

PENSION INSECURITY IN IRELAND

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(read before the Society, January 20th, 2009)

Abstract: The annual amount of the state subsidy to occupational and private pensions in Ireland is double that previously believed and is of the same order as the total annual payments under the state flat-rate contributory and non-contributory pension schemes. We ask: does the state get value-for-money from these subsidies? To answer the question we introduce the fair value approach to value pension entitlements. The current regulatory regime is shown to be very weak, with the security of pension entitlements of those in private sector employment below that of investment grade debt (so the pension promise if tradeable would have junk status). We suggest and analyse measures to improve members' security. We recommend that an explicit percentage of the fair value of pension entitlements be made a debt on the sponsoring employer and that there should be regular disclosure to members of the level of security backing their pension entitlement. The former only gives a minor increase in security in an Irish context but the latter incentivises members to make other provision for their retirement. We conclude by suggesting that the state has a larger role to play in pension provision in Ireland in the 21st century than it played in the last century.

Keywords: pension funds, public pensions, private pensions

JEL Classifications: G23, H55, J32

1. INTRODUCTION

One hundred years ago to this month there was a revolution in social welfare provision in Ireland: the Old Age Pension began to be paid. The Old Age Pension, or following its renaming in 2006, the "State Pension", had a profound affect on the social, political and economic development of Ireland. The aim of the pension was to provide relief from poverty in the aged, in a better manner than the Poor Laws relief and their associated workhouses (Booth 1891). The initial level of the pension, set with reference to UK conditions generally, was high relative to living conditions in Ireland at about half of an unskilled labourer's wage. It was paid to proportionately more of the population in Ireland than the rest of the UK and amounted in aggregate to a redistribution of about 1.6% of the National Income of Ireland at the time.² Such a comparatively generous pension impacted family relationships (Guinnane 1996), and, by effectively subsidising the rural community, lessened the forces of migration and urban agglomeration over the century. The social and political dimensions of the Old Age Pension are explored in Carney (1985), Guinnane (1993, 1996), and Ó Gráda (2002).

One of the arguments put forward by opponents of the old age pension originally was that it was an enemy of self-reliance and thrift and it would make a large proportion of the population reliant on the state in their old age. This has proved broadly true over the subsequent hundred years: pension provision through the private sector has developed in a patchy and incomplete way, which is the principal reason for the current review of our pension system.³ Despite the subsidised growth in occupational and private arrangements, the flat-rate state pension still currently accounts for about 90 per cent of the income for more than 60 per cent of the retired population in Ireland (Hughes & Watson 2005). This widespread reliance on the basic state pension – now almost entirely contributory (but with a means tested non-contributory safety net) – will not alter significantly in the decades ahead as occupational and private provision remains at 54% or so of workers (CSO 2008).

¹ Shane.Whelan@ucd.ie. The authors thank Liam Quigley, David O'Sullivan, Conor Hayes, John Reilly, Roz Briggs, Brendan Kennedy, John O'Connell, and an anonymous referee for comments on earlier drafts of the paper. The opinions expressed are those of the authors alone. Time to complete this research was facilitated by a Government of Ireland Research Fellowship for Shane, from the Irish Research Council for the Humanities and Social Science.

² Ó Gráda (2002), pp. 129, 132. The maximum rate of the Old Age Pension when first introduced was 5 shillings per week and most claimants in Ireland were paid this rate.

³ Pensions Board (2005, 2006), Green Paper on Pensions from Department of Social and Family Affairs (2007), and the subsequent report on the consultation process in Department of Social and Family Affairs (2008a).

Of course, the leading role of the state in pension provision is not just observed in Ireland but is a feature of developed economies generally. In fact, the cost of the public state pension in Ireland now, and projected to 2050, is one of the lowest in Europe. One of the reasons the cost is so low is because the pension is so low: the median income of those over 65 years of age as a proportion of those under age 65 is lowest in Ireland amongst the nations of western Europe (Pensions Commission [UK] 2004, Table 2.1 and 2.2 (pp.119-121)). Of course, in most economies the state pays, and collects contributions towards, an earnings-related pension so the dependency on the state is even more complete (Whelan 2006; Pensions Commission 2004).

