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THE ACTUARIAL PROFESSION AND EQUITABLE LIFE

“Unsafe At Any Speed”
A Critique of Actuaries in the Life Sector

Dear Sir Derek

- 1) Since the summer of 2001, I have been pursuing enquiries into the basic causes of the Equitable Life disaster, and into the identities of those primarily responsible. This investigation is by no means complete as yet, but this submission marks a further stage forward. I am special advisor to Investors Association in regard to Equitable issues, and have contributed to their recent paper, but this current offering should be taken as representing only my personal assessment of the matters referred to.
- 2) It might be argued that Equitable Life was a one-off situation, and that the Profession¹ should not be judged by what happened in a company with such a uniquely distorted mode of operation. Clearly Lord Penrose did not think much of such arguments, and my personal view is that the events in question serve as a sort of ‘litmus test’ to bring out the real strengths and weaknesses in the professions concerned.
- 3) This submission deals specifically with issues arising during the long course of the Equitable Life affair, but some of them have turned out to be of rather general application, and have demanded more extensive analysis as a result. Accordingly, I have summarised the conclusions and the resultant recommendations at the start, in advance of the detailed argument.

¹ The term ‘the Profession’ is used throughout to represent ‘The Governing Councils, advisory committees and influential forces within the Actuarial Profession, as well as the Regulatory Apparatus including the GAD’

Conclusions and Recommendations

- 4) Lord Penrose criticises the Profession for failing to establish standards for dealing with non-guaranteed bonuses. I have reached the conclusion that the more fundamental criticism is that it failed to establish proper standards for dealing with **Investment Contracts** as a whole, and that it endorsed the use of an inappropriate methodology derived from **Insurance Contracts**, which was bound to distort the financial and solvency situation of the Lifecos² in question.
- 5) As is well known by now, this methodology dictates that only the guaranteed part of allocated investment growth should be treated as a financial liability, and moreover that it should be **discounted** back from the notional maturity date. This conflicts with the way such contracts are presented to investors by sales representatives and other intermediaries, and more importantly with the statutory requirement to protect PRE. As a result, no ordinary saver or investor is made aware of the legal disabilities involved in such contracts and the extent to which his future entitlement is left at the unfettered discretion of his Lifeco. Nor is he or she warned of the enhanced risks involved and of the consequential need for greater vigilance over the conduct of that Lifeco's affairs.³
- 6) This dichotomy between what is sold to policyholders and what is actually delivered to them represents a potential fraud in each and every case where the policyholder acts without the benefit of skilled actuarial advice, a fraud which would stem from the Profession's neglect of its responsibilities to establish appropriate standards for the determination of such liabilities.
- 7) Where a Lifeco conducts itself in a fair and responsible manner, the consumer is largely protected against the consequences of the Profession's neglect, but when the Lifeco's affairs are mismanaged, as in the case of Equitable Life, that neglect can have disastrous consequences. In particular it creates a massive 'knowledge gap' between those policyholders with actuarial advice, and the great majority who lack such help. Such a knowledge gap leads to major financial disadvantage for the majority. The Profession does nothing to address such situations and at times, seems actively to promote them.
- 8) Examination of the detailed pattern of events at Equitable indicates that its Management was well aware of the defects in the Profession's methodology, and that it decided to exploit those defects to the full. It could well be argued that such a decision was inherently fraudulent, but what is relevant here is the reaction of the Profession when it became aware of what was happening.⁴
- 9) Between 1982 and 1987 Equitable had awarded large amounts of final bonus which cumulatively brought Realistic Obligations to a point where they exceeded current assets (£3 Billion) by £1.5 to £2 Billion, (according to my own investigations). Absent any correction of those bonuses, this would be sufficient

² The term 'Lifeco' is used as shorthand for 'Life Assurance Company or provider of money purchase or defined benefit pensions'.

³ See paragraphs 22-32

⁴ See paragraphs 33-46

to generate massive overpayments of claims, permanently distort the pattern of asset shares, and undermine the finances of the Society within a few years.

