact that the provisions of the common law of trusts are not always enforced is evidence neither of its inefficiency nor of its lack of legal validity, just as the existence of theft does not prove the laws against it are inefficient or unjust. It does provide evidence of injustices, and the contractarian view, if used to undermine the provisions of the law, is a rationalisation of the illegal looting of shareholders' interests.

3.4.6 *Donations and corruption*

3.4.6.1 As argued earlier, economic rent is a legitimate target for taxation. Governments find it difficult to do so: because of the problems of isolating the rent; because they are often the source of the monopoly power that creates the rent, not least in the supply of arms; and because the revenues can be used to buy them off. There are few countries where this never happens, either through lobby groups, donations to political parties, or, more brazenly, to individuals.

3.4.6.2 Apart from the injustice in creating monopoly rents of this sort, it is unlikely that the overall interests of beneficiaries are served by preserving the economic rents in any one company in which they have invested. This is because their investment in any one company is likely to be a small proportion of their assets. It is suggested here, therefore, that trustees have a responsibility to oppose all lobbying and political donations by the companies in which they have shares. This will, however, be limited by fears that other companies will step in to the detriment of their beneficiaries. It calls, perhaps, for collective action by institutional investors.

3.4.6.3 There are many who oppose all donations by companies. Kaufman *et al.* note the long-standing concern that big business should not use its wealth to dominate other institutions. Drucker (1977), too, sees all 'social impacts' outside the 'mission' of the business as being socially undesirable. The argument is that managements have no proven ability and no brief to commit shareholders' resources to charitable projects.

3.4.6.4 It may be, however, that charitable donations or projects enhance the image of the company or contribute to a greater sense of solidarity amongst staff. Some balance is obviously acceptable.

3.4.7 *Complacency*

3.4.7.1 It is not only management's appropriation of the profits of the company that is at stake here. The failure of managers to achieve the best

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possible return can also be due to complacency and incompetence. As Charkham (1994) graphically puts it: "Across the bleak economic landscape have struggled in recent years the tattered remnants of once proud companies led towards defeat by a charismatic chairman cum chief executive with a weak board."

3.4.7.2 It is not merely particular companies, but whole industries, that have been shown to be complacent and inefficient when faced with new international competition. The shareholders, and their representatives on boards of directors, cannot escape being implicated. Charkham quotes Knowlton & Millstein (1987):

> "In their permissive and passive stance, most boards ... have a tendency —
> (1) not to appraise the performance of CEO's critically enough;
> (2) to overestimate the ability of managers to manage different kinds of businesses well;
> (3) to allow managers to build enterprises that are too large and diversified for anyone to manage well; and
> (4) to wait too long to respond to ongoing political, social and economic change."

3.4.7.3 Calpers (1995), the Californian public pension system, has been prominent as a vocal shareholder. Although its portfolios are indexed, it takes an active interest in companies it feels are poorly managed, and reports significant improvements in management, and dramatic increases in share prices as a result.

3.4.7.4 Lowenstein (1991) also argues for, and provides some evidence for the success of, relationship investment, which describes investors who concentrate on shares in a relatively few companies which they thoroughly understand and to which they can contribute by monitoring management. Pound (1993) refers to an unpublished report that has investigated Lowerstein's ideas of relationship investment and found that it can add value but does so "less often than investments that are not fully friendly and negotiated."

3.4.7.5 There is, therefore, evidence that shareholders can play a role in reducing managerial complacency.

3.4.8 *Mergers and takeovers*

3.4.8.1 It has been suggested that the risk of takeover provides a sufficient restraint on managements. Like litigation, however, mergers and takeovers are expensive and difficult. They have also provoked extensive criticism.

3.4.8.2 Firstly, Kaufman *et al.* say that their survey of the "research showed unambiguously that managers typically acquired firms and fended off hostile takeovers in order to promote their own careers." As Berle & Means suggest, those interested in the motives of the CEO's of large corporations may learn more by "studying the motives of an Alexander the Great, seeking new worlds to conquer, than by considering the motives of a petty tradesman of the days of Adam Smith." The takeover panders too much to ambition to be an effective disciplinary tool.

3.4.8.3 Secondly, Charkham points to their considerable internal costs when he says that: "to require a takeover to change a CEO is like needing a revolution or foreign conquest to change a government." Both the human costs and the

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disruption to the productive capacity of the affected organisations need to be considered. The latter cost may explain part of the apparent failure of most mergers and takeovers to improve profitability.

3.4.8.4 Lowenstein (1991) supplies a third criticism: "A company will be better managed, and its workers and suppliers will be more motivated and loyal, if the major shareholders know something about the company and share some measure of that loyalty." Seabright (1993) writes of loyalty as another social virtue that supports collective action. It is equivalent, in this context, to a recognition of implicit contracts between the shareholders and the other stakeholders of the firm. Selling control to a disreputable shareholder who will break these contracts is, he argues, 'itself a disreputable act' and an unjust one; the risk of this occurring undermines the value that might otherwise be gained from collaboration, in particular training of employees in firm-specific skills.

3.4.8.5 These views offer a counter to the idea that the fiduciary duty is always to accept what appears to be a good price for shares in a company targeted for takeover. Of course, the other counter is to argue that there is little evidence that markets are imperfect; the shares must be worth the price offered, and so there is no reason to sell.

3.4.8.6 The fourth critique has policy implications. Loescher (1984) believes that: "the strongest case to be made for decentralized private enterprise stems from its tendency to enrich diversity by experimentation, as decision makers possessing different perceptions of alternative outcomes enlarge the portfolio of explorations... Through such diversity society increases the chances that its best bets will be both uncovered and acted upon." Mergers and takeovers always reduce this diversity, and so can be argued to be socially undesirable, even when they are not aimed at the creation of monopoly rents.

3.4.8.7 Loescher suggests legal changes that require bidding company shareholders to approve takeovers in the U.S.A. This certainly would be appropriate if the size of the takeover is significant; shareholders should, in any event, want public companies to include such provisions in their articles.

3.4.8.8 Trustees should not always oppose mergers and acquisitions, but it is suggested that instructions to investment managers should be to question the economic rationale deeply, and to vote against proposals if in any doubt that the benefits of the proposed transaction will be material.

3.4.9 *Dividends*

3.4.9.1 Lowenstein (1991) devotes much space to a criticism of the Miller & Modigliani (1961) dividend irrelevance proposition that investors do not mind whether they are paid dividends or not. As long as the market is efficient and the company earns an acceptable return on its assets, they argue that investors can always sell their shares if they need cash. Lowenstein, on the other hand, believes that shareholders want larger dividends, because they base their lifestyles on the income they receive.

3.4.9.2 The needs of institutional investors are not the same as individuals,

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but bigger dividends would enhance their liquidity and reduce their exposure to market risk. The institutions would be subject to a reinvestment risk, but their reinvestment options are essentially the same as any company's management. The investors would, however, have the freedom to make decisions that best fitted their liability profiles rather than be forced to accept the decision of the management.

3.4.9.3 The accumulated evidence discussed by Kaufman *et al.* is against greater retentions. Company managements tend to retain more of their earnings than required to expand their businesses, and the cash so accumulated tends to 'burn a hole' in the corporate pocket. It is then spent on less than economic projects, greater executive remuneration or unnecessary takeovers.

3.4.9.4 Lower dividends may be desirable for tax reasons or if the company is expanding internally and the costs of raising new funds are significant. The suggestion, in this paper, is that trustees should, in other cases, encourage the payment of greater dividends. It is also suggested that it would be justifiable to lobby against tax rules that discourage the payment of dividends; they flagrantly favour the vested interests of established companies and managements by making it more difficult for newer companies to raise capital.

3.4.10 *Collective action*

3.4.10.1 One reason for the problems discussed in this section is the collective action problem; costs of shareholder intervention are high, and the likelihood of success low. Ostrom (1991) has developed a list of prerequisites for successful collective action in the face of this problem. She suggests:

— there must be a common judgement as to the harm;
— it should affect all the parties that can act;
— parties should take a long-term view;
— there should be low information, transformation and enforcement costs;
— norms should be shared and there should be mutual trust; and
— the targeted group should be small and stable.

3.4.10.2 Institutional investors probably satisfy most of these requirements, especially as there seems to be a growing agreement as to the harm caused. Institutional investors are frequently organised in industry groups that undertake collective action in a number of spheres. This also takes the form of lobbying on various issues, and has, in places, taken the form of action on corporate governance. Coffee (1991) points out that this collective action has, however, been "characterised by a short term focus on crises, free riding and inevitable managerial manipulation".

3.4.10.3 The issue has also been controversial, predictably so as it addresses injustices. The Harvard Business Review (1991) published an agreed statement by some of the protagonists in the debate as to what they saw as the rights and responsibilities of boards and shareholders. They agreed that:

— institutional investors should see themselves as owners, not just investors;

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— they should not be involved in day-to-day operations of companies;
— they should evaluate the performance of directors;
— the should be informed about the directors and the business of the company; and
— the common goal of both would be the prosperity of the company.

3.4.10.4 The question arises as to how this agreement might be implemented. The answer appears to be in a growing focus by trustees, directors and policymakers on appropriate corporate governance.

3.4.11 *Corporate governance*

3.4.11.1 Monks & minow (19950 define corporate governance as "the relationship between the tripod of shareholders, the board and the management in determining the direction and performance of organizations." More simply, it is the management of management and involves the appointment, monitoring and remuneration of the board of directors.

3.4.11.2 Monks & Minow, Kaufman *et al.* and Charkham each deal with the issues in some depth, the latter including a description of international practice and a copy of the British Cadbury Code of Best Practice.

3.4.11.3 A number of other codes and recommendations are mentioned in these books. Sections 3.4.12 to 3.4.14 look at some common themes. The codes are normally the result of compromise; they may not have adequately balanced the interests of shareholders with those of the directors and others sharing similar class interests.

