

A paper to explore the preservation, survival and resurrection of defined benefit in the current crisis.

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Section 1: Preamble: survival or extinction

Wedgwood and Darwin

- 1.1 As we stand on the precipice of the collapse of the great Defined Benefit empire that has supported former generations, we must try to learn the lessons of history. Ironically the sponsoring business behind the failing Wedgwood enterprise contains a very relevant lesson. The pottery business established by Josiah Wedgwood became incapable of survival due to the changing environment. Survival is dependent on the ability to change and to acclimatise to the new environment. Ironically Josiah Wedgwood's grandson was Charles Darwin. It is now 150 years since he published the famous "The Origin of Species". This book highlighted how evolution and natural selection operates through the survival of the fittest. Clearly it is the case that Wedgwood as a business proved to be unfit, and in the absence of evolutionary change has dwindled.
- 1.2 Resurrection of a business is dependent on new investment, which will only materialise if there is a change in direction. A new plan and a new focus must be discovered embracing a new momentum. But it must command respect and be credible so that it is sufficiently attractive to be embraced by a large enough following and a believing multitude. Leadership is all about discovering the cutting edge and putting it to good effect. Failure to discover leads to a lonely and exhausting search and eventually losing the way into darkness. The lack of light will slowly render the machine listless, disorientated and it will ultimately fall into decline.

Innovation

1.3 Innovation has been identified very often as the crucial ingredient which accounts for survival by some companies and species ahead of others. When Microsoft developed the Windows Operating System, the company made a momentous defining breakthrough, which ensures its pre-eminence and current survival. But challenge and change will eventually happen and is inevitable. Darwin recognised this by indicating that extinction is an integral part of evolution. Extinction like death is a great leveller, sweeping away regiments of species including companies/institutions as the environment changes and in the process various practices/specialisations can be rendered redundant.

Extinction

- 1.4 To interpret the extinction process by holding it up to the mirror of history we try to project the image forward. In this process I see the possible extinction of Estate Agents, Investment Managers, Bankers and of course old fashioned methods for storing wealth.
- 1.5 In our world, extreme and sustained weather conditions provoke changes in the species who can survive. The weakest are identified and in turn they succumb to the wilderness and die. Business survival is dependent on innovation, automation, relocation of production and market intelligence. The dinosaurs abound, observe Wedgwood, Woolworths, Anglo Irish and how they all failed to change at the crucial stage. Darwin contended it was futile to attempt to protect species from destruction. He would undoubtedly have rejected the concept of bail outs for failing banks.

Survival through adaptation

- 1.6 I wonder what Darwin would think of Defined Benefit Pension Schemes and their potential demise on failure to meet statutory funding standards. A new approach is needed, a new structure is required. Darwin contended that a new species is born, maintained and survives by acquiring and demonstrating an advantage over the competing opposition. Ultimately many species, companies, products are all competing to be supported by limited resources and the limited customer base that exists.
- 1.7 Darwin's great observation was that it would not be the strongest or indeed the most intelligent who survive, it is the species that adapt best to change. The purpose of this paper is to explore some ways in which Defined Benefit can evolve and exhibit a sufficiently strong change process to ensure its survival albeit in a new form.

Section 2: Introduction to the present Funding Standard

2.1 The Pre-1990s approach

In the early years of defined benefit, many schemes were set up at a time when:

- former employees on pension were being paid directly from company revenue
- existing active employees had completed significant periods of past service and no advance funding had taken place.

Furthermore at the time there were no accounting standards to create any form of financial structure or discipline around the emerging cost of benefit arrangements or accumulating liabilities.

In order to get the funds up and running the contribution arrangements were in many cases designed along the following lines whereby:

- a. the average cost of one year of accrual of future service was expressed as a percentage of the payroll of the corresponding population of employees, and to this was added
- b. an amount to represent amortisation in respect of the capital value of the past service of the active employees and of the pensions in payment to retired former employees spread over the average future service period of the active employees. The cost was represented by a level percentage of the payroll, payable for the amortisation period assuming that the payroll remained stable in real terms.

In order to ensure that there would be sufficient money to at least cover the emerging cost of buying out the pensions for retired members, a "sufficiency test" was completed. This test was designed to ensure that the flow of contributions would be sufficient to at least cover the capital cost of securing pension by purchasing an annuity as each retirement took place. Essentially it was similar to our present Funding Standard with zero cover applicable to the actives / deferreds.

Subsequently many schemes progressed to targeting in addition, 100% cover for the accrued benefits of actives / deferreds (but with no form of revaluation in the period before normal pension date). However, it is important to understand that there was no statutory Funding Standard or wind-up requirements. Practice developed according to house policy and style, actuarial input and the actual terms built in to scheme specific legal documentation.

2.2 Catalyst for change

As a consequence of the H Williams pension scheme debacle in the late 80's when the supermarket chain ceased trading and their pension schemes proved insolvent, the Irish government introduced extensive legislation in order to regulate the operation of pension arrangements and protect members of pension schemes. As a key part of the legislation a new funding standard was introduced in order to establish a "floor" for the level of assets to protect accrued benefits. This requirement is known under legislation as the statutory minimum Funding Standard. It is important to recognise that this Funding

Standard has as its objective the provision of accrued benefits on wind-up, calculated in accordance with the specific pension scheme rules. In reality the transfer values available to actives/deferreds will not secure the deferred benefits.