- 10) It is clear that the Profession was aware of this by the spring of 1989, when Ranson formally defended Equitable's methods before his fellow professionals, and received a wide range of pertinent and substantive criticism. Subsequently Ranson carried on as if Equitable had received a standing ovation, not criticism, and the Profession appears to have done nothing, nor did GAD respond to protect the 'prudential' situation which was obviously under great threat.⁵
- 11) It is even more distasteful to report that influential groups within the Profession (including leading firms of consulting actuaries) decided that it was proper to take advantage of the 'knowledge gap' referred to earlier, to gain benefit for themselves and their clients from the fruits of Equitable's mismanagement, at the expense of the ordinary policyholders who were being recruited to replace the capital squandered on the pre-87 cohort.⁶
- 12) Finally, when the inevitable disputes broke out between the Industry and its customers as a result of its failure to safeguard PRE, the Profession adopted the cynical position that there was nothing wrong with either its methodology or the actions of its employers, and that the fault, if any, lay with the feckless behaviour of the policyholders, for not trying to comprehend what was being hidden from them.
- 13) By its actions, the Profession showed that professional and public duty were of negligible importance compared to career progression and commercial advantage. Its claim to be regarded as a properly conducted 'profession' was severely compromised as a result.
- 14) To sum up, the Profession, by its neglect or worse, has inflicted the following disasters on the Life and Pensions Industry and its many millions of customers:
 - a) An utterly flawed valuation and control system for Investment Contracts, which has destroyed confidence in With Profits business and in defined contribution pension schemes.
 - b) An almost mindless adherence to the Cult of the Equity, which led to near universal over allocation of assets to company securities, at the expense of less risky fixed interest and commercial property investments.⁷
 - c) Complete lack of discipline in the estimation of long term interest rates for valuation purposes and in the valuation of guarantees, leading to gross understatement of liabilities by any number of firms within the Industry.⁸
- 15) In choosing the title "With Profits Without Mystery", Roy Ranson was surely taunting the Profession over a) and b) above, and in the body of his presentation

⁵ See paragraphs 47-50

⁶ See paragraphs 51 et seq.

⁷ See IA's earlier submission "Concerns About the Actuarial Profession"

⁸ Exemplified in GAD's failure to intervene in Equitable's use of excessively high valuation rates, and in the 'black holes' which have emerged in a high proportion of occupational schemes

he showed his understanding of all three areas of weakness as well as his ability to manipulate them all.

- 16) Policyholders, politicians, and latterly the FSA have rightly been critical of Conduct of Business regulation as it was set up from 1988 on a self-regulatory basis. But given the flaws on the Actuarial/prudential side which have now been identified, it is difficult to see how any viable system of customer facing regulation could have been created for the Life and Pensions Industry. This has led to very rough justice for policyholders and Lifecos alike, much of which must be put at the door of the Profession.
- 17) Clearly, the FSA is now attempting to put With Profits business onto some sort of sound basis, which is a Herculean task akin to the Cleaning of the Augean Stables. I have considerable doubts whether it is possible to achieve this without explicitly admitting the flaws in the original model. However, theirs is a practical problem related largely to in-force business, while for the Profession it remains an issue of principle.
- 18) **The primary recommendation which flows from this pattern of failure is that the reform of the Profession must take the fullest possible account of the need to put proper professional ethics and effective professional methodology at the centre of the Profession's activities, and to relegate all commercial interests to the periphery.**
- 19) **In terms of long term structure, the concept of the FSA, or some other Regulator from outside the Profession performing the regulatory tasks and leaving the Profession to get on with technical matters seems illogical and impractical. This could easily lead to 'the worst of all worlds'. Surely the better approach would be to give the FSA (or similar body) a general oversight of the Profession's regulatory activities.**
- 20) **However, the Profession must first demonstrate that it can handle the conceptual and methodological challenges of Investment Contracts, of Asset Allocation and Risk, and of Prudent Valuations , before it can be allowed to play an active part in the regulatory arena again. Meanwhile, primary control must surely remain vested with the FSA.**
- 21) I would also suggest with due humility, that the judicial rulings on the subject of WP Funds and Investment Contracts have suffered from the confusion surrounding the whole area, and from the inability of the Profession to offer the Courts clear and consistent advice. This is an important area which an expert committee might be asked to address in due course.