3.4.12 *Appointment*

3.4.12.1 Proper procedures ought to cover the method of appointment of, and the functions to be allocated to, different members of the board.

3.4.12.2 Directors have a fiduciary duty to all shareholders regardless of to whom they owe their appointment, but the structures of election procedures may constrain them. Those that do not promote the interests of the shareholders who appointed them (often the largest shareholder) may find themselves replaced. This is why all shares should have equal weight, and provides a case for the proportional representation of minority shareholders. The former is widely accepted, the latter is not. Branson (1993) says that some dozen American states allow for minority representation in the form of a cumulative voting system. He refers to evidence that share prices are negatively affected by the removal of such minority representation.

3.4.12.3 Institutional investors are normally minority shareholders, and so have an interest in minority representation. They will, however, have to act collectively to take on controlling shareholders who are unlikely to voluntarily relinquish absolute control.

3.4.12.4 Employees are also represented on boards in continental Europe. This can be justified, not only as breaking a class monopoly, but opens additional

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channels of communication with employees and can also help them protect their interests to the extent that they are exposed to business risks. As continental pensions are often funded from the company's balance sheet, these risks are even higher on the continent than elsewhere in the world.

3.4.12.5 An anonymous (1982) comment in the University of Pennsylvania Law Review also suggests that union directors might have additional information to offer other directors, and perhaps more time than other outside directors to contribute. Williamson's (1984) response to the comment worries about the appointment of union directors "deflecting strategic decision makers from their main purposes ... by forcing them to address operating level complaints..." and "...more serious the problem of opportunism that inclusion of partisan constituencies on the board invites." He suggests that "irredeemable conflicts of interest" will arise.

3.4.12.6 Conflicts of interest of this sort arise whenever directors are appointed by constituencies whose financial interests are at odds with some shareholders. This, however, applies to representatives of shareholders, management and labour, as well as other 'related parties', including auditors and legal advisors. The ultimate protection is the common law of trusts, but all codes of corporate governance also encourage the appointment of non-executive directors with no such conflicts. Most also suggest that the chair should be non-executive, as it is inordinately difficult for a board to evaluate impartially and critically the performance of its chair.

3.4.12.7 Charkham in the U.K., and Gilson & Kraakman (1991) in the U.S.A. suggest that there is a need for 'a core of professional directors' with the necessary skills and independence to function as independent directors. In their absence, it is necessary to recruit suitable retired people, foreigners, academics and others with some spare time.

3.4.12.8 The codes normally suggest that the responsibility to find suitable directors be given to a nomination committee of the board, which should itself be made up of non-executive directors.

3.4.12.9 The final point raised in connection with the appointment of executive directors is that their contracts should not be of inordinate length, nor provide for excessively generous termination compensation or golden parachutes. The Cadbury Code suggests three years as a limit, unless approved by shareholders directly. It is, however, far from clear why an executive director should be treated any differently from other employees, or contractors, in this respect.

3.4.13 *Monitoring*

3.4.13.1 Boards need to evaluate the performance of the company and that of the executive directors, especially the chief executive.

3.4.13.2 Kaufman *et al.* record that the compulsory external audit was a corporate governance innovation brought about in response to management excesses in the 1920s. The codes normally make suggestions for strengthening

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the outside audit, and for the appointment of an audit committee to which the auditors should report.

3.4.13.3 Drucker (1991) suggests that institutional investors, especially if they cannot easily sell their shares, need an institutional structure to supervise management. He suggests an outside business audit covering the company's:

— mission and strategies;
— marketing;
— innovation;
— productivity;
— people development;
— community relations; and
— profitability.

Even if this is not made compulsory, shareholders might take more action in setting standards for what ought to be included in companies' annual reports.

3.4.13.4 The evaluation of the chief executive cannot, however, be a public event. Monks & Minow (1995) report one suggestion that each director should first make an individual assessment of the chief executive's performance against previously agreed standards. The results should then be synthesised and fed back in a confidential manner by the non-executive chair. The chief executive should then be allowed to respond to any criticisms in a suitable way. Needed is both a just process and a just outcome.

3.4.14 *Remuneration*

3.4.14.1 The codes all recommend that executives' pay should be set by a remuneration committee made up of outside directors.

3.4.14.2 Crystal's experience as a compensation consultant and journalist who now works for shareholders, because of his concern over 'the excesses of American overcompensation', put him in a position to make suggestions. He proposes that the remuneration committee should have direct access to a compensation consultant who should attend all their meetings and give a written report annually. The report should include the level of remuneration, its sensitivity to profit changes, and comparisons within and outside the company. The consultant's name should be reported in the annual report. If a consultant is fired, this too must be noted, and the fired consultant should be given the right to report the reasons to shareholders.

3.4.14.3 It is also normally suggested that top executives' salaries should be reported individually, with details of bonuses and perks. Monks & Minow note that an appropriate value of stock options should be, but are not normally, given, and quote an analyst as saying that three large U.S. corporations would see earnings drop by up to 10% if the value of options was deducted from profits.

3.4.14.4 Crystal suggests that outside directors should be paid the median for comparable companies.

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3.4.15 *Politics*

3.4.15.1 Pound (1993) develops the case for 'informal, political mechanisms', which fulfil the need to be "flexible, less disruptive (than takeovers) and ... politically sustainable". Political sustainability is important; he points to government action against voting trusts (which were a form of collective shareholder action) in the nineteenth century, because of fears that they would become too powerful.

3.4.15.2 He suggests that the political process, with its parties, lobbies, and gradations of discipline against misbehaviour, could function as well in business as in government. Ultimately, his call is for a "renewed tolerance for insurgency in the corporate sector ... because ... insurgency, contention and debate are fundamental to effective corporate governance."

3.4.15.3 This approach has much to recommend it, but Pound (1995) goes on to propose a model he calls the 'governed corporation', where outside directors take an active role (at least 24 days a year), particularly in strategy formulation. He proposes that they be remunerated by some form of profit share. It is suggested here that this latter proposal (whatever its other merits) does not address the main issue of corporate governance: the need to ensure that those that manage the corporation are controlled; and that profits are justly allocated.

3.4.15.4 Trustees will face contention when they enter the field of corporate governance. They will unearth numerous conflicts of interest. Fund managers will not want to cross company clients, an especial problem where the managers are related to banks and insurers; universities and foundations may not want to displease major donors; fellow trustees may have interlocking directorships.

3.4.15.5 These conflicts are unavoidable; no system will avoid their necessity. As Eliot (1934) observed:

> "Why should men love the Church? Why should they love her laws? ...
> She tells them of Evil and Sin, and other unpleasant facts.
> They constantly try to escape
> From the darkness without and within
> By dreaming of systems so perfect that no one will need to be good."

3.5 *The Red or Socialist Critique*

3.5.1 Socialists are often guilty of such dreaming, but their indignation at greed and injustice is often justified. (It would be appropriate, however, to sound Polanyi's (1958) warning against the 'magic of Marxism': that Marxists lose their intellectual defence against tyranny if they pretend to themselves that their indignation is based on a science of economics and not on justice.)

3.5.2 The socialist critique is particularly concerned about inequalities, both of money and status, and with the needy. There is often a focus on unemployment. Bruyn (1987), in a discussion of socially desirable investment from a respectable left wing perspective, regards the effects of large scale shutdowns on unemployment as sufficient cause to abolish the entire capitalist

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system. Naive though such suggestions may be, they can be felt tso fiercely that they ought not to be ignored.

3.5.3 Justice is concerned about the poor, and trustees need to consider accusations that they, or the companies they own, are responsible for harm to the needy. This section considers the responses that trustees might make to the problems of particular importance to the left.

3.5.4 *Corporate governance and class interests*

3.5.4.1 The red critique is not unconscious of the role of class interests in the corporate governance debate. O'Barr & Conley's (1992) golden rule can be seen to be sinister; part of an implicit conspiracy by the ruling class to entrench its power. Mandel (1962) fulminates against the "'great families', who remain supreme at the summit", and it could be argued that a wider class of professionals and graduates, from the better universities, has been co-opted to keep a closed grip on economic power in most countries.

3.5.4.2 Trustees who allow miscreant managements to extract significant rents from the companies in which they invest are ignorant, or shirking work that they are legally obliged to perform, or effectively conspiring to raise the overall level of directors' renumeration in the hope they will be paid more themselves. The last is a serious offence, but justice presumes innocence until proved otherwise, and the burden of proof is on the accusers. Those who wish to make specific accusations ought to bring them to court or be proved, themselves, to be frivolous or confused.

3.5.4.3 Absence of such proof does not, however, prove that this problem does not exist. Allowing for union appointed directors is a response, although even this could be regarded as, or turn into, further co-option. It does appear to work in some European countries, and seems an approach worth pursuing.

3.5.5 *Entrepreneurial rules of the game*

3.5.5.1 Baumol (1993) explores the differences between profit seeking activities that are genuinely entrepreneurial (that is are creative) and those that largely involve rent seeking. "If entrepreneurs are defined, simply, as persons who are ingenious and creative in finding ways to add to their wealth, power, and prestige, then it is to be expected that not all of them will be overly concerned with whether an activity that achieves these goals adds much or little to the social product or, for that matter, even whether it is an actual impediment to production."

3.5.5.2 On the basis of some historical data, he goes on to make three propositions which on his numbering are:

> "Proposition 2.1: The rules of the game that determine relative payoffs of different entrepreneurial activities do change dramatically from one time and place to another.
> Proposition 2.2: Entrepreneurial behaviour changes direction from one economy to another in a manner that corresponds to the variations in the rules of the game. (e.g. In ancient Rome, wealth from land, lending or political office was valued and yielded more than income from industry or commerce.

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> Proposition 2.3: The allocation of entrepreneurship between productive and unproductive activities, though by no means the only pertinent influence, can have a profound effect on the innovativeness of the economy and the degree of dissemination of its technological discoveries."