2.3 Statutory Funding Standard

The Funding Standard is designed to ensure that in the event of a pension scheme termination (windup) sufficient assets will exist (excluding self investment and concentration of investments) to deliver the following costs/benefits in the order of priority by category as specified:

- 1 The expenses incurred under the termination.
- 2 The entitlements of members in relation to their Additional Voluntary Contributions under the pension scheme.
- 3 The cost of buying out from an insurance company all pensions currently in payment to pensioners (including allowance for any attaching spouses' entitlements on death). This category also includes individual members who have reached normal pensionable age but who have remained in employment.
- 4 A transfer value payable in the case of
 - a. each deferred pensioner (a former employee who retains a benefit entitlement) in respect of their accrued benefit entitlement on leaving service;
 - b. each active member in respect of their accrued pension (based on final pensionable salary and pensionable service completed at the termination date).

The liability under one category must be met in full before moving on to deal with the next category. In calculating the transfer value the methodology and assumptions are set out by a combination of legislation and Actuarial Standards of Practice (ASP). However the transfer value amount does not represent the cost of buying out the deferred benefits from an insurance company. Furthermore as the legislation does not require allowance to be included in respect of benefits granted on a discretionary basis, meeting the Funding Standard is not equivalent to reflecting members' expectations. This applies specifically in relation to discretionary pension increases.

2.4 Actuarial Certification

In the case of each defined benefit pension scheme the trustees are obliged to arrange for an actuarial valuation to be carried out at least every 3 years and for the actuary to furnish an Actuarial Funding Certificate. The Certificate sets out a measure of how the value of the scheme's assets compares to the value of its liabilities using the assessment process outlined above. This effectively indicates how members' benefits valued under the Funding Standard requirements would be covered had the pension scheme gone into wind-up on the date of Certification. It is purely an assessment at a point in time, and the Certificate must be supplied ordinarily within 9 months of the effective date. The trustees are obliged to lodge the Actuarial Funding Certificate with the Pensions Board.

2.5 What happens if the Certificate reveals a level of cover less than 100%?

If the Actuarial Funding Certificate reveals that a shortfall exists at the effective date, the actuary will construct a Funding Proposal to be agreed with the trustees and with the sponsoring employer. The Funding Proposal is effectively a plan of action which if implemented should result in the scheme meeting the Funding Standard at the end of a specified period (sometimes referred to as the Restoration Period). The Funding Proposal must be submitted to the Pensions Board.

2.6 Funding Proposals

The normal restoration period automatically available for the purpose of a Funding Proposal is 3 years. However subject to satisfying certain conditions (for instance that the deficiency arises in the main part due to investment underperformance) on application to the Pensions Board a longer restoration period of up to 10 years may be approved by the Pensions Board (although longer periods may be granted in special circumstances). Under the Funding Proposal the Actuary certifies that based on the assumptions adopted the scheme would be expected to meet the Funding Standard at the end of the Proposal Period. The assumptions for projecting asset values are constrained insofar as certain ceilings apply depending on asset mix and so forth.

2.7 Annual Statements by the Actuary

Each year (other than in a Triennial Certification year) the Actuary is required to supply an Annual Statement which is included as part of the Trustee Annual Report. The purpose of the Statement is to indicate whether the actuary is reasonably satisfied that were he to carry out a full investigation,

- the scheme would meet the Funding Standard, where there is no Funding Proposal in place, or
- the Funding Proposal is on track, where there is a Funding Proposal in place.

If the actuary is NOT reasonably satisfied, it will be necessary to either prepare a Funding Proposal or amend an existing Funding Proposal. In each case the date chosen to be the effective date of the Funding Proposal must be no more than 12 months after the qualified Statement Date. In reality given that the Proposal must be signed within the 12 months then the effective date will need to be comfortably within the 12 months. However due to the current crisis an extension to 18 months will apply as a short term measure in certain cases.

An important requirement when preparing Funding Proposals and amended Funding Proposals is that the Actuary must take into account material developments between the effective date of the certificate and the date of signing.

2.8 Funding Proposal options

In addition to meeting the Funding Standard by increasing contributions, there are other options available for consideration. These options include the following items or a combination:

- A reduction in the benefits to be credited in respect of the future service of the active members.
- A discontinuance of the benefits in respect of the future service of the active members.

- A capping of the level at which salary increases will apply in the future to all benefits for active members.
- Converting part of the scheme benefits to equivalent benefits administered on a discretionary basis.

Ultimately any reduction or curtailment would have high level HR implications and would require careful communication due to the loss of security for the members concerned. In the absence of agreement between the employer and the trustees, the Pensions Board has the power to intervene and impose specific conditions including a reduction in the past service benefits of active members.

2.9 Investment considerations

In general the underfunding of pension schemes is caused in the main part by lower than expected investment performance and improving mortality experience. Given the high exposure to real assets and their inherent volatility it must be recognised that pension schemes are continuously at risk of underfunding and Funding Proposals going off track. One way to tackle this and thereby reduce the risk is to build a pool of assets that match the liabilities more closely. However a reduction in real assets and an increase in exposure to bonds will inevitably lead to higher contributions over the long term, whereas the expectation is that despite the volatility of real assets they will ultimately deliver higher returns.