In this paper we look at the role of private provision in Ireland. Private pension provision is subsidised by the state by way of taxation relief on contributions, investment returns, and some pension benefits. The subsidies for occupational and private pensions in Ireland are in aggregate of the same order of magnitude as the cost of the state pension in a year. The key question is: does the state get value-for-money from these subsidies? We argue that it does not. Specifically we demonstrate a fundamental failure of the private sector is to provide adequate security for pension saving. The defined benefit scheme in the private sector, generally believed to be the ideal model and comparable with similar schemes in the public sector, is shown not to be so: their pension promises rely too much on the employer's goodwill and its continuance. In essence, pension regulation requires only partial asset-backing for benefit promises, has little enforcing powers for even that minimum standard, and allows no support from the sponsoring employer's balance sheet. The weak regulatory system is helping conceal the true cost of superannuation undertakings, with the risk ultimately borne by the members.

The layout of the paper is as follows. First, we give a concise overview of the development of private pension provision in Ireland and give a breakdown of its current structure, coverage and accumulated assets. We attempt to quantify the value of the state subsidy as it is given in the less than transparent manner of a tax deferral. Citing a recent report commissioned by the Irish Association of Pension Funds, the subsidy is probably double that estimated in the recent Pensions Green Paper – we believe it to be of the order of 4% of GNP rather than their 1.9% estimated in the Green Paper on Pensions. It is shown that the subsidy is highest, both proportionately and in overall amount, for those in the highest income deciles. There is much confusion over the cost of pensions, which has frustrated previous attempts to compare different pension arrangements. We introduce the fair value approach and show, under the fair value paradigm, the state has materially underestimated the cost of public sector pensions. The fair value approach is used to evaluate the Minimum Funding Standard for occupational pension schemes. We report that it gives inadequate security to active and deferred members: it only confers the security of a sub-investment grade debt or junk bond on the pension even if fully funded to this standard. We analyse measures in an Irish context – such as making the fair value of pension entitlements a debt on the employer or establishing a protection fund financed by the pension industry – but find no fully satisfactory way of improving the security of members in the short to medium term. We recommend that (1) the fair value approach be adopted to value pensions, (2) that the government makes explicit which semi-state pension schemes enjoy a state guarantee, (3) that a specified percentage of the fair value of pensions be made a debt on the sponsoring employer, (4) that a pension protection fund is not introduced, and finally, (5) that there must be disclosure to members (on an annual basis) of the percentage asset-backing maintained in the pension fund of the fair value of their pension entitlement if guaranteed. We conclude by suggesting that the state has a larger role to play in pension provision in Ireland in the 21st century than it played in the last century.

2. PRIVATE PENSION PROVISION IN IRELAND

The Irish State inherited not only the Old Age Pension from its membership of the United Kingdom but also the tax incentivisation of private sector occupational provision dating from the Finance Act 1921. In return for tax concessions on contributions and investment income, the Finance Act 1921 required occupational pension schemes to be bona fide in character - constituted by trust deed and to provide benefits that were not judged excessive. Thus began one of the more important public-private partnerships in Ireland. Subsequent legislation, especially the Finance Acts of 1958, 1967 and 1972 updated the arrangements, widened tax relief to other pension arrangements through life offices and prevented growing abuse of the tax reliefs for tax avoidance (Honohan 1960). The state's incentive is through tax deferral, as most pension benefits are ultimately taxed as income, which creates a subsidy to private pension provision that is difficult to quantify and varies in time as taxation rates change and varies at the same time from one individual to another depending on income level.

The tax deferral incentives, coupled with rising tax rates, stimulated the growth of occupational schemes in the private sector with a survey in the mid-1980s showing that only 6% of such schemes dated from before 1960, 42% were established in the period 1961-75 and 52% in the period 1976-1985 (OECD 1994: 9). Regulation of

occupational and private sector arrangements in Ireland up until 1990 was primarily concerned with ensuring that the taxation subsidies were not abused. The Pensions Act 1990 made a fundamental change in requiring preservation of accrued pension benefits for early leavers, which dramatically increased the costs of schemes, and imposed minimum funding standards on schemes, to be policed by the newly created Pensions Board. The rationale behind this development was twofold: (1) to ensure that pension arrangements did not impede the free flow of labour and skills in the economy and (2) to protect the financial interests of the scheme member. In any event, the Pensions Act 1990 and the Pensions (Amendment) Act 2002, sufficiently increased the cost of maintaining private sector defined benefit schemes, at a time of relatively low corporate tax rates, that few new schemes were subsequently established and some established ones closed to new entrants (Whelan 2003). The Pensions Board forecasts no defined benefit schemes outside the public sector in 50 years' time (Pensions Board 2005). In its stead, private defined contribution schemes and individual arrangements have grown markedly in the last decade or so.⁴