Dangerously Inappropriate Methodology

- 22) In common with most of the campaigners and policyholders who have had to deal with the actuarially based arguments of the Society, I have had a persistent feeling of being transported into an 'Alice-in-Wonderland' universe, where it has been

continually asserted that the contracts that we individually entered into were not the contracts which the salesman described to us.

- 23) After extensive and careful reflection, much of it documented in the papers and reports that I have contributed to over the years, I have very recently come to the conclusion that much of the responsibility for this state of confusion derives from a basic failure of the Profession to deal properly with the difference between **Contracts of Insurance** and **Contracts of Investment**.
- 24) I claim no expertise in Life Assurance matters, apart from that which I have acquired as a result of studying various papers relating to Equitable Life, in addition to my background knowledge of the Financial Sector. However, I would argue that there is a clear distinction between **Insurance Contracts** where guaranteed benefits at a future period of time are spelt out in cash terms, (such as the old form of Retirement Annuity Policy or Endowment), and **Investment Contracts** like With-Profit Bonds or Personal Pension Policies, where the primary benefits depend fundamentally on investment growth, with part or none of the final benefit guaranteed.
- 25) The Profession has blurred the profound distinction between these different kinds of contract, essentially by using the same valuation methodology in each case. This enabled the Industry to claim that was legitimate to back Investment Contracts with a smaller fund than the investor had actually contributed, on the spurious basis that this was sufficient to cover the (inadequate) guarantees. Surely, in the words of the House of Lords, there was an *'implied term'* (or an explicit one) in the contract that it should be administered so as to deliver to the policyholder on maturity, **the sum total of his premiums, less legitimate costs, plus an amount approximating to what those premiums had earned over the years during which the Lifeco had been responsible for their investment**.
- 26) **Only by representing the contract in this latter form were the salesmen (or IFAs) able to market such policies to the public.** For example, a current advertisement states: *"Your premiums will be invested in the With Profits Fund to share in the investment returns of that fund..."*. And yet, it was (and is) standard practice in the Industry to ignore most or all of the policyholder's entitlement to future investment growth, when setting out the financial condition of the Lifeco in question.⁹
- 27) Lord Penrose records that the DTI became aware of this problem prior to the passing of the 1973 Act, and inserted references to the protection of Policyholders Reasonable Expectations ['PRE'], to ensure that the entitlement to such investment earnings had proper statutory backing. Unfortunately, the Profession, either intentionally or through neglect, allowed PRE to become a dead letter. Specifically, the Profession did not require actuaries to calculate the running totals

⁹ For example, with a 25 year endowment or pension policy, and a modest discount rate of 5%, only 50% of premiums on average are treated as corporate liabilities, with the remaining 50% going to charges and to 'Free Assets'. Responsible Lifecos treat the Free Assets as part of the policyholders' entitlement, but other Lifecos seem to treat them as their own to dispose of as they please. The latter appears to be closer to the strict legal position as currently interpreted by the Courts.

of **Realistic Obligations** including investment earnings (or losses), and to reconcile those Realistic Obligations against the **current** net asset position.

- 28) In fact, the Profession allowed Lifeco actuaries to use the old valuation model for ‘Investment’ policies, and to calculate liabilities on a **reversionary basis**, whereby the guaranteed benefits are discounted back from the maturity date of the policy, and in times of high interest rates, the liabilities may be only 60% or 70% of the values notified to policyholders. Such liability calculations also exclude that part of investment growth which has not (yet) been allocated to declared bonuses.
- 29) Thus there was nearly always a massive gap between a Lifeco’s ‘contractual liabilities’ for use in the Accounts, and its realistic obligations allowing for PRE. Any responsible Lifeco would have set up an additional ‘PRE Reserve’ to cover that gap, and would have monitored the asset situation against the larger obligation. In practice, Lifecos used their Free Assets, or ‘Estate’ to fill the gap, and from this simple analysis one can see that it was quite impractical for a Lifeco to deal with investment business without a substantial estate.
- 30) So a competent actuary would be expected to formally defend the ‘liabilities presentation’ in the Lifeco’s accounts, which minimised its liabilities and exaggerated its profits, while at the same time arguing at Board meetings that the ‘Realistic Position’ was the one that needed to be given pride of place. It would not be surprising to find that Life Actuaries as a class had developed a somewhat schizoid personality!
- 31) There was another danger that the Profession was aware of, but seems to have done nothing to prevent: that a Lifeco would manipulate its bonuses to the advantage of one cohort of policyholders, and the consequent and substantial detriment of other cohorts. Lord Penrose finds that there is every reason to believe that such improper favouritism took place at Equitable, and I have attempted to quantify some of the effects.
- 32) In summary, the effect of the Profession’s promotion of inappropriate and inadequate methodologies in the field of **Investment Contracts** was to deprive Lifecos of a proper framework of controls, to deprive policyholders of protections that they were entitled to expect, and generally cause such companies to be **unsafe at any speed**.¹⁰