2.10 Contingent Assets

As a means of avoiding the need for capital injections under a Funding Proposal while being able to continue with the existing benefit terms and conditions, the role of Contingent Assets has attracted some interest as of late. A Contingent Asset is one which does not form part of the scheme's normal portfolio under the trust but is governed by a separate contract. The main requirement is that the asset is available to the trustees in the event of the scheme going into wind-up. Therefore as the Funding Standard relates to what would happen in wind-up, the Actuary can take credit for the Contingent Asset when carrying out his Funding Standard assessment. A specific legal agreement would be required to underpin the position of the trustees contractually and limit the rights of the sponsor and its creditors. The contract would therefore cover critical terms such as:

- What is the asset and what is its status in the sponsor's business?
- The term over which the asset would be pledged in the manner agreed.
- The position that would obtain at the end of the period and any renewal options.
- Limitations on the actions by the sponsor in relation to the asset and related assets that could impact on value.

The nature of contingent assets makes it imperative that the Actuary is very clear about what is the appropriate value to be taken into account for Funding Standard purposes. In this regard it may be necessary to employ independent valuation expertise.

- 2.11 Contingent assets may take many forms but the most common are:
 - A property of the employer which can be assigned because it is not encumbered.

- An amount placed on deposit which cannot be used for other purposes during the contract period.
- A letter of credit issued by one or more independent and highly rated financial institutions.

The main attraction of this Contingent Asset is that its deployment helps to create space and time when extreme conditions prevail. The asset value is also likely to be less volatile than the main trust assets, and it can usually be increased if matters worsen.

Its existence can not only assist by substituting for cash contributions (a welcome assist during periods of tight liquidity), but can also help to stabilise matters during periods of volatility by acting as a buffer to absorb asset falls.

Section 3: The present funding crisis and current options

3.1 The options at a glance

In order to solve the pension funding crisis, the stakeholders are faced with choosing from a very simple menu of:

- increased contributions
- reduced benefits
- allocation of contingent assets.

Any combination of these options will suffice, subject to legal constraints. In particular the normal lengthiest period over which solvency can be in normal circumstances restored is 10 years, benefit reductions cannot apply to accrued benefits in the case of deferred pensioners or pensioners and in the case of active members a reduction to accrued benefits would require Pensions Board intervention. In any event, ultimately a reduction in benefits could happen if the pension scheme is put into wind-up. For example in a wind-up of a typical scheme at present, the assets that would remain after looking after pensioners could give active / deferred members 50% of their accrued benefits transfer value.

3.2 Difficult times

In normal economic circumstances what is set out above would be an adequate list to choose from. But these are no ordinary times we are living through. In addition, the availability of sufficiently reliable and durable contingent assets will be more scarce than could have ever been envisaged this time last year. The degree of due diligence and trustee/company discussion around the contract governing contingent assets will be much greater for obvious reasons in the current economic environment. The creation of certain types of contingent assets such as bank deposits, letters of credit etc. will require even greater scrutiny than ever before and the risk of exacerbating an already highly charged situation will emerge in many instances. The obvious cases are Bank sponsored DB schemes, but in fact all employer sponsored DB arrangements are under the microscope.

3.3 Higher contributions

Increasing contributions is a viable alternative during periods of satisfactory trading conditions and of stable employee/pensioner ratios. The difficulty at present is that trading conditions for most entities are due to show serious deteriorations. This in turn while curtailing the affordability of higher costs, will also lead inevitably to a higher pensioner/active liability ratio as workforce reduction takes hold. An increasing pensioner population and contracting funds understandably leave active employees between a rock and a hard place, given the structure of the priority rules under the current Funding Standard.

3.4 Scaled back benefits

If on the other hand a move is made to scale back the benefits promised under trust, the position of existing active members will be severely depleted in any event (as pensioners and deferred pensioners have greater security).

Given the circumstances where:

- cash flow is absolutely vital to the financial survival of both companies and individuals,
- any moves to "save" more at the expense of "consumption" could exacerbate the pensioner/active ratio by accelerating the move from the workplace of many current active employees,
- the outlook for non "risk-free" assets is bleak,

there appears to be a compelling case for finding a solution which is less demanding in these dangerous times, and which is sympathetic to the dire needs of the various stakeholders.

3.5 Solution characteristics

The solutions worth considering at further length involve some or all of the following scenarios:

- The suspension and/or deferral of funding programmes.
- The swapping of government bonds for distressed assets at prices that reflect more fairly the long term possibility of price recovery.
- Some element of government backing for an arrangement that provides security in the event of unanticipated business failures leading to scheme wind-ups.
- Solutions that can be applied even handedly to both defined benefit and defined contribution arrangements.
- Dividing existing benefits into a dual benefit structure under which one part of the benefits is subject to the rigours of a funding standard which, provides security (albeit at a higher level than at present). The second part would be dealt with more by way of "discretionary" or less securely covered.
- Allowing the current reduced levels of funding to be maintained while contributing sufficiently to absorb the strains created as new retirees take place (a form of the old "sufficiency test" referred to earlier).

In some way the actual solutions adopted may end up being a combination of all of these possible supporting mechanisms.