3.5.5.3 Trustees of institutional investors are not in control of the rules of the game that determine profitability, but they have a direct responsibility in determining the power and prestige given to directors and managements. The power to appoint the boards lies largely with trustees, and the function of these boards is to judge management against previously agreed objectives.

3.5.5.4 It is suggested, firstly, that directors should be required, in setting directions, to make a distinction between the creative and the rent seeking. The former is worthy of praise, the latter is degenerate and reprehensible. Some obvious points of difference are set out in Table 2.

Table 2. Differences in objectives and behaviour

	Monopolist	Entrepreneur
Objectives	Market share	New markets
	Cost savings	Efficiency
Behaviour	Lobbying	Research
	Restrictive practices	Innovation

While both monopolist and entrepreneur seek to maximise profits, the objectives and behaviour of both will reflect different emphases.

3.5.5.5 This is not to hold that cost savings or market share are unimportant, but rather that efficiency and turnover reflect greater aspirations, both for the financial success of the firm and the prosperity of all. Arguments against lobbying and restrictive behaviour are more difficult to sustain, in that trustees who, collectively, opposed such behaviour would expose their beneficiaries to exploitation by free riders who practised the restrictive behaviours. The same problem has been addressed in Section 3.4.6, without suggesting government intervention, which suggestion might, however, be made from within the red critique.

3.5.5.6 Lobbying is clearly political. In a vigorous attack on rent seeking behaviour, Tullock (1993) reports on studies that indicate a relatively small effect in the U.S.A., but that it reduces economic activity by over a third in developing countries (or rather those that have failed to develop). All suggestions to combat rent seeking eventually reduce to finding a sufficiently widespread agreement that it is unproductive, so that legislatures will not listen, and those that do try to lobby are somehow disciplined. Ostrom's (1991) requirements for successful collective action, mentioned in Section 3.4.10, are again relevant. It is possible that the group of investors and legislators necessary to enforce such disciplines is

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sufficiently small and stable, and can develop the foresight to make collective action possible.

3.5.5.7 Government intervention in preventing restrictive and monopolistic practices is more controversial as it must (from Table 1) be traded off against liberty. Different approaches will be acceptable in different environments. As a minimum standard, it should be clear that monopolistic behaviour is unjust, and that lobbying can only be justified when undertaken as a defence against other lobbying and aggressive free riding.

3.5.6 *Job creation*

3.5.6.1 An economic explanation of unemployment is that it derives from the inflexibility of labour markets; employers are not prepared to offer employment, or the unemployed are not prepared to accept jobs at the prevailing wage levels. The argument often polarises along class lines, with unions being blamed for insisting on wages too high to be economic, and employers criticised for offering wages too low to be worthwhile.

3.5.6.2 A more sociological approach would be to speak of institutional failure based, perhaps, on a rejection of the term 'labour market' as reducing people to the level of commodities. This approach also becomes polarised in blaming one or other structure as the creature of the opposing class. Both approaches are consistent with the idea that unemployment reflects a widespread inability to respond sufficiently rapidly to economic, technical or demographic changes.

3.5.6.3 The polarisation suggests that feelings of injustice run high. This does not imply that change necessarily brings injustice, but may mean that previously acceptable agreements need renegotiation. The legitimate concerns of both sides need to be satisfied. If there is a need for people to accept new jobs, lower pay or lower rates of profit, it must be in a venture where everyone's shares are seen to be under investigation, and the interests of all are considered. The process of achieving this must also be seen to be fair, which, incidentally, provides an additional justification for appropriate corporate governance.

3.5.6.4 Institutional or market failures occur because individuals, and consequently groups and organisations, fail to respond appropriately to new circumstances. The failure may be ascribable to incompetence (which may or may not be blameworthy), malice or inertia. Trustees, in their own capacity and as overseers of company managements, may also be guilty.

3.5.6.5 The existence of unemployed individuals is not only a social tragedy, but a business opportunity. Unused labour is an unutilised resource, and provides potential for profit. The elimination of unemployment will need people who grasp this opportunity; trustees can perhaps contribute by raising aspirations. It is urged, in the name of humanity and profitability, that boards should make job creation one of the objectives against which management will be measured.

3.5.7 *Small businesses*

3.5.7.1 Frequently laid as a charge against institutional investors is their

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failure to invest in small businesses. The response of investment managers is that it is relatively less efficient to carefully investigate the investment merits of a smaller investment than a large. This must, however, be balanced against the potential for higher earnings.

3.5.7.2 The real question is whether investment managers continually make this calculation, or whether their failure to do so is another example of Simon's (1983) satisficing. Trustees ought to inquire.

3.5.8 *Training and affirmative action*

3.5.8.1 Polachek & Siebert (1995) provide a recent overview of human capital theory, which provides an empirically verified basis for the widespread belief that education is a good investment.

3.5.8.2 Both employers and employees have an interest in greater productivity, and can adapt the employment contract to share the costs and benefits of training equitably. (This can take the form of reductions in wages during periods of training, or of suitably designed retrenchment packages, and early leaver penalties in retirement fund benefits.) Firm-specific training provides greater challenges, because both parties must want to continue to work together in order to enjoy the full fruits of the investment. The firm that wishes to make full use of investment opportunities in human capital needs the commitment of its employees. This, again, requires a just balance of interests between all the stakeholders, and provides another reason for remonstrating against disloyalty to employees, as in Sections 2.4.6 and 3.4.8.

3.5.8.3 The development of people is, therefore, not just a socially desirable activity, but an essential part of a firm's economic function. The returns to education appear to be higher for earlier years of education. This provides a justification for affirmative action if it means giving additional training to those who have received an incomplete education. It should be distinguished from calls for companies to make good more general injustices in society. If legislatively required, this presents no problem; the laws ought to be obeyed. If not required by law, then it should be seen as a type of donation, subject to the considerations mentioned in Section 3.4.6.

3.5.8.4 Again, the successful training and retention of staff is an objective against which management's success should be measured.

3.5.9 *Employee share ownership plans*

3.5.9.1 Estrin (1989) makes a strong case for employee share ownership plans (ESOPs): "...the fragments of evidence so far accumulated suggest that increased employee participation in profits, in shares or in decision making, is often associated with improved industrial relations, organisational efficiency, factor productivity and profitability." (They are also discussed in Kaufman *et al.*, 1995).

3.5.9.2 It is suggested that the analysis of profit developed earlier highlights why ESOPs are not, and need not be, more widely embraced. The employees have a justifiable interest in that part of the profit attributable to the risks that

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they bear, the innovations that they contribute and in monopsony rents extracted from them in the form of low wages. These should, however, be paid to them as higher wages and should not be shared with shareholders. (They may also demand a share of monopoly rents unjustly extracted from customers, but they are no more justly entitled to this than the shareholders.)

3.5.9.3 Employees do not, however, have a just interest in that part of the profit due to pure interest, nor the business risk accepted by the shareholders, nor from innovation resulting from institutional structures. They may also be wise not to accept any additional business risks, correlated as these risks are with the employment risks they are already exposed to. (Limitations on the self investment of retirement funds are analogous, and are usually justified financially.)

3.5.9.4 It seems that advocates of ESOPs fall into two main categories. The first belive that people work better only when given economic incentives; the second that the rent portion of profits is high and worth fighting for. The first view is partly true, but appropriate incentive packages should exclude sources of profit not under the control of the employees concerned, which ESOPs fail to do. The second view is degenerate and reprehensible; prices should rather be reduced.

3.5.9.5 Weitzman (1989) suggests that profit sharing arrangements will also contribute to wage flexibility (the profit part can drop), and thereby to greater employment. His proposal is based on the idea that many industries are naturally monopolistic because of infinitely reducing returns to scale; only large companies can compete. His proposed reduction in the cost of labour would lead to greater employment and increased production, but could also lead to lower overall wage income and increased monopoly profits. His is, therefore, not necessarily a just solution. Monopoly profits that arise from returns to scale are unjust, and legitimate targets for taxation, policies that may introduce foreign competition, or regulation. Just and prudent shareholders and managements would reduce prices and expand production.

3.5.9.6 ESOPs, therefore, earn a greater share of profits for employees only by exposing them to the full range of business risks. It is suggested that they offer little value to any party.

3.5.10 *Easy externalities*

3.5.10.1 Leeman (1982) proposes that socially desirable institutional investment should aim at positive externalities. He considers job creation and housing particularly, and suggests that investors should accept lower returns if the useful externalities are high.

3.5.10.2 If such externalities involve an insignificant cost, then investors should clearly try to provide them. The argument is, however, that of easy rescue, of which it was suggested, in Section 2.2.3, that it required a greater virtue than justice, and could not be legislated. If those who would benefit from the externalities are related to the beneficiaries of the institution, then the arguments used against usury would apply.

3.5.10.3 If those who might benefit are more distant and the costs significant,

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then such actions would need to be considered as a donation, as discussed on Section 3.4.6.

3.6 *The Green or Environmental Critique*

3.6.1 The green critique decries the despoliation of the environment and the exhaustion of non-renewable natural resources. Alternatively put, it argues that companies sometimes unjustly expropriate the economic rent of natural resources which belongs to all, including future generations.

3.6.2 *Non-renewable resources*

3.6.2.1 The green critique will coincide with the blue if the capitalised value of the rents deriving from non-renewable resources are not recorded in the accounts of companies. The discovery of a rich oil field, for example, is a natural rent, capital profit for the exploring firm. Shareholders, existing and potential, would be better able to evaluate the value of the firm of the extent of the rents were disclosed. The interests of shareholders and society coincide once the field has been found; to maximise the value of oil extracted.

3.6.2.2 The right to exploit newly discovered natural resources can represent a distributional problem, as some people (perhaps with the right connections) may exclusively enjoy a natural windfall. It can be solved by allocating rights to prospect for natural resources to state owned firms or by auctioning the rights if it is felt the market will function efficiently. What is clear is that the basis of the taxation of the prospecting profits should be agreed in advance if it is to be just.