Issues Raised By Events At Equitable Life

- 33) However, when we turn to Equitable Life, we find that Roy Ranson, speaking on behalf of the Society, told the Profession in 1989 that it had lost its Estate by 1982 and that it saw no need ‘to hold funds back in excess of immediate needs’; i.e. that it had no plans to re-establish an Estate. But we find, on examination, that at about 80% of their business was in the form of Investment Contracts, so what he was saying amounted to a total denial of any requirement to cover PRE and

¹⁰ The use of ‘Insurance’ methodology to value ‘Investment’ liabilities is akin to fitting an airplane with controls from a motor car, “because everyone knows how to use them”. Only a fool would choose to fly in such a craft. But this in effect is what happened to ten million policyholders or more.

Realistic Obligations. One would have expected an **immediate corrective response** on the part of the Profession, but there is no sign that any such thing occurred.

- 34) It could be argued that in doing so, Ranson was merely carrying the Profession's valuation methodology to its logical conclusion, or to put it another way, that the Profession had created the temptation and at last a Lifeco had fallen victim to that temptation. In doing so, Equitable were disregarding the lessons that had been learned (and recorded for posterity) by previous eminent actuaries during the long history of the Society. [Dr Michael Nassim has provided a detailed and illuminating critique of Equitable's arguments and methods of operation in his substantial and carefully researched paper "*An Equitable Assessment of Rights and Wrongs*", which has been submitted to you separately.]
- 35) But Equitable were not just violating an important point of principle. My estimates indicate that, at around the time they were induced to present and debate their innovations with the Profession, their allocations of bonus in excess of available assets exceeded 50%, and that the end of 1986 marked a watershed in this regard. An over-allocation of this order to one cohort of policyholders leads inevitably to a corresponding under-allocation to the remaining cohorts, particularly those whose policies are initiated subsequently. Accordingly it is a fundamental breach of the duty to apportion the earnings of the Fund in a fair manner.
- 36) It is necessary to point out that the ordinary investor, in contrast to those with access to actuarial expertise, could not know that his PRE was at considerable risk from 1982 onwards, as Equitable did carry what appeared to be a substantial unallocated reserve in the form of its Fund for Future Appropriations. There was no way for him to discover that this reserve was quite inadequate (see below), and indeed nearly all the relevant data were hidden from him by the way the Society chose to operate and to account for those operations.
- 37) Equitable's plunge into a situation of unacceptably high risk seems to have occurred over the period from the beginning of 1982 until the end of 1987, with 'chickens coming home to roost' over the next 5 to 15 years. Lord Penrose provides a detailed narrative from the perspective of papers submitted to the Board, and I have attempted to reconstruct the approximate 'Realistic Obligations' for 1986 when they appear to have reached their maximum in percentage terms. Following Penrose, the position developed as set out in the subsequent paragraphs:¹¹
- 38) It is believed that, in common with much of the Life Industry, Equitable was in substantial difficulties in 1973 and subsequently, as a result of the collapse in equity markets which occurred in that year. Lord Penrose provides valuable background to this era.
- 39) It now appears that subsequently, under the Presidency of John Caldecott and with Barry Sherlock as General Manager and Actuary, a prudent regime was in

¹¹ See the Appendix for further detail

operation and by the latter part of 1980, **notional liabilities** and assets were closely in line, and off-balance-sheet obligations of less than 15% were covered by the investment reserve. In order to achieve this, bonuses had been held back to levels which compared poorly with the competition.