3.6 Benefits restructuring

It is perhaps worthwhile to consider the way in which the final one of the specified proposed solutions in the previous paragraph could operate in practice. But first let's have a look at some of the ways in which benefit terms could be altered as part of a restructuring which would alleviate financial strain. The following possibilities emerge:

Pension increases

If the rules currently allow such increases but at the discretion of one party such as trustees, company or even actuary then the next such increase could either

be declined

or

be granted but not "guaranteed" as part of the pension scheme's terms and conditions. Instead it would be paid as "ex gratia" through the Company.

It does seem anomalous that such an increase could be totally capitalised in order to be paid over the future life expectancy of existing pensioners, and a special contribution paid to finance this capital cost. This at a time when the deficit for active members is being spread forward over a period of up to 10 years. The capital sum could be up to 15 times the annual amount of the pension increase.

As an alternative the pension increase could be awarded separately by the company and paid on a discretionary basis each year through the company payroll. The cost to the company then is the actual amount of the increase due to be paid in that year, not the capital value which could be 15 times the annual amount. This pay-as-you-go (PAYG) approach could remain in place until such time as the current financial crisis subsides. In many respects this is reverting to the approach which prevailed in the pre-1990s. However some form of agreement would be warranted so that as and when more "normal" conditions return, there would be a move to "catch up" on the funding of such increases, thereby restoring the security that is lacking under PAYG.

This approach significantly reduces the burden of cost immediately borne by the employer (as it would take up to 15 years for the accumulated unfunded payments to reach the level of the capital cost of one year's increase). While in the interim pensioners will have received their increases, they are in a much less secure position than if pre-funding of capital values had taken place. At the same time we should expect that the coverage applicable to active/deferred members will have been increasing by virtue of structured payments made under a statutory Funding Proposal. At the time when "catch up" for actives and deferreds is complete the opportunity would exist to turn attention to the unfunded pension increases.

Of course if pension increases are not granted in a discretionary form, and are in fact "guaranteed" then the above approach is not workable under current legislation. Specific enabling powers for trustees/companies would be required to enable such pension increases to be dealt with in a similar manner to what is already set out. It is difficult to envisage legislative changes along the lines that would permit pensioners to be stripped of their "entitlement" to pension increases, without some form of protection in the event of an employer default. Such protection could enter the space of employer debt and/or State guarantees, both of which are fraught with difficulty.

Salary increases

In the past the cumulative impact of funding the capital impact of salary increases on the past service liabilities of active members under defined benefit pension schemes, was significant. Going forward such increases are likely to be less in size and in some cases could in fact be zero or even negative. It would seem reasonable for legislation to accommodate a more pro-active approach to introduce the type of change which caps salary increases for pension purposes. For example under existing

legislation it would appear that it would not be possible to change rules so that annual salary increases are less than the level of statutory revaluation. But if it were possible to declare "zero" salary increases for pension purposes for a number of years as part of a Funding Proposal, this could go some way towards alleviating the financial strain. The practice of zero increases is likely, in any event, to become more common in the domestic labour market. It would also be quite natural to consider extending this practice so that it could apply in the case of "guaranteed" pension increases.

Of course a freeze for a period of 3 years on pension increases, pensionable salary increases and actual salary increases would have its drawbacks by curtailing or reducing actual consumption. However, if it emerged as an alternative to pension scheme wind-ups and job losses and if in addition it resulted in lower costs (and in turn a more competitive economy) then it could be a constructive option.

Normal pension age

At present many pension schemes have reflected "Celtic Tiger Psyche" in their definition of the age from which pensions commence. A normal pension age of 60 is not uncommon and even where the state pension age of 65 applies under the occupational scheme, there is very often a concessionary discount in the event of early retirement after age 60. However, in face of increasing life expectancy and the economic recession, such extravagance is difficult to justify. Other countries in Europe such as France, Germany and Greece have all woken up to this issue and have moved swiftly to bring retirement age and life expectancy more into line with each other. With the challenge of current funding levels and asset values there is no doubt that this change must happen in Ireland at both State and private sector levels. If you consider the increasing propensity on the part of married couples to defer having their children until their 30's and often well into their 30's then the practice of retiring later becomes an economic and social necessity. It will of course throw up a different challenge in terms of finding the right combination between leisure time, working time, remunerated activity and social service. But the challenges presented by the issue should not put off tackling the problem or making the necessary change.

Years of accrual

In the sense that pension is viewed as deferred pay, and bearing in mind that the level of pay is under major scrutiny in many organisations, it would not be unreasonable to consider a suspension or reduction in pension accruals for a specified limited period. For example as part of a Funding Proposal the active members could have no accrual for 3 to 5 years. This is likely to be more equitable than a long term reduction to the accrual rate as

- the funding position is likely to be restored more quickly,
- each active member is affected immediately to a similar extent,
- the cost is borne contemporaneously with the duration of the economic downturn.

Nevertheless, in taking this approach the stakeholders would need to be convinced that benefits at their current levels are affordable and sustainable over the long term, when the temporary period of suspended pension accrual has elapsed.

3.7 In practice some combination of the foregoing possible changes would apply, with priority being given to the changes that best meet an organisation's needs.