3.6.2.3 More of a problem is whether non-renewable natural resources are correctly priced. The market would allocate proper prices if participants were able to predict future supply and demand, and were to face the same cost of capital as society as a whole. The green critique appears, partly, to be based on a feeling that the resource companies are myopic. If correct, this provides possibilities for profit. It may transpire that our generation has dissipated the world's natural resources and condemned future generations to considerably lower standards of living. One of the reasons will be that those with the foresight did not have the courage of their convictions to buy up resources for later use. This means that it is not a collective action problem.

3.6.2.4 The problem is, however, obviously a once-off question of the type considered in Section 3.3.4, that will not necessarily be solved by the market. It calls for detailed multi-disciplinary teamwork. Trustees of larger institutional investors should consider investment in non-renewable resources as a possible source of profit and a social contribution to the unborn.

3.6.3 *Pollution*

3.6.3.1 The other thrust of the green critique covers the externalities that the activities of a firm may visit on the rest of society. Environmental pollution is the main issue.

3.6.3.2 Pollution is unjust if it leads to self enrichment at the expense of

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one's fellows, as is the case with monopoly rent. The problem is considerably more complex if there is no self enrichment. Coase (1960) warns against the inconsistencies in the idea that governments should impose fines on environmental offenders. Greater overall welfare may be achieved if the polluter were to reimburse those that suffer. He suggests that the problem should, therefore, be met by extending property rights so that victims can claim in court.

3.6.3.3 Legal developments have tended to move in this direction, and the lesson of the past half century is that claims for damages (to health principally) can arise after a considerable time. The changes in the legal system that have allowed such claims — although they reflect a type of *ex post* contractual adjustment — provide an example of how such adjustments may be seen as being just.

3.6.3.4 Shareholders certainly have a vital interest in ensuring that proper account is taken of environmental damage, particularly that for which claims may be made in future. Such information should be included in a business audit.

3.7 *The Purple or Moral Critique*

3.7.1 There may be some business activities that are morally abhorrent to a majority of the beneficiaries of a fund: prostitution; and the manufacture and distribution of certain drugs and arms provide obvious examples. This section is classified as purple, partly to suggest a combination of the other colours, and partly because of its moral and ecclesiastical usages.

3.7.2 A detailed examination of what should be morally acceptable is beyond the scope of this paper, which will merely support Day & Jamieson's (1975) fourth objective, and suggest that the moral sensibilities of the beneficiaries should be considered. This will not impair the returns of those institutional investors that choose to avoid morally suspect investments if they are insignificant participants in the investment markets and the markets are perfectly competitive.

3.7.3 If, however, a sufficiently large number of investors take the same view, then the returns to investment in these immoral activities will be higher than those for morally acceptable investments. One interpretation of the fiduciary responsibilities of trustees, as suggested by the British courts (Cowan and others v Scargill and others [1984] 2 All ER 750), would be that they should restrict themselves to pursuing the financial interests of the beneficiaries. This would mean that they should take advantage of higher returns offered by companies engaged in immoral activities. The court was, in this case, however, reviewing an extensive set of restrictions on the fund's investment that was largely politically, and not morally, inspired. It is suggested here that it would be monstrous to compel trustees to indulge in moral arbitrage to take advantage of the moral qualms of other investors unless the beneficiaries can be shown not to share those qualms.

3.7.4 Fiduciary responsibility to look after the interests of beneficiaries should then include a view as to their moral sensibilities. This is especially

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necessary when the market appears to support such views, as it does when returns appear higher than average on morally suspect assets. Some assets may, therefore, be justly avoided on moral grounds.

4. Conclusion

4.1 Trustees have wide ranging responsibilities in overseeing the investment of the assets under their control. They may find the tasks somewhat daunting. In bounded rationality terms, the purpose of this paper is to throw more light onto the issues and raise aspirations. Trustees can do more; every little bit may help.

4.2 A commitment to fulfilling fiduciary responsibilities justly, intelligently and energetically is required. It requires persistence and not a little courage, for it will inevitably involve some confrontation. Is it worth it? To do justice will mean balancing the costs with the benefits: personal and societal.

4.3 What will they say, or whisper, at your funeral?

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(This should not suggest that anyone mentioned agrees with me.)

Epilogue

E.1 My experience is that Christians in a pluralist, or post-Christian, society battle to reconcile the doctrines of their faith with the assumptions and behaviour of their colleagues. A particular problem is the extent to which others can be required to behave ethically without infringing their rights or dignity. I have certainly battled in business, an academia and in voluntary organisations, and this paper is the outcome.

E.2 It would be inappropriate to rely on Biblical texts as proofs, but those familiar with the scriptures will hopefully see the parallels. Simon's bounded rationality is a modern exposition of St John's: "if we say we have no sin we deceive ourselves ...", while the issues of collective action, job creation and

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training are intimately linked to questions of how we love our neighbour. Fiduciary responsibility — stewardship — is also affirmed by Him, who Bayne (1986) calls the 'Chancellor of Galilee', and St Paul underlines it: "It is required of stewards that they be found trustworthy" (1 Corinthians 4:2).

E.3 I would also like to make some additional comments on a Christian view of justice. Firstly, justice is a minimum standard which is fulfilled and surpassed by the law of love: 'the fulfilment of the law.' (Romans 13:10). Christians will seek to give more, even in their commercial relationships, than that required by strict justice. (This should make them excellent people to do business with ...)

E.4 Secondly, justice is, etymologically in both the original languages of the scriptures, linked to righteousness. The good news that our righteousness is the gift of God in Christ (Romans 4:3 ff) is, therefore, directly relevant to the questions raised in this paper. Doing justice is part of the calling that we have, and in the economy of God there is both the power to do it when we choose, and forgiveness when we fail.

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ABSTRACT OF THE DISCUSSION

The President (Mr P. H. Grace, F.F.A.): I welcome a number of visitors and guests, in particular Professor Gavin Burnett, Chairman of the Church of Scotland Investors Trust, and the Reverend Dr Hugh Ormiston, Industrial Chaplain Organiser to the Church of Scotland, and Editor of the *Finance and Ethics Quarterly*.

Professor A. Asher, F.I.A. (introducing the paper): I feel that I am bringing coals to Newcastle. This is the home of Adam Smith; David Hume, in his rather odd costume, sits across the road. Economics, philosophy and values were discussed before most of South Africa was discovered.

What I have tried to do in this paper — which is still work-in-progress — is to try and provide a framework for values. We all have values. We expect others to share our values, but so often it is done implicitly. This is a problem, not only in the investment area, but also in our professional area. One of the problems of self-regulation is the question of what values we share.

The paper was presented at the convention of the Actuarial Society of South Africa in 1997. The opener then commented on my use of the word 'should'. My paper was preceded by another on valuation, and I did a count of the word 'should'. In 15 pages the authors used the words 'should' more often than I had used it in 45 pages. Even in valuations we discuss values — we *should* be solvent, we *should* be prudent, we *should* be realistic.

It seems to me, after looking at what others have written on this matter, that the foundation for social ethics is the virtue of justice. One can define justice as the virtue that governs power. When we have power, either allocated through democracy or in any arbitrary fashion, we ought to be constrained by justice in the exercise of this power. Justice involves, among other things — and it is a complicated virtue — valuing others, recognising the dignity of others, and, in particular, the principles of equality, liberty and just desert. It is from this perspective that Table 1 looks at profits and tries to come to the conclusion that one of the big issues of economic justice is the question of monopoly profits.

As such, I find myself in disagreement with what was the Catholic position (the Thomist position of the labour theory of value, which was subsequently taken up by Marx) that all profits are wrong. The table is there really to try to justify why some profits can be quite acceptable, even a good thing, while other profits are bad.

The other element of justice, I would raise, is that it requires balance. This is the picture of justice that we have, with her scales in one hand. As such, justice is part of our intellectual maturity; balancing different values and objectives.

Some people find it difficult to accept that we can have common values. Most people, however, will agree that we can. If it were not so, one could not be able to say, for instance, that we should maximise profits, because that, too, is a value. We, also, would not have been able to say that *apartheid* was wrong.

It may be that, in a society such as your own, where there is much consensus and comfort, that the values about which politicians and others argue appear to be unimportant. You are lucky! In a society where—as in South Africa—there are considerable differences in wealth, and a great deal of unhappiness about both the past and the present, discussion on justice becomes very animated and is felt deeply. It also seems to lead to crime and violence.

Coming back to the question of investment, justice applies because trustees are given power to make investments. I want to raise two issues:

(1) I think that, with the power to choose investments, particularly equities, it is important that trustees utilise a fundamental analysis that is forward looking and that takes account of all the available information. I am concerned about the focus on technical analysis, that looks historically at price and very little else. However much more sophisticated than the head and shoulders that technical analysis used to mean, modern financial economics is at risk of focusing too much on historical price information. It is ironic that I sit in the university common room between the historians and the applied mathematicians. The historians are losing students

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because no one believes that the past is relevant to the future. The applied mathematicians are gaining students because they are using historical information to predict the future.

(2) This issue is what I call managing and managers: voting shares; being concerned about mergers; corporate governance; the remuneration of senior managers and directors. An important part is what Baumol (1993) called 'the rules of the game'. He implies that we should be aiming, as a society, to commend the productive maximisation of profits, and be less enthusiastic about the maximisation of monopoly profits.

Being ethical may be in your interests or not. I can boast that the Community Growth Fund, which is the socially desirable unit trust with which I am involved, was the top performing unit trust in the South African market in 1997. It can work, but it does not necessarily do so. In 1996 it was the worst performing unit trust.

Doing good has its own value. You can look at yourself in the morning, and it is possible to relate to others with genuine fellowship.