- 40) However,¹² in 1982 Roy Ranson took command of actuarial matters, (first under the Presidency of David Murison and subsequently, from May 1986 under Roland Smith), and began a campaign to institute a fundamental change in bonus strategy, which culminated in 1986/7 with 'off balance sheet' final bonus obligations, not quantified by Penrose, but which I estimate to be around 45% of disclosed liabilities. It must be appreciated that those Consulting Actuaries involved in Equitable Life 'scheme business', would have had detailed briefings on what was happening from year to year.
- 41) It may also be relevant that any actuary or related party who knew of Ranson's intentions could have achieved a splendid investment return by taking out an appropriate with-profit policy at any time prior to the start of 1982.
- 42) The Profession has an excellent grapevine connecting those in positions of influence, and I have no doubt that there was awareness of what was happening at Equitable and considerable anxiety on that account. It also seems more than probable that there was internal dissent among senior managers at Equitable, given the dangerous nature of Ranson's innovations.
- 43) Such dissent would have been fully justified. It is estimated, on the basis of a crude cash flow model, that the effect of this sustained boost in final bonus was to create **an asset shortfall of the order of £1.5 to £2 Billion on an asset base of only £3 Billion**. The effect of such an extreme act of Overbonussing is to drain capital at 10% of the realistic excess year by year, unless and until the over-bonus is reversed. This is because it causes claims to be paid at an average level grossly in excess of asset share, at the same time as it reduces the asset growth for policyholders' funds.
- 44) This was in no way apparent from the accounts or the regulatory returns as Final Bonus does not appear in either except as part of claims when policies mature.
- 45) During 1986, while the new strategy was awarding final bonuses at three times previous levels, W. Barry Sherlock, nominally chief executive and principal actuary was placed on attachment as first Chief Executive of LAUTRO. This was well known in the Profession.
- 46) It can be argued that this 'innovation' of awarding large incremental amounts of final bonus (and subsequently notifying them to policyholders as part of accumulated 'policy value'), completely ignored PRE and was sufficient to account for all of Equitable's subsequent financial difficulties, up to the point at which it closed to new business in December 2000. Absent this act of irresponsibility the GAR problem and the Hyman case would have been manageable, albeit in a less attractive and therefore smaller Society. In short this

¹² See the Appendix for further detail

deliberate **act of commission** was a near mortal blow to the Society, and the subsequent failure to undo its terminal effects was a **continuing act of omission**.

The Ineffectiveness of the Profession

- 47) These developments now appear to be the reason that Equitable was ‘invited’ to explain its business model to the Profession, a most unusual event. Hence the previously unexplained meetings in London (1989) and Edinburgh (1990) where the Profession as a whole was given the opportunity to comment on “With Profits Without Mystery” as presented to them by Ranson and Headdon.
- 48) The paper and the subsequent debate were expressed in language that was not intended to be readily comprehensible outside the Profession, and which very largely succeeded in this. We now realise that the sophistries and fallacies embedded in the Equitable approach were easily identified by the more capable actuaries present, and they are recorded in the proceedings for those who know how to interpret ‘actuary-speak’.
- 49) This analysis indicates that the Profession ‘knew’ the real story of Equitable Life which was in essence a fairly simple exploitation of the known weaknesses in the Profession’s guidelines and a disregard of the principles of prudent Life Fund operation. It acted to withhold that story from Parliament, from the new Management of Equitable, and from Lord Penrose.
- 50) Ranson simply ignored the criticisms and continued as before. The Profession must have realised that Equitable’s business platform was fundamentally unsound, despite the window dressing of its innovation and uniqueness. **Despite its central role in the formulation of binding standards for appointed actuaries and the like, the Profession appears to have done nothing whatever to take the issue further.**