Section 4: Adopting a "Hold" Funding Strategy with pension increases

4.1 Ceding security for survival

As indicated earlier there may be scope to develop an agreement in favour of adopting a less stringent (albeit less protective) Funding Standard in the short term. However such an approach would need to be aligned with a move towards a more robust long term funding standard. In the short term however companies are faced with very demanding trading conditions which are leading to a major downturn in profits, potential redundancies and in some cases closure. The burden of increased contributions under a Funding Proposal in order to restore solvency could precipitate the closure of a pension scheme, and/or the closure of a company.

4.2 Example

The worst case scenario is closure. In such circumstances the legal requirements kick-in and we can use the following example to illustrate the position:

	Liabilities	Assets	
	€m	€m	Coverage
Pensioners	80	80	100%
Deferred pensioners	5	21/2	50%
Active members	15	7½	50%
	100	90	-

This is a typically mature defined benefit pension scheme. However post retirement pension increases are discretionary and as such do not figure in the liability values set out. Although the scheme's overall funding level at 90% does not seem extreme given the falls that have occurred in asset values, the coverage for deferred and active members is a lowly 50%! If allowance had been included for pension increases the deferred/active cover would have evaporated to 0%, and the pensions coverage would fall below 100%!

4.3 Funding Proposal requirements

In order to address this deficiency under existing rules the following liabilities must be met over a 10 year period.

- a. The disclosed deficit of €10m
- b. The capital cost of pension increases that would be paid over 10 years of €20m (assuming inflation averaging 3% pa).
- c. The pension accruals for active members over the next 10 years of €10m (assuming an average past service period of 15 years).

d. The excess of salary inflation over price inflation and the additional liability created by movement of current deferred/active members to pension.

If we assume that the additional returns due to be earned on the fund (and not allowed for under the Funding Standard assessment) over the period will support the costs under d. then in crude terms the annual cost over a 10 year Funding Proposal period will be \notin 40m \div 10 = \notin 4m which is four times the cost of accrual!

In many respects this assumes a fairly benign overall funding level of 90%. If this level were to drop to 80%, so that only pensioners are covered then we would have an annual contribution of $\mathfrak{S}m$, five times the cost of regular accruals.

4.4 Isolating pension increases

Of the annual cost by far the largest element is pension increases (which are discretionary). Given the discretionary nature of the benefit, it can hardly go without discussion as to whether it ought to be granted. From a trustee perspective the granting of the increase must be subject to payment of the capital cost, and as indicated this would involve €2m. However from a corporate perspective the sponsor could:

- indicate that such cost would not be met in which case the trustees would have no option but to decline the increase, or
- specifically not sanction an increase in which case the end result is the same.

In either case the sponsor would be at liberty to consider paying the increase directly to the pensioners (outside the legal entity of the pension scheme). This would involve a payment of €200k each year. The difference of course is that in respect of this increase there is no security for the pensioners in the event of a wind up and furthermore as the increase is discretionary it could be discontinued at any point in time. Nevertheless, from a corporate perspective this does reduce the overall annual contribution from €4m to €2.2m per annum under a Funding Proposal. Under this approach, and if it is sustained over the 10 year period, as each increase is granted the annual cost will increase until eventually it will reach the €4m mark. But as explained, no reserves will have built up to back continuation of the cumulative increases granted over the period. The reduction in pensioner security is mirrored by a favourably improved cash flow position for the company, throughout the 10 years.

4.5 Fair and equitable

In a situation where the level of cover for active/deferred members is zero and pensioners are just covered, the approach outlined above does present the opportunity (subject to affordability) to shorten the period over which 100% cover is attained. For example by paying €4m per annum the deficit could be covered in 6 years.

If in an extreme case the cover for pensioners is less than 100%, then under any Funding Proposal, it will only be at the point when the 100% cover for pensioners is reached that the cover for actives and deferreds will commence its restoration path. As it is the business activity engaged in by active employees which generates the profits from which pensioners' cover is restored, it does seem equitable to adopt the discretionary approach to pension increases.

Section 5: Generalising the "Hold" Funding Strategy

The need for generalisation

5.1 I would now like to explore a generalised version of the "Hold" Strategy that was described in the previous section. In the previous section I specifically used discretionary pension increases as the vehicle to facilitate "Hold". In order to make this work for all schemes they would have to be either (a) with discretionary pension increases, or (b) with guaranteed increases which could be treated as discretionary following a change in legislation. What if the change in legislation is not forthcoming or the benefit terms simply do not include post retirement increases?

Adapting like our ancestors

5.2 Recall that the purpose of the exercise is to find the space and comfort zone within the existing environment, so that we can continue to move freely and to deliver much needed income to individuals in retirement. In exploring the possibilities we are seeking freedom to exist, the ability to survive and the hope that when the "storm" subsides we can rebuild our world with a new found security. It is analogous to our ancestors the cave men when faced with unprecedented environmental change. Those who were strongest felt they could master the elements and could find food and wood in the plains and could return with much needed sustenance. Those who were intelligent felt they would move to the other side of the mountain where they would be sheltered. The first cave men simply came about by changing their habits and living within the mountain in caves, and developed a life there. Neither did they fight or run, they adapted.