Mr J. Hastings, F.F.A. (opening the discussion): The paper that we have before us considers institutional investment, principally in the context of ethical stewardship. Although entitled 'Effective and Ethical Institutional Investment', I feel that the main concern of the paper lies in the area of ethics, rather than providing particular insight into effective investment management from a performance viewpoint. However, this former topic is a less well trod path, and so the paper is welcome for providing us with some new avenues to consider. The author suggests that the subject is far from a solely actuarial one, and his paper covers many diverse subjects.

It might be worth considering, at this stage, how we arrived at the current position regarding stewardship. As companies have grown, so their ownership has become more widely dispersed, and the close connection between principal owners and their business managers (or stewards) has become detached, with power increasingly being invested in the management. With increasing globalisation of business, this position is becoming even more extreme. Some balance is required within the system to ensure the accountability of this new corporate aristocracy. Whether or not this will lead to an improvement in investment returns delivered by institutional managers, however, is debatable.

Section 2 begins by summarising investment objectives, and the author introduces early on the concept of 'bounded rationality', which is what I would call being 'good enough'. The author appears to imply a current criticism of investment managers here. I suspect, however, that I would be described as a 'satisficer', but I think that there is merit in not being too demanding. I would caution with two thoughts: first, that the best is often the enemy of the good; and second, Hutber's law, that 'improvement means deterioration'. For the actuarial profession, I believe that this means that we should certainly study the vanguard, but we have to continue to monitor the regiment of investment managers.

When the author introduces the subject of justice, we begin to get into a difficult area. People will inevitably position themselves along a broad spectrum when aligning their views on what is just. I believe that this is another subject which, having developed out of community roots, has become more difficult to maintain as a simple concept. Oscar Hammerstein may have written: "Territory folk should stick together", or: "Territory folk should all be pals", but the corporate constituency has broadened, particularly as companies have globalised, and principles of justice need to alter to accommodate this geographical spread and the different cultures and legal or ethical philosophies that are introduced. I merely note that all of the references used by the author are derived wholly from western tradition and thought, but perhaps justice and ethics are more universal ideas.

I should, perhaps, stick my colours to the mast at this point, and declare my own core philosophy as that of a free marketeer. By implication from that, I would also draw an objection to monopoly of any form at all. I also consider interference in markets to be against long-term interests, no matter what beneficial impacts such interference is designed to achieve, or may occasion, in the short term.

Interference is akin to the opening of Pandora's Box, so I am more inclined to let Adam Smith's invisible hand perform its work, as I believe that it has largely proved successful over history, and does less overall damage. Interestingly, the author opens Section 2.3.3 by describing Adam Smith's

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conclusion "that others benefit when people pursue their self-interest" as 'not remarkable'. Surely it is only its widespread acceptance that now makes this seem so unremarkable. I also wondered, considering Adam Smith, whether a more appropriate quotation for this evening might have been: "*People of the same trade seldom meet together, even for merriment and diversion; but the* conversation ends in conspiracy against the public or in some contrivance to raise prices".

Section 2.4 analyses profit into its component elements, and Table 1 summarises the author's analysis. I found this quite valuable, but I did have some difficulty convincing myself that pure interest should ever be negative. I would certainly affirm the author's conclusion, in Section 2.4.5, that the use of notional interest is a necessary rationing tool for capital, even in a planned economy. Recent economic woes in the Far East might have been alleviated or avoided if this rationing had been more rigorously applied in the past. This statement may appear contrary to what I have previously said about the need to be aware of non-western philosophies and cultures, but I do believe that some central laws of economics apply equally as rigidly as, for example, Newton's Laws of Motion.

I thought it was interesting, at this stage, to consider that there are four groups involved in a business: the owners; the management; the staff; and the customers. Of these four, it is often the owners who have the shortest relationship with the enterprise. Management and staff are likely to spend a considerable part of a career with a company, and, depending on the product involved, customers may continue in their role, over many years, as end product purchasers. However, an owner's relationship with a business may have become very short term as a consequence of portfolio turnover, and, through trusteeship, may be so far removed that the owner loses all sense of identification with the business. In terms of accountability, this is the most serious of problems, and one which the author goes on to discuss, although not particularly from this viewpoint. This strikes me as a recurring theme, but not one wholly addressed by the paper.

Section 3 begins with a discussion of utility theory as a basis for effective institutional management. I will let others consider the potential use of utility theory in this field, but I comment that I see obvious dangers in all models of this nature if they are used to determine tactical, rather than strategic, considerations. If actuaries are acting as advisers, rather than as investment managers, they would do well to tread carefully in the area of stock market valuation. As global inflation has eased, stock market returns from a wide range of assets have been spectacular — none more so than from equities. Criticism of indexation and the 'herd' of institutional investors looks flawed when set against this backdrop. It would be a brave actuary who was prepared to predict confidently when or how this current 'bubble', if such it is, will burst or what will promote a change of stock market opinion. All we can say is that, with normal market cyclicality, something, sometime, is likely to lead to changed perceptions, and that, by normal standards, valuations appear stretched.

Section 3.3 discusses the choice of managers. This is an area at least as complex as the choice of securities. The number of managers is considerably less, but the information available is more qualitative and judgemental. The 'bounded rationality' principle should apply here, too. In terms of objectives, our principal aim would be to 'avoid a dud'. While the whole market cannot choose indexation, the choice of indexation will certainly satisfy the first aim. There are also uses of part indexation which can prove helpful. For example, a manager might avoid sector bets, but concentrate on stock selection, or an asset allocator might use fixed benchmarks, rebalancing the portfolio using underlying index positions within those benchmarks. Market movements will then oblige the sale of rising markets and the purchase of falling markets, whereas pure indexation would apply new cash flow in the opposite direction. This would accommodate the author's seeming enthusiasm for value investing.

For active managers, the author correctly identifies security analysis, portfolio construction and market timing as being critical skills. However, I would question the need to attribute timing of individual deals. This seems overly detailed in analysis. Although money can be lost through poor dealing, the decisions to buy or to sell are surely the more important. Consider, for example, the purchase, 10 years ago, of Microsoft, Coca Cola or Glaxo, or sometime further back, of Manhattan Island from the Indians. Did it really matter when in the day or the week these purchases were made?

Performance evaluation of managers is notoriously difficult. Luck plays its part, as with the

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evaluation, indeed, of chief executives and senior management. The good are likely to be less good, and the bad less bad, than an ex-post evaluation of performance might suggest.

The remainder of Section 3 contains much of the argument of the paper, by examining stewardship from four perspectives. It seems to me to be a pity that the author concentrates on the directorate and their rewards. Successful businesses balance the competing claims of shareholders (i.e. the owners), of the management, of employees, and of customers, over the long term. Prospects for the business can be distorted if any one of these four groups becomes too powerful or, indeed, too weak, which is surely the problem which needs to be addressed here. The author appears to view this more as a problem of entrenched management.

Using the author's phraseology, in the blue corner the capitalist position is examined. The author wonders whether trustees have adequately safeguarded the rights of beneficiaries. My argument would be that the owners (i.e. the beneficiaries) have increasingly abandoned their role, particularly as collectivisation of investment has increased. This is a more likely source of a perceived problem with management power.

I am very drawn to the principle of economic value added, but would seek to apply it far beyond executive reward. It would help most businesses if managers and their employees understood more completely the value that they each contribute to, or subtract from, the business. At the same time, employees also have more of an obligation, these days, in my opinion, constantly to retrain and to grow with their employer or as the business develops. Business has become harder for everyone. I think that there are two particular destabilising trends affecting the labour market. The first is the increasing power of knowledge-based workers within organisations and the mobility of that talent. This will require astute managerial skills to husband. A more worrying problem, however, is the diminishing prospects for unskilled labour. I would see this more as a social problem, somewhat beyond the capability of business to manage on its own.

This view may be thought by some as an abrogation of managerial responsibility for their workforce. However, companies are created, grow, flourish and die, just like other organisms. It is an evolutionary process, and the problems that this causes often operate at a cycle which synchronises badly with human rhythms. If downsizing alleviates a problem and can stave off a company's total liquidation, it is surely a better solution than outright closure.

The author highlights a number of faults of some management: fraud; corruption; complacency; over-ambition. All of these are elements of the human condition. It is hardly surprising that they can be found among the management of companies, but it is unclear how a trustee should be in a position to identify these problems. All that trustees can ensure is that high standards of corporate governance apply, and I would argue that the occasional corporate misfeasance — or to be more exact, its uncovering — is helpful, particularly when financial loss is involved. It is helpful for its value in educating, or re-educating, investors about risk. To quote a native American saying: "Trick me once, shame on you; trick me twice, shame on me".

Mergers and acquisitions offer scope for a paper on their own, and this topic and that of the value of dividends, or at least of excess cash returns to shareholders, are currently very important issues.

The author devotes much space to the capitalist critique, and rather less to that of the socialist, green or purple factions. Notwithstanding my free market tendencies, I am concerned that, in capitalism's third age, no natural challenger to it has appeared following the collapse of communism. All institutions benefit from an effective opposition, and grow fat and indigent if allowed to.

Inevitably, one looks towards governments to provide this challenge. Ideally, this should be accomplished by setting long-term economic goals, and promoting their achievement. Businesses can be measured for their contribution to achieving those benchmarks. Longer-term goal setting would avoid criticism of government interference, usually characterised as a short-term corrective action. At the macro level, then, I would applaud the objective and behaviour of the entrepreneur that the author highlights in Table 2. Job creation grows out of a fostering of this entrepreneurial activity.

The author appears to disfavour employee share ownership schemes. I would be interested in other views, but believe that such schemes are valuable for attaching the interests of the workforce to the success of the company. I see no reason why the degree of profit share (and of risk) could not be structured so as to form an increasing part of remuneration as an employee's influence grows. This

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would remove the greatest part of the exposure to business risk from more lowly paid employees. Given the value that this would add to shared purpose, I find the author's objections curious.