Ethical Issues

- 51) But what happened next was even more remarkable: Equitable gained a significant amount of new scheme business (as well as retaining existing contracts) under the patronage of eminent consulting actuaries, including the GAD, thereby underlining the conflicts of interest inherent in GAD’s role at the time. So, the professionals best able to appreciate Equitable’s weakness and risk to policyholders, were putting new money into its with-profits fund.
- 52) The only credible explanation is that they did so under what they felt to be, cast iron assurances that the funds in question could safely be withdrawn without penalty, if their security came under threat for any reason. One envisages letters of comfort and the like, available only to the Profession and its clients, that no ordinary policyholder would dream of asking for. When the boom was lowered at the end of 2000, there was every sign of such undertakings being honoured!
- 53) In addition, Equitable’s contracts were administered with undue leniency: surrenders were allowed without penalty, despite their cost to the fund, and switching between WP and unit linked investment was positively encouraged,

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where in other offices it would have been prevented as “Selecting Against the Fund”, a well known danger in WP funds which are vulnerable to just such no-risk arbitrage. Indeed it has been discovered that Equitable’s sales force used to do such switching en-masse on the basis of insider tip-offs about the size of the annual bonus allocations.

- 54) The issue here is not whether the actions in question were **illegal**, but whether it was in any way **proper** for the Profession to profit from its knowledge of the weaknesses of Equitable’s finances and the flaws in its operational procedures, knowing as they must, that the extra profits made by their clients and themselves could only be at the expense of the ordinary policyholders. It is difficult to avoid the conclusion that in its actions relating to Equitable, the Profession took no account of public duty whatever.
- 55) Financially, Equitable was at its weakest in the period 1990-92, before the exponential growth of new business diluted the cumulative asset shortage generated by the 1986 over-bonussing. The GAD did not intervene and Penrose records some of the special protections that the Society received during this period. There has been much talk of high level political patronage as the source of Equitable’s arrogant confidence, but the possibility **that Equitable was kept going as a milch cow for the Profession** also needs to be considered.
- 56) Penrose also describes how the Actuarial Department at Equitable retained effective control over corporate policy by denying the Board access to relevant information and assuming unfettered powers in key areas. It is not at all clear that this was deprecated by the Profession, and it may well have been admired and encouraged. Certainly the Profession remained blind to the dangers of such behaviour.

Misleading Explanations

- 57) By the year 2000, the original 1986 over-bonussing had probably cost between £7 -£10 Billion in lost capital against which the £2 Billion cost of guaranteed annuities was almost insignificant. And yet, the legend was diligently fostered by the Profession that Equitable was brought low by unreserved for guarantees. The truth is the opposite – it was non-guaranteed obligations that broke her, and the Profession had expected that to happen since 1990 at the latest.
- 58) Also, the claim by the holders of the mass of those policies with guaranteed annuity rates that they were entitled to large final bonuses in addition to their guaranteed funds was totally without merit. The bonuses were excessive and there were no funds to cover them. They should never have been awarded, but this information was not disclosed to legal advisors(?), nor to the relevant courts. Again, the role of the Profession in these legal actions merits some critical study.
- 59) Later, the real origins of Equitable’s problems were withheld from all classes of policyholders during the Scheme of Arrangement procedures in 2001-2, thereby benefiting the holders of the GARs at the expense of the remaining policyholders. It is not necessary to ask whether the reports of the Appointed Actuary and the Independent Actuary, (both eminent members of the profession), contained any

falsehoods, but it is most relevant to ask what facts were omitted that creditors and policyholders had a right to know.

60) Lastly, it is not hard to discern dissatisfaction on the part of Lord Penrose with the quality of advice received from the Profession in the course of his Inquiry. Some of the matters set out here were not disclosed to him when they could well have been.