Find a different river until pollution is eliminated

5.3 The approach I am about to outline is not intended to convey a message that security is something not worth pursuing. It is not intended to convey that we should abandon or even consider futile the practice of funding for retirement. This practice has served us very well and in the right conditions was indeed a much needed and laudable approach. However, the beautiful river that weaves its way through the fields is a great gift to the earth and its citizens. It provides for drinking, for industry, for washing and so forth. If it becomes polluted, we have to change our attitude, and to find a new source of water. Failure to adapt will lead to extinction. Adaptation will facilitate survival and will also allow the possibility of restoring the river to its former glory.

Wind-up is a form of extinction

- 5.4 Referring once again to the example used in paragraph 4.2 we see that the pensioners are covered 100% and actives/deferreds 50%. This means that if a wind-up is triggered on the assessment date the pensioners are fully covered and can be secured by purchasing annuities from an insurer. However, the actives/deferreds would receive only 50% of the transfer values specified in the legislation.
- 5.5 Almost without exception, the legal documentation which governs pension schemes would allow the employer to cease paying contributions to the pension scheme subject in some cases to a minimum

notice period. This would normally trigger the wind-up of the scheme, although in some cases the trustees could decide that it would be in the better interests of the members to pay the benefits directly from the fund (that is to run it off). The likelihood of this approach delivering significant improvements by reference to the alternative wind-up, would be small and would involve adopting corresponding higher risk (which the trustees would in most cases be looking to avoid). In the case of a solvent employer there may be scope to demand payment of the deficit amount in order to increase the actives/deferreds cover to 100%. But this could render the employer insolvent in the process, and if the employer is already looking at insolvency in any event then recourse to the Employers Insolvency Fund may be the only hope of some degree of restoration.

5.6 The preference would be that in these difficult times we could avoid wind-up, limit the impact on the employer's cash flow, deliver the benefit payments as they arise, create an agreement which offers hope of restoration when conditions prove more favourable.

The "Hold" Strategy

- 5.7 With this in mind let us try the following. As a minimum the employer commits over the next 5 years to achieving these targets:
 - Maintaining the level of cover for pensioners (including any new pensioners) at 100%
 - Maintaining the level of cover for those who remain actives/deferreds after 5 years, at 50% (or if lower the percentage cover currently applying).

In order to maintain this "status quo", contributions would need to be paid each year to cover these principal costs:

- a. the difference between the rate of return assumed for the assets and the rate of interest adopted when discounting the liabilities,
- b. the impact of any underperformance by the assets in relation to the assumed rate of return indicated above in a. for projection purposes,
- c. the cost involved as members retire in order to meet the excess of covering pension liability (assessed by reference to open market annuity rates and based on full service and terms of the pension scheme rules) over the 50% transfer value cover being maintained throughout the projection period up to retirement,
- d. the excess of actual salary / price inflation over the assumptions made when formulating the funding strategy,
- e. any strains that arise from membership movements and demographics to the extent they are not anticipated in the projections for the purpose of the funding strategy.

This approach does not preclude its application in conjunction with the illustrated method in Section 4 for the purpose of dealing with pension increases or the various benefit changes to contain long term costs as set out in Section 3.

Investment Strategy

5.8 The initial contributions schedule developed under a 5 year projection in order to meet the objectives set out in the earlier part of paragraph 5.7 will be such that there is intended to be no diminution in the cover of 100% and 50% between pensioners and actives/deferreds respectively. Subsequent reviews will reveal the need for modifications in light of actual experience relative to expected outcomes. One such expected outcome relates to investment return. Depending on how the assets are invested there will be more or less likelihood of gains and losses materialising throughout the period. In particular the expected return on equities/property is likely to be greater than the roll-up increase in pensioner liabilities whereas the reverse could be the case for transfer values. The scope for variability is however, very great. One of the trade-offs therefore to be considered in the context of the reduced level of security associated with the lower funding strategy is to adopt a corresponding investment derisking policy leading to a much higher bond content.

Reduction in contributions

- 5.9 As the approach outlined requires targeting a policy which maintains only 50% cover based on service at the beginning of the "changeover" there will be a fundamental shift relative to the status quo when considering contributions and funding levels. The immediate impact relative to the status quo is that there will be no need:
 - to make up the deficit in respect of service completed prior to changeover in the case of deferred members and active members who have not moved to pensioner status by the end of the projection period, and
 - to fund in advance for the cost of future service accruals after the changeover in the case of active members who will not retire during the projection period.

In each case these costs would have been included in the Funding Proposal projections that would currently be required.

5.10 The effectiveness of this approach is correlated to the pension scheme's state of maturity. For a very mature scheme the impact is least, whereas the reverse is true in the case of an immature scheme. Nevertheless relative to the Company's payroll the impact is significant in all cases.

Avoiding employer "walk-away"

- 5.11 The purpose in proposing the form of relaxation as outlined is to create space to breathe and survive. It is not a mechanism to allow employers "walk-away" from their commitments. Ultimately decisions will be required to determine how to address such issues outlined as follows:
 - (i) How to deal with any recovery in investment values. These should be used to reset the target funding level for actives/deferreds and should not be siphoned for the purpose of reducing contributions further.
 - (ii) At what stage in the economic recovery cycle should the 100% requirements under the current Funding Proposal regime kick-in fully and over what period from that date?