Green issues are considered briefly. I will also be brief, save to say that I believe that it is difficult to run a successful, broadly diversified portfolio with a heavily ethical or environmental stricture. Many stewardship funds operate reasonably successfully and perform well, but I believe that they can do so only when they occupy a minor fraction of investable assets. If these funds grow to a higher proportion of investable assets, the level of stock restriction and sector bets would begin to have a seriously adverse impact on investment performance. However, there is one particularly beneficial aspect of such funds, and that is the clear franchise which exists between the trustees and the beneficiaries.

Franchise is an interesting topic. This paper covers the role of trustees in the investment process. It seems to me that too little consideration, in general, has thus far been given by the industry to the nature of the franchise between the trustee and the beneficiary. Performance has generally been seen as the only goal. For larger pension funds, statements of investment principles will have been expanded recently to include issues of corporate governance, but, for collective investment, it is still likely that no such clear franchise exists. This is one area, in particular, where members of the profession are most likely to become involved in the 'ethical' debate, in their role as investment advisers.

Professor R. S. Clarkson, F.F.A.: This paper offers us the opportunity to debate some important principles of institutional investment, and, in particular, to highlight the desirability of formulating a reasoned and structured approach — a 'coherent intellectual framework' as the author calls it.

Section 3.1 states, with commendable clarity, that the primary responsibility of trustees is the maximisation of returns to beneficiaries. This is in welcome contrast to modem portfolio theory and similar methodologies, where, all too often, no attempt is made to improve the return, presumably because most academic studies purport to show that capital markets are efficient, and, accordingly, that higher expected returns invariably lead to higher levels of risk.

In ¶3.2.4.3 the author discusses the crucial choice between the mean-variance paradigm of modern finance theory and utility theory as the favoured mathematical foundation for his 'coherent intellectual framework'. I agree, not only with the author's choice of utility theory, but also with his main reason for rejecting mean-variance analysis, namely, that the many simplifying assumptions required for the latter do not, as he puts it, "provide a sufficient foundation for the mountain of mathematics, published and unpublished, that has been built upon them".

When we attempt to use utility theory to improve risk-adjusted returns, we are confronted by two serious problems, one conceptual in nature and the other practical. The conceptual problem is that, as Professor Maurice Allais first explained in his 1953 critique of the underlying postulates and axioms (Allais, 1953), expected utility cannot provide a satisfactory numerical framework for reasoned risk/return assessments by intelligent human beings. The second, and somewhat paradoxical, problem is that utility theory, when used to maximise long-term returns, can be so much more powerful than the erratic behaviour of fallible human beings that it is, what we might say: 'too clever for the market'. While, in the fullness of time, its long-term predictions may prove to have been brilliant, the dominance of irrational herd psychology can result in disastrously bad short-term and medium-term performance.

The author partially solves the conceptual problem relating to utility theory by suggesting, in ¶3.2.4.4, that trustees and their advisers should, at the very least, consider the mean and the cumulative distribution function of alternative investment strategies. However, capital market returns involve so many degrees of freedom and such high random variability that meaningful estimates of the really interesting parts of the cumulative distribution function are exceptionally difficult to obtain. A more robust indicator of investment risk is required.

The risk indicator that I prefer can be regarded as a two-stage enhancement to the commonly-used standard deviation of return, which is essentially the root mean square of the deviations about the mean. My first enhancement is to include only downside elements, since investment risk — as even Professor Markowitz now appears to accept — is a downside, not a symmetric, function of variability.

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My second enhancement is to use shortfalls below the benchmark agreed for appraisal purposes rather than deviations below the mean, since it is obviously only outcomes below the benchmark that constitute adverse performance events. The resulting measure, which is the root mean square of shortfalls below the benchmark, is similar to the measure of investment risk that I first suggested in my 1989 paper on the subject (Clarkson, 1989), and it has the important property that its value is zero if, and only if, the return is never less than the benchmark return.

As regards the problem posed by the failure of many others to adopt a rational long-term strategy, I suspect, from the general tone of ¶¶3.2.1.2 and 3.2.1.3, that the author has underestimated the seriousness of the situation. I respect, but disagree with, Miller's (1991) so-called 'compelling evidence of efficiency and rationality'; his results are crucially dependent on the many simplifying assumptions of financial economics that the author rejects in ¶3.2.4.3. On the other hand, I regard the very disturbing conclusions of O'Barr & Conley (1992) as representative of the rule rather than the exception. In particular, in a paper to the Centenary Convention of the Institute of Actuaries of Australia in 1997, Addison & Shaffer (1997) report very similar conclusions in the context of large Australian pension funds. One typical, and very costly, episode that they describe relates to an investment contract which was terminated as a result of poor short-term performance. I quote:

> "The client went from one strategy that had underperformed but was about to come good, to a fund manager who had performed well, but was likely to underperform in the changed market circumstance. Further, the client would have to make up the costs of the changeover."

Also, the author of this paper conveys the impression, in ¶3.2.1.3, that the presence of a few rational traders will cause market prices to converge to real values, and thereby prevent ill-informed participants from buying at excessively dear prices. I would find it difficult to explain this pearl of academic wisdom to someone who bought United Kingdom or United States equities just before the Crash of October 1987, or to someone who bought Japanese equities towards the end of 1989. However, the dominance of herd psychology over reasoned long-term projections is not a new phenomenon in investment markets, and, indeed, Keynes (1936) gave this very eloquent warning more than 60 years ago:

> "It might have been supposed that competition between expert professionals, possessing judgement and knowledge beyond that of the average private investor, would correct the vagaries of the ignorant individual left to himself. It happens, however, that the energies and skill of the professional investor and speculator are mainly occupied otherwise. They are concerned, not with what an investment is really worth to a man who buys it 'for keeps', but with what the market will value it at, under the influence of mass psychology, three months or a year hence."

Plus ça change, plus c'est la meme chose, or, as the Italians say: '*cosi fan tutti*' — that is the way of the world.

In the U.K., most unit trusts invest exclusively in equities, and most pension funds and many insurance companies have a very large proportion of their assets in equities. Accordingly, for U.K. institutional investors, one of the most important objectives must be to maximise the long-term performance of their equity portfolios relative to the appropriate market index, subject to an acceptably low probability of short-term under-performance. However, apart from some general comments on indexation and a brief mention of some systematic mispricings identified by Fuller, Huberts & Levinson (1993), this paper does not discuss the day-to-day management of equity portfolios in any detail. A more useful starting point here might have been reference to the results, described by O'Shaughnessy (1996) in his best-selling investment book *What Works on Wall Street.* He concludes that a systematic approach using selection criteria, such as a low price-to-book ratio and a low price-earnings ratio, can significantly outperform the vast majority of professional investment managers over the long term. Also, although not an actuary, he interestingly describes his conceptual approach as being actuarial in nature.

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Having concluded that the most serious impediment to achieving consistently superior returns on equity portfolios is the acute disequilibrium that results from what might be called the systematic irrationality of the typical investor, I have spent a considerable amount of time over the past two years trying to develop a new approach, which I call strategy investment — the core of the strategy being to rank shares in order of attractiveness using a forward-looking utility function with a very strong bias, or tilt, that is designed to exploit the predominant elements of investor irrationality. My article in the December 1997 issue of *The Actuary* (Clarkson, 1997) describes the general philosophy in more detail.

I intend to set out the detailed results of my new approach in a paper to the 1998 Investment Conference, but this discussion seems an appropriate occasion on which to give a brief preview of the general pattern of results. I used my tilted utility function to identify, at six different dates, the twenty most attractive FTSE-100 stocks. The selection dates were the beginning of June, July, August, September, October and November 1997. For each monthly cohort of selections, I tracked the average performance relative to the All-Share Index at monthly intervals, and then, for each available duration from selection, from one month to ten months, I calculated the mean relative performance, together with my new risk measure (the root mean square shortfall below the index), and also the root mean square deviation about the mean as a proxy for the standard deviation of return. The results are shown in the following table:

'Top 20' FTSE-100 stocks

Duration in months	Number of observations	Mean relative performance	Root mean square shortfall	Root mean square deviation
1	6	101.0	0.7	1.7
2	6	102.1	0.3	2.0
3	6	101.6	2.0	3.2
4	6	101.7	1.1	2.8
5	6	102.6	0.3	2.2
6	5	104.0	0.0	2.4
7	4	104.3	0.0	3.1
8	3	104.7	0.0	1.8
9	2	107.0	0.0	0.7
10	1	108.3	0.0	-

There is a very strong trend of outperformance over the All-Share Index, contrary to what proponents of market efficiency would tell you, with an average outperformance to-date of 4% after six months and 7% after nine months. I stress that this is for FTSE-100 stocks, which are supposed to be analysed intensively and, to a first order of magnitude, efficiently priced. Also, the zero value of my shortfall risk measure from six months onwards indicates that, for all periods of six months and longer, for which there was a total of fifteen observations, my 'Top 20' FTSE-100 selections never once underperformed the All-Share Index.

Returning to Section 3.3.5, I welcome the emphasis on a detailed evaluation of performance, and have two comments. First, my shortfall measure of risk, when applied to readily available quarterly data, would offer a very useful means of comparing the variability of return of different investment managers. Second, the detailed performance model, described by Day, Green & Plymen (1994), is a very powerful internal management tool, in that it highlights the strengths and weaknesses of the fund manager and allows areas of systematic under-performance to be addressed and remedied, often before external observers become aware of any serious problem with the overall performance.

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Mr. C. W. McLean, F.F.A.: This paper is a very important one, not just for the subject, but for the way in which the author has treated the approach, and its range, rigour and originality. It will take its place as one of the most important papers, not just on investment, but overall, that has been presented to the profession. I do not consider it too disappointing that it does not ultimately lead to direct conclusions for day-to-day investment management. It provides a framework on which we can build. It is a heavy enough paper as it is.

My complaint, perhaps, in language, is not with the 'shoulds', but, unfortunately, with the occasional 'appropriates' and 'acceptables', which are today's politically correct buzz words, though often judgemental and rather vacuous. An occasional leap of faith is required, based on these sorts of words. I agree with most of the rest of the paper.