Yours sincerely

Michael Josephs

APPENDIX: The Distortion of Policy Values

- I. The key to the financial destruction of Equitable's With Profits fund lies in the period between the beginning of 1982, when Roy Ranson assumed office as AA and Joint Actuary, and five years later at the end of 1986 when the stated values of policies were no longer represented by any approximation of real assets. It is interesting that D.L. Murison was appointed President in 1982 and stepped down in May 1986 in favour of Roland Smith.
- II. Lord Penrose describes the events as seen from the perspective of Board documents, but he is not able to quantify the scale of the 'off balance sheet' liabilities created in the form of incremental final bonuses. However, he leaves little doubt that the prime mover was Ranson, and that, from the beginning, he intended to increase final bonuses by two to three times the previous levels.
- III. Ranson presented an elaborate rationalisation of his approach to WP investments in the paper "With Profits Without Mystery" submitted to the Institute of Actuaries in March 1999, and to the FoA in January 1990. Dr Michael Nassim has subjected this paper to comprehensive analysis and concludes that it is riddled with sophistries and casuistic arguments, intended to hide the fundamental flaws from the casual or uninformed reader.
- IV. This writer has developed a number of simple spreadsheet models of the Equitable business, and is satisfied that the system outlined in WPWM is totally unsound, and that it generates excessive bonuses and unsupportable capital drain in almost all business conditions. In particular, it leads to rapid collapse when the overall level of business is stable, which is an unacceptable situation. These defects in the business platform must have been quite obvious to any competent actuary experienced in 'Life' business.
- V. More recently Nassim discovered a marketing oriented document giving year by year accumulations of final bonus going back from 1999 to 1963. By reverse engineering the figures it proved possible to estimate the equivalent simple rates of final bonus year by year back to 1968, albeit with reservations because of the nature of the document itself. By comparing similar tables from annual reports in 1984 and 1986, it could be established that the interim bonus for 1987 was set at the extraordinary rate of nearly 30%, subsequently reduced (after the October '87 crash) to a more typical 13%.
- VI. It must be borne in mind that the system of allocating annual increments of final bonus was only introduced at some point during the period in question and was not notified to policyholders until 1987 or 1988. Hence the final bonus rates calculated for the years 1968 to 1981 are purely nominal, and indeed there is evidence that older policies had their allocations of final bonus frozen from time to time, while newer policies were favoured, which could only happen when there was no public announcement of incremental bonuses.
- VII. The new figures indicate a quite extraordinary state of affairs, whereby over a period of five years, Final bonuses were increased by 64%, and by 90%

(temporarily) over a six year period. These non-guaranteed bonuses were applied after the contractual 'declared' bonuses had been added to the guaranteed value of the policy. Such a rate of bonus allocation was unheard of historically, and was not in fact to be seen again. For comparison, the six years ending in 1999 saw only a 28% accumulation of final bonus, and the 14 years (1987-2000) saw only 60%.

- VIII. The cumulative effect of such large bonuses was to increase the proportion of the hidden 'final bonus' from under 15% of guaranteed liabilities in 1980 to about 45% at the end of 1986. After that, an increasing flow of new policyholders and premiums which did not benefit from the Overbonussing, progressively reduced the average overhang.
- IX. As Penrose makes clear, the creation of these 'realistic liabilities' was not accompanied by the building of corresponding assets, and we can be sure that, by 1986, there was a substantial deficit on a realistic basis. I have estimated that deficit to lie in the region of £1.5 Billion to £2 Billion at the end of 1986, on an asset base of £3 Billion. This deficit was not apparent from the Accounts, essentially because Policyholders Reasonable Expectations were not addressed adequately by either the auditors or the actuaries at Equitable. [See the fuller discussion in the main body of this submission]
- X. The effects of such a deficit is most easily visualised by treating it as a compulsory loan being made by future generations of policyholders to the current cohort. Unless steps are taken to repay that loan by the present generation, then it will effectively increase year by year by whatever increment is applied to the policies in the WP Fund. There is no sign that any adequate steps were taken in this direction, and the consequence by the year 2000 would have been a capital deficit of £7 Billion to £9 Billion compared to what should have been available if payments had been made on a basis consistent with fair asset shares.
- XI. An asset shortage of such huge dimensions is entirely consistent with a careful reading of the Penrose Report, with the losses that have been borne by policyholders and with the evidently parlous state of the Society at the present time. Hence the question of GAR guarantees was secondary. It was the straw which broke the camel's back and little more.
- XII. The conclusion is obvious: ***Equitable Life may have died in 2000, but it was mortally wounded by its own actuaries 15 years earlier, and the Profession and the GAD must have known it. Had they acted in time, great harm would have been avoided. They did not act, and sought to hide the need for such action. Now it is time to account for that inaction.***