- (iii) What level of benefits should be governed by the Funding Standard requirements when the 100% Funding Proposal does kick-in?
- (iv) Should there be a stronger Funding Standard requirement for actives and deferreds, that is over and above the current transfer value level?
- (v) What legal structures are necessary at the initial stage to make the overall model acceptable and operational?
- (vi) In the event that the reduction in benefits subject to the funding strategy remains "permanent" and a stronger Funding Standard is applied, what happens to the excess benefits? If they are discretionary but funded over rolling periods, is this sustainable?
- (vii) What happens on wind-up during the initial transition recovery period, and thereafter? Is there, perhaps a role to be played by contingent assets?
- (viii) As already indicated, should there be a natural de-risking investment policy unfolding in conjunction with the transition recovery plan.

Back to the future (the pre-1990's approach)

- 5.12 In the extreme situation the statutory "reins" could be relaxed to the point where 0% cover is permitted in the case of actives/deferreds throughout the transition recovery period. This would effectively mean that there is no requirement to prefund benefits in respect of individuals not retiring over an agreed specified period (say 5 years). Essentially the pre-funding would be aimed at building sufficient funds to meet the cost of purchasing annuities as individuals retire, in respect of the core benefits promised. A decision not to purchase an annuity would make sense only for very large funds, where the build up of liabilities would reflect credible experience but investment would be in bonds (unless sufficient higher reserves were maintained relative to the investment risk adopted).
- 5.13 This approach would not preclude the provision of non-core (discretionary) benefits, either in the form of basic benefits, or as would be more likely annual increases on the core benefits. The increases could be dealt with in a flexible manner, either:
 - a. by discretionary payments through the sponsor with no advance funding but some form of insurance cover in respect of default, or
 - b. by pre-funding through the use of a more aggressive investment policy with a commensurately higher (risk level) discount rate to set reserves.

Either a. or b. could be implemented in conjunction with a contingent asset strategy as fall back cover.

Costing the "Hold" Fund Strategy

5.14 In the Appendix I have tried to provide some indication of cost as would arise under the strategy discussed in this section.

Section 6: The role of the State

State as alpha and omega

- 6.1 There has been much talk about pension provision being too important for the private sector to take ownership. By implication the expectation is that the State should organise, control and provide in this area.
- 6.2 Throughout history the State has demonstrated its ability to be enlightened and also to be corrupt. All extreme situations involve a high degree of risk by definition. There is within the cosmos a natural process of evolution. The State undoubtedly has a fundamental role to play at the outset when the origins of a new state are initially established. The need to originate, lead and create momentum is for the State in the first instance. Over time the natural evolution and spread of risk points to greater diversification in the direction of the private sector.
- 6.3 The Society's position under the Green Paper submission indicates very clearly a crucial, pivotal and integral role for the State. Provision of benefits on a pay-as-you-go basis clearly introduces its own risks and demands over time. In particular the level of benefit/increases, in conjunction with the state pension age would have to be tailored and to evolve in order to create sustainability.
- 6.4 However failure by the private sector in the current crisis does not invalidate the approach whereby the private sector has a role to play in the overall provision of pension benefits. Corruption, systematic failures and regulatory deficiency have all contributed to the current crisis. But lets not throw the baby out with the bathwater.
- 6.5 In the same fashion as the State's role was essential in creating the humble beginnings, its intervention is crucial in helping survival and ultimate restoration. Intervention should be with a view to restoration, not with a view to replacement of private sector initiatives by public sector structures for all time.

An essential interaction between private and public

- 6.6 To the extent that the private sector evolves towards a two tier approach as described in Section 5, there is likely to be less quantity of benefit by way of "solid" and highly "governed" private sector provision. In such a world the need for adequate public sector provision becomes even more vital. The interaction between the two would become more emphasised more visible and more dynamic.
- 6.7 The overall vision in this interplay between State and Private Sector pension provision could be translated and extended to also cover the Public Sector Workforce. As employees, their inclusion as beneficiaries with entitlement to a State pension like every other employee must be supported fully. If in addition they are to be provided with extra pension then it must be subject to the same criteria as apply in the private sector which are:
 - Affordability
 - Pre-funding
 - Transparency

- Accounting principles
- Independently governed.

This discipline and transparency will help to harmonise the overall structure and avoid the anomalies that prevail at present.

Wind-up protection

6.8 The proposed short term remedial solution proposed in this paper, does not reduce the long term cost of providing benefits but simply reschedules the cost. This occurs by pushing more cost to the point when retirement takes place. In addition there will be less fund from which to gain investment return, in which case the running cost will rise to a higher level unless there is a return to "full funding". Nevertheless consider the formula,

C + iF = B

This describes the contributions required when a stable state is reached for pension schemes generally. Contributions (C) plus real return i on the Fund (F) will equal benefit outgo (B). If the real return is negative then contributions must increase correspondingly to compensate accordingly. This is what is currently happening and is more demanding than simple PAYG.

6.9 One of the weaknesses in the hold strategy outlined in Section 5 is the lack of protection for employees in a wind-up. While the State continues to exist then it can cover its employees in all circumstances. If a company and/or its pension scheme folds then there is no protection. This indicates very firmly that the State has a role to step-in and provide cover in wind-up cases. How that is provided and how it is financed is outside the scope of this paper. Any move in that direction must be accompanied by a stronger funding standard and stricter investment policy. This is the trade off for having State protection.