Picking up on some of the opener's points, it is very important that a lot of power is now with knowledge-based workers. The inter-relationship between labour and capital makes it much harder to use traditional methods of analysing financial capital, and may lend some credence to the labour theory of value. It will certainly provide a useful tool when it comes to looking at knowledge-based industries.

Contrary to the opener, I do not think that capitalism has, yet, finally seen off Marxism as an approach to understanding the relationship between factors of production. There may be a longer-run battle to come, as owners of capital, perhaps, have to fight with these knowledge-based workers and with labour within businesses.

In the longer term, when you combine that issue with the age disparity which exists in the economy, I find it hard to believe that all the financial claims that we have on tomorrow's businesses in 30 years' time, which will be run by quite a different generation, will be met, in order to pay our pensions in the terms that we want. Inflation might very well be the argument that we have with tomorrow's workers.

We can already see evidence in some aspects of employee share ownership plans (ESOPs). All individuals have motivations. I think that it is the role of employers to tap into these motivations in a productive way, and the role of the stock market is to make judgements on whether it adds value in their terms. I do not think that it helps to transfer the stock market risk, and the stock market's judgement, onto employees; it is hard to explain the risk. Moreover, although assuming that people are purely financially incentivised addresses the basest motivations of individuals, I do not think that ESOPs add to the incentivisation of employees or the direction of businesses.

There is a suggestion, in ¶2.4.8.5, that monopoly rents do not belong, by desert, to the overcharged customers. It is very easy to see that, if there is a monopoly rent, then the overcharged customers are the ones who deserve relief. However, I think that it is important to remember that most new businesses, and almost all entrepreneurship, involve an initial element of a monopoly. After all, most businesses do not start up with the benefits of low-cost production economies of scale. They typically start up by exploiting some self-defined or self-created monopoly for a period. The risks come in the longer term if that monopoly becomes embedded in distribution channels. We do not need to look any further than a group like Microsoft to see the dangers in moving from correctly rewarding one monopoly for a period of time, to enshrining it in a way that is ultimately anti-competitive.

Consider the real losers from extended monopolistic profits. It is not actually the customers who overpay. They merely lose their consumer surplus, but presumably are happy enough to pay, say, £50 to £70 for a piece of software. We get some indication of the lost value to society by the number of counterfeit copies of the software that are sold for, perhaps, £5 or £10. Often large numbers are put on the loss to, say, Microsoft, or software producers, of this counterfeit software, and it is valued up

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at the proprietary sale price. The one thing we do know is that the people buying over the counter at £10 would not pay £70 for the software. What we do not know is whether their inability to buy at full price is because they do not have as much productive use of the product as the people who are paying the full price, or because they just do not have the resources to pay the full price. They might very well have a more productive use for the product — certainly considering the extent to which technology, software and telecommunications are denied to large areas of the world, it is very difficult to believe that they would not, if they had the money, find a more productive use. Thus, the real losers from extended monopolistic profits cannot be measured just by looking at overcharged customers. That is why I believe that extended monopolistic profits really are an issue for society, for governments, to deal with rather than something that can be dealt with just by shareholders.

There is a suggestion from the opener that, perhaps, it might be worthwhile to explore mergers and acquisitions a little more. The suggestion in the paper is that it would be quite right, if there were the prospect of shareholders breaking contracts, perhaps even unwritten contracts, with employees or customers, that this would provide the board with a justifiable defence and excuse for declining a bid. We do not have to look too far from here to find examples of boards defending broken promises which were made in takeovers. Distillers and Guinness is one example, with their promise of a Scottish headquarters. Even within the life sector, if we look at the hopes that were in place in certain sorts of reconstructions, and what has actually been followed through in terms of employment, we can see some big discrepancies. What we need in society is some measure of holding boards accountable for the statements that are made during takeovers — some proper standard to set against claims made to reject bids, in favour of maintaining an existing board and existing contracts. There is a broader issue of how both parties in a contested bid can be held to their promises.

The suggestion, in ¶3.7.3, is that returns may be higher in those businesses which are shunned morally. The important issue is that their cost of capital should be higher, where the stock market provides a primary capital function, which it does from time to time. Either the risks involved in raising money by these sorts of businesses, or just simply their low ratings, should increase their cost of capital. Of course, those sorts of businesses might end up raising money from the fixed-interest markets, rather than from equity markets, if their returns are very low. So, it is quite difficult to say that shareholders, just by avoiding certain sorts of companies, can exert much influence. Moreover, merely to act on companies that you think are doing unworthy things is exerting a very negative sort of influence.

Nothing very much happens if you are not a shareholder. How is the company going to know why you are not holding its shares, and, if it can get finance from the fixed-interest markets, or from banks in some other way, it may not be terribly concerned that it cannot raise primary capital through the stock market. So, there is a much broader issue there of how companies can be influenced. I hope that it is by shareholder democracy and activism rather than just simply avoiding companies that you do not like. Companies which are pursuing good policies should be encouraged positively. Looking beyond that into the value judgements of what is good and bad is quite difficult, even accepting the author's overall tool of applying justice as a base.

Contrary to the opener, I do not take the author as necessarily supporting value investing, despite the hint of the fundamental approach in Section 3.3. Indeed, there is almost a suggestion that you should shun very-lowly-rated companies because there might be something morally wrong with them, which does tend to lead you away from a value investing approach. While it might be nice if you can apply an ethical perspective, as you look at yourself in the mirror each day, the danger is that often we cannot look at companies as closely as we would like. When you look at a company closely, you might find one that appears to be doing very ethical things, or which operates in an area that you want to support, but, perhaps, its employment policies or some other aspect of its operations which does not necessarily get public attention, may be abhorrent. The decision is multi-faceted, and it is very difficult to make simple judgements. Some broadly good companies still have some aspects of behaviour which you would not necessarily want to support.

The Reverend Dr H. Ormiston (a visitor): I am an outsider to the industry, and in no way qualified to comment on the nuts and bolts of the industries that you serve or on the profession to which you

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belong. I have been invited here tonight because I have been editing the *Finance and Ethics Quarterly*. Cynics might say that our title is a contradiction in terms, but we have struggled with it for the last three or four years, and relied on people like Mr McLean to give us the more in-depth professional expertise that we have needed.

I have been fascinated by this paper. It is part of a general fascination with the way in which the issue of ethics has become a major strand in thinking, not only in the industries which you serve, but across the spectrum of industry in the last 20 or so years, and with the way in which schools of business ethics have mushroomed across the world in our universities.

My only qualification for commenting is that I am an ordained minister of the Christian Church, and we claim to have some understanding of ethics, although not a monopoly on ethics, I hasten to say. Ethics, as you will understand, is something on which people of all religions, and no religion, can legitimately claim to have a view.

I should like to make three comments on the paper. The first concerns the background issue of justice, which is a major issue for theologians, and has been for very many years, even before medieval Catholicism. Personally, I am not so comfortable with looking upon justice as a question of balance, and am rather more attracted to the thought of Paul Tillich, the German-American theologian of the post-war years, who spoke of justice as being in correlation with peace and with love, not so much a balance, but a matter of pursuing these ends simultaneously and as rigorously as possible. I find that a more useful way of looking at a number of issues in the world; instead of being a trade-off between, for example, love your neighbour and love God, it is a matter of pursuing love of neighbour and love of God as rigorously as possible and simultaneously.

The second point that interested me was the question of managing the managers. A good number of years ago now, J. K. Galbraith spoke of the tendency of companies to become meritocracies. As ownership became more dispersed, it gave opportunities for managers to grab the reins of power and to run companies in their own interests. It has been of interest, in recent years, to see a tendency among major institutional investors to try to set up a countervailing power here. From our point of view, in the church, as people trying to think ethically about industrial activity, it seems to us that this has been a useful development and one which ought to be encouraged. There may be further scope for large institutional investors to move further down this road and begin to apply a countervailing force to the tendency of managers to manage and to run companies in their own self-interest. The fact that they do that, of course, comes as no surprise to a Calvinist, because I have to agree with the economists that, by and large, we all run along the lines of self-interest.

My third comment is on the issue of monopoly and the subsidiary topic, as it were, of government interference. To begin with, we are all free marketeers now. Since 1989 there has been no option, hence Mr Fukuyama's provocative statement that we are at the end of history. What we have seen is a continuing number of different forms of capitalism: the continental European form; the Japanese form; and the Anglo-American form; all of them varying, it seems, on the issue of government interference. However, the concept of government interference is something that needs to be teased out a bit further. For example, would we consider education of the population as a form of government interference? Many of us, I assume, have been educated solely at government expense, or, more accurately, at the taxpayers' expense. We, therefore, form part of an educated labour market from which employers were able to pick and choose. Are we saying that, if we want to eliminate government interference, then the educational system should be totally privatised? Do we want a large sector of the population to be disenfranchised from education? Most of us would be worried about that. So, I argue that the concept of government interference needs more explanation.

Allied with that is the question of monopolies. It seems to me, from the simplistic outsider's point of view, that there is an underlying trend in human affairs for wealth and assets, over the long term, to accumulate into the hands of fewer and fewer people.

Our forefathers in Old Testament days noticed this. You may say that these were very primitive days compared to our advanced industrial society. The Old Testament spoke in worrying terms on this trend, and came up with a possible answer in terms of a Jubilee Year: every 50 years slaves were to be returned to their freedom, debts were to be forgiven and the system virtually unscrambled. It would be very simplistic to think in terms of doing that in modern industrial societies. However, if there is

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a tendency towards monopoly, if there is a tendency, in the long term, towards accumulation in the hands of the few, what checks and balances, what constraints, are possible in advanced societies to redress that balance and to make sure that we do not move further down the road of marginalising about one-third of mankind from the system?