Section 7: Conclusions

A need to act

7.1 It is not desirable that a human being die on the road side due either to:

- blind and listless passers by, and/or
- failure to act adequately and in good time.

Loss of life that can be saved is very sad and unacceptable.

- 7.2 Deficient, under funded pension schemes do not have to wither, wind-up is not the only option.
- 7.3 The risk of transferring the obligation to the State and ultimately the possible over burdening of future generations of tax payers cannot be allowed to occur without considering carefully all of the options.

Rehabilitation

7.4 The quest for an elixir that will confer eternal youth is a fruitless exercise if the extended life span is a misery. We must strive to rehabilitate ailing defined benefit pension funds. They provide the only source of much needed "life blood" and sustenance to our pensioners and in an aging population context, to our economy.

Adapting and evolving to a new standard

- 7.5 This paper advocates taking a step back and applying the current funding standard protection to a reduced level of benefit. However, this is proposed as an interim measure with a view to survival. Having survived we should move on to embrace key changes in order to build a better system going forward:
 - a. increasing the security level so that it applies to a core level of benefit possibly lower than at present,
 - b. providing the excess benefits on a purely discretionary basis (subject to affordability),
 - c. de-risking by adopting a matching investment policy in respect of the core benefits specified in a. above.

The emphasis going forward must combine better alignment in respect of risk, affordability and security.

A partnership approach

- 7.6 The State has a role to play but its role is more enduring if it ensures the survival and revitalisation of our private sector system. Time will prove that a well organised defined benefit system is key to having a robust and comprehensive pension structure.
- 7.7 While this paper concentrates on the ailing defined benefit schemes that are wilting under the weight of funding demands in an economic downturn, it should be acknowledged that the emergence of hybrid pension schemes is consistent with what the paper advocates.

Appendix: Costing the "Hold" Funding Strategy

Stable state funding

The formula for a stable state situation which connects contributions, benefits and fund size is:

C = B - iF

If we consider this formula for simplicity to illustrate the impact on contributions and fund sizes of different funding targets then we could start with two extremes. Extreme A is one where the contributions are only paid at the point of a person's retirement to cover the full liability.

Assuming an equal distribution of active members at each age between 25 and 65, all on the same salary, pension of 1/60 for each year with attaching 50% spouse's and post retirement increases in line with inflation. Salaries and pensions are all assumed to increase annually in line with inflation. Investment returns are assumed to be 2% pa in real terms. The contribution rate is $2/3 \times S \times Annuity$ factor at age 65 ÷ (40 x S). On this basis, therefore, the contribution rate is 36%.

Pensioners' fund

In this situation our fund will exist exclusively in respect of current pensioner liabilities and its size will be 4.8 times the payroll of active employees. We now have two elements of the three parameter equation, and this allows us to determine the final element which is benefit outgo, $0.36 = B - 0.02 \times 4.8$ according to which benefit outgo equals 45.6% of active payroll.

Pensioners' and actives' fund

Extreme scenario Z is one where contributions are paid to provide full coverage in respect of all active members and all pensioners. In this instance the contribution rate is $1/60 \times \text{Annuity Certain for } 40$ years at 2% x Annuity factor (age 65) x S ÷ (40 x S) which is 23.4% of active pay roll. Slotting this into our formula indicates $0.234 = 0.456 - 0.02 \times \text{F}$, in which case the fund size is 11.1 times pay roll.

Impact of "hold" funding strategy

If we consider a scheme which is funded 100% for pensioners and 50% for actives then the fund size is $\frac{1}{2}(11.1 - 4.8) + 4.8 = 7.95$ times salary roll. In this case the contribution rate currently payable is $\frac{1}{2}(23.4\% + 36.0\%)$ which is circa 30%. Or another way C = $0.456 - 0.02 \times 7.95$ = circa 30%. Alternately the rate could drop immediately to $\frac{1}{2} \times 36\% = 18\%$ and subsequently rise gradually to 36% as the fund gradually depletes from 7.95 times salary roll to 4.8 times over 40 years. This drop assumes that the funding level for actives is frozen at 50% and in relation only to completed service at the changeover date.

The position could be smoothed over a control period of say 10 years by paying 20% annually. In contrast the current Funding Standard would require payment of 30% plus getting the fund back up from 7.95 times to 11.1 times which equates to an extra 28.7% annually! Giving a total of 58.7% until dropping back to 23.4% after 10 years.

Dealing with loss of security

Clearly a weaker funding level coupled with a reduced contribution requirement, subsequently rising to a higher rate, leaves private pension funds exposed to corporate failure. The establishment of separate reserves or insurance on a pooled basis may prove to be a more efficient use of resources in the long term.

If we assume a corporate failure rate of say 20% over 10 years, then the contribution rate required would be $18\% + 0.20 \times 31.5\%$ for 10 years, 24.3% increasing by 0.45% annually. After 10 years that would be 28.8%, but then would fall to 22.5% but subsequently would rise by 0.45% annually before reaching 36%.

The decision with regard to the desired level of security must be aligned with the affordability of associated cost. In addition the balance must be found between requirements for long term on-going stability on the one hand and the demands of short term corporate failure. An approach which allows protection against corporate failure to dictate the behaviour of and demands on all institutions must be analysed critically. A pooled protection scheme could represent a more efficient use of resources.