Dr B. G. Moretta, F.F.A.: My observations mostly relate to practicalities. The first one that struck me was the author's comment, in ¶2.4.8.6, on monopoly rents. He writes about the unjustness of investors who receive monopoly rents effectively through investing. The author mentioned that it is hard to identify these in the first place, which I think is a huge practical problem. The second problem, to which a previous speaker referred, is that, from a shareholder's point of view, if some companies are receiving monopoly rents and your objective is to get the best performance that you can, then it is very difficult to invest only in companies which ignore monopoly rents. I know that I have recommended companies or invested in companies which may not be monopolistic in themselves, but are certainly heading towards oligopolies, which is, I suppose, tantamount to the same thing. In these circumstances, it is important that governments sort out the rules of the game.

The author writes, in Section 3.2.1, about strategy and methods of investment. He did suggest that the rise of technical factors is to be abhorred and use of fundamental data is certainly to be encouraged. I am not quite sure whether this is value investing or not. It certainly could be.

It seems logical that investors should use as much information as they can. It is also reasonable to say that many investors have been very successful by ignoring such factors and dealing in purely quantitative approaches. There is room in the market for all approaches, otherwise the efficiency of the market must start to deteriorate. In free market circumstances there must be some sort of inherent balance, where, if a method is under-used, then that method may well, because of the market's ignorance, be able to be used to exploit market anomalies.

This leads nicely on to the bubbles, which are discussed in Section 3.2.5. I noticed an interesting thing about games where, if players play the game twice, in the second game bubbles do not appear. I am quite sure that there are many investors, who are new to the stock market, who would find this very interesting.

The author's 'meat' is corporate governance. I am not sure that 'governance' is the right name. It seems to cover disclosure of directors' benefits rather than what I would call governance, in terms of administering the company, and making sure that all people's interests are maintained. Theoretically, as the author has done, it is reasonably straightforward to draw up some ideal circumstances. Practically, it is very difficult. As an earlier speaker suggested, it is much easier, sometimes, to sell the shares in a company than to change the management, especially where the company is very large. Where the company is small, it is often a lot easier. Where you can get four or five shareholders together, who may well control half the company, you can engineer changes. I think that some of the tight holdings in the investment trust sector provide evidence of this assertion.

The focus, thus far, in corporate governance, has been on highlighting the rewards which directors receive. Possibly, people should be focusing on the performance of the directors, and setting out the objectives more clearly in order to judge if the rewards are appropriate.

The final comment relates to ethical funds and size of assets. The opener suggested that an increased popularity of ethical investments would lead to a problem due to the shortage of such investments. I would have thought, again, that this is self-balancing. If there is increased interest in ethical investments, and increased funds being applied to ethical investments, surely that will lead to outperformance of ethical stocks, and, if there is effective corporate governance, then shareholders will be looking for companies to become more ethical, which leads, in turn, to greater performance and greater availability of assets. On the other hand, you could just end up with another bubble.

Mr M. E. Pearson, F.F.A.: I have a few observations about various aspects of the paper. As a member of the ABI Investment Committee, I can also touch on its work.

The paper is an interesting and stimulating one. It makes us think about issues that we thought we understood clearly from new perspectives, and it led me to consider what we, as institutional investors, should be doing that we do not always do now.

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We should certainly vote at AGMs, although we should not be compelled to vote, because compulsory voting leads too easily to mindless box ticking. The outcome of voting should always be disclosed. At the moment, AGM voting is almost always carried out by a show of hands, and proxy votes are frequently not even counted, let alone disclosed. That is a disincentive to voting. In fact, the Investment Committees of both the NAPF and the ABI encourage their members to vote, and the ABI Investment Committee is much the more successful in that respect. The voting record of life companies in the U.K. is generally a very good one.

It is tempting to go on from that and argue that institutions should have specific votes on the reports of remuneration committees, which are concerned with directors' remuneration. I would resist that. It is hard enough for us to determine pay in our own businesses, without seeking to impose some sort of incomes policy on others, when no government is willing so to do. In voting on remuneration committees' reports, we could become easy targets for press and politicians.

What we have done is to mandate the *process* by which executive pay is determined, rather than the results. The approach of having remuneration committees consisting of non-executive directors, with annual reports to shareholders, does not always produce the right answer, but it is the best that we have found.

With badly-performing companies we should be prepared to go beyond just asking difficult questions, and try to push for management change by applying real pressure. That is difficult to do as an individual shareholder, and even as a single large institution, but it can be done collectively. However, it is easier said than done, and my experience, in practice, is that companies always have explanations for their problems that involve external circumstances rather than inept management. It has been difficult to get enough institutions to have strong enough views on a company to make them go to some effort to secure change. Unless institutions are prepared to do this, and act on occasions more visibly than they do at present, then change will not take place, generally, unless it is too late.

On monopoly profit, the author correctly points out that it is virtually impossible to identify what is a monopoly profit and what is not. For example, the profit from a new drug is clearly well above the cost of production, and even the cost of production plus research, but the revenue gained from one successful product also has to finance many, many unsuccessful ones. So, I believe that it would be impossible to isolate a true monopoly profit which could be taxed legitimately. There are also companies, Coca Cola might be an example, where there is no obvious source of exceptional or monopoly profit. It does nothing that could not be duplicated by anyone else, yet it does manage to extract exceptional returns year after year.

On environmental matters, analysts and fund managers certainly need to understand 'sustainable development'. Environmental considerations need to be part of the stock selection process and subjects for discussion with management to a greater extent than they have been. Companies need to understand, and Shell probably does now, that environmental issues can affect them in unexpected ways.

There is a gap. We all have, and are familiar with, generally accepted accounting principles, but, as yet, there are no generally accepted environmental standards. We should encourage their development as a way in which we can take this issue forward.

Although I did not agree with the comment that indexation is inconsistent with due care, indexation relies, not only on an efficient market hypothesis, but also on an efficient index hypothesis. Companies can be included in certain indices when only 25% of the shares float freely, and it will be interesting to see the result when index funds have a 26% market share.

Professor A. Asher, F.I.A. (replying): The opener felt that it was a pity that I concentrated on the remuneration of directors. I understand his view. I would, however, like to tie it up with the Rev Hugh Ormiston's comments about the rich getting richer. There have been some studies that show a correlation between crime and the differences between rich and poor. It has been held, since the Greek philosophers, that excessive differences do create crime and political instability. Whether this view is correct, or whether we have got anywhere near a situation where there is some danger that social solidarity is threatened by differences between the rich and the poor, I do not know.

It does seem to me, however, that there are two things that you can do about it. One is to make

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sure that people get what they deserve; and that is what we ought to be thinking about as trustees or directors of long-term institutions. The second is that governments can think about redistribution. 'Jubilee' capital taxes are much better than income taxes, in that, as long as they are completely unpredictable, they do not distort economic activities at all. That is what my Samuelson tells me, and it seems credible. Government action is, however, beyond the scope of my paper.

I would make a comment on Professor Clarkson's model, as he described it in *The Actuary.* Fuller, Huberts & Levinson (1993) come to a similar conclusion. They have found evidence that investment managers tend to be over-optimistic about companies that are growing, and overly pessimistic about companies that are trading at a discount to their net asset value. The question really is whether such anomalies will be permanent. It seems to me that, if they are undervalued at one stage, they may well return to proper values relative to the rest of the market, at a later stage. Professor Clarkson's results show that, over the last year, value investing has been a good thing. I do not think that we can expect the market always to represent certain patterns any more than we can expect it always to be perfect.

Some of Mr McLean's thoughts on government interventions, rather than interference, particularly that boards be held accountable for statements that they make, are interesting. They could be based on common law principles. If you make a statement and cause other people to lose thereby, then they may have a right to sue you.

The President (Mr P. H. Grace, F.F.A.): Although we have had fewer contributions than normal, we have had a very useful discussion. A number of new points were made and suggestions were forthcoming, some of which will require additional work. Perhaps our own Investment Research Committee will pick up on some of the points made, and we might see another paper on these issues in a few years' time. There would, of course, have been no discussion, no suggestions, no ideas, coming forth without the efforts of the author and we now thank him in the usual way.

WRITTEN CONTRIBUTION

The author subsequently wrote: Value investing came up four times in the discussion. I think, now, that there is more of a link to ethics, and to our professional responsibilities, than I did when I wrote the paper. By value investing, I mean investment based more on the underlying worth of a share than of the psychological factors that will affect its price. (This is a different meaning to a focus on shares with high earnings yield, or NAV, rather than on growth stocks.) Keynes's well-known comments, quoted by Professor Clarkson, are too close for comfort.

Attempting to predict psychological movements in the market is a negative sum game, as they distort share prices. This has the effect of also distorting decisions on the allocation of capital, and reducing the financial security of individuals who rely on share price predictability for their retirement income. Professor Clarkson suggests that it is possible to make money out of these distortions. If they are systematic, he may well succeed. It is the strength of the free market that systematic distortions can be eliminated in this way.

I do think that psychological distortions exist, and fear that we, as actuaries, may contribute to them. This arises from our central position in the measurement of investment performance. It seems to me that the methods we use to measure investment performance — including those mentioned in this paper — do not distinguish between real and psychological factors. We could, presumably, measure real factors by using a discounted cash flow method to value shares. Changes in share prices that reflected changes in the underlying discounted cash flow would be real. Although such changes do depend on subjective estimates of future profits, Fuller, Huberts & Levinson (1993) find that there is less error in these estimates than in estimates of future share prices. It may be that investment managers could be rewarded for achieving real, rather than psychological, performance.

On the question of whether justice would be relevant in non-western societies, I have little doubt that the model used in the paper has wide applicability. There is no doubt that the balance of interests and value realised in different societies does differ. It appears, however, from my limited understanding of Islamic, Japanese and African societies, that justice plays a significant role in each

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of them. Lawrence Kohlberg's work on moral development also suggests that the way that we learn to think about ethics does not differ markedly in different societies. His research covered countries in the West, in Central America and in the Middle and Far East. He found 'justice' to be the mark of the mature individual in each of these societies.

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