Honohan (1960) read a paper as President to this Society on Providing for Old Age through Private Channels but lamented that "statistics on the volume of business in this country are almost entirely lacking" (p.184, and see also p.197).⁵ The position is now considerably better with numbers known of persons with occupational or private pensions, but the accumulated assets in such arrangements must still be estimated on a relatively crude basis and used solely to represent the order of magnitude.⁶ Table 1 gives a breakdown of occupational and private pension provision in Ireland at the end of 2007:

Table 1: Breakdown of Occupational and Occupational and Private Sector Pension, End 2007, by Numbers Covered and Size of Assets

	No. of Persons	Assets € Billion	% of GNP
Occupational DB Type – Funding Standard	244,541	69	44
Occupational DB Type - Not Funding Standard	282,714	21	13
Occupational DC Type	269,465	18	11
Other (PRSA, RACs)	184,750	12	8
Total	981,470	€120 Bn	76%

Sources: For numbers covered in DC and DB arrangements, figures from Tables 6 and 8 in The Pensions Board Annual Report and Accounts 2007; estimated numbers in Other estimated from Table 4.2.2 in Pensions Board (2006); assets for Occupational Pension Schemes from IAPF (2008) assumed to apply only to occupational schemes outside the public sector; assets for Other class assumed as same amount per capita as for members of occupational DC Pension Schemes; assets of schemes not subject to funding standard taken as the market value of the National Pensions Reserve Fund (even though some of these assets may be used to support the state pension).

The majority of members of defined benefit schemes are not subject to the funding standard of the Pensions Act 1990. We make the generally valid assumption that such schemes are for public servants and therefore their pension enjoys a full state guarantee. Of course, the state generally pays such pensions on a pay-as-you-go basis.

It should be noted that others schemes, though funded, might also effectively enjoy a state guarantee. Some of the larger defined benefit schemes are sponsored by semi-state companies or are in sectors that have near-monopoly or regulated pricing. It is difficult to envisage many of the latter schemes failing to pay pensions when due, even if the fund is exhausted, as the state, the regulator or the employer's monopoly position would allow price increases of their final product sufficient to cover these liabilities.

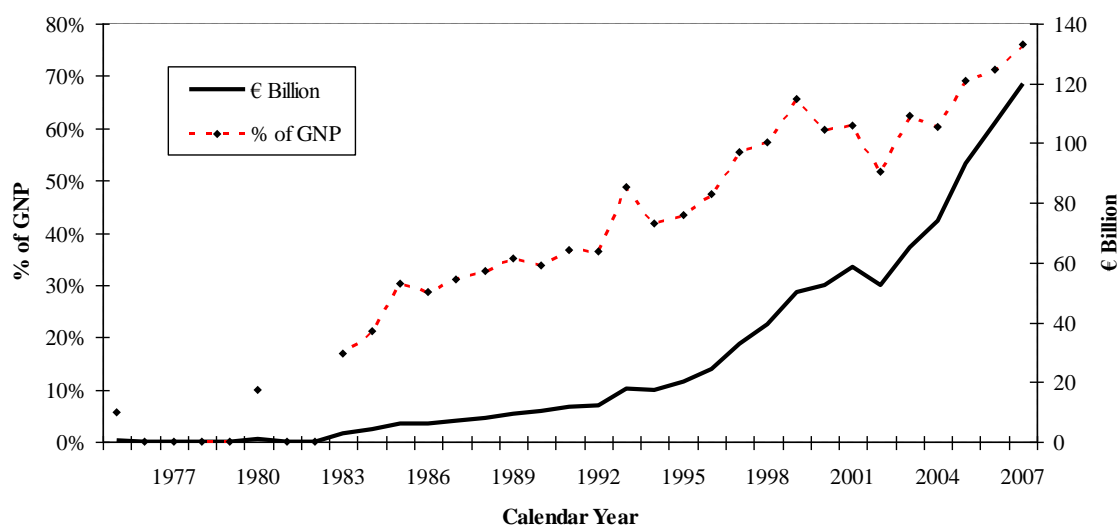
⁴ For a more complete overview of the operation of the current pension system in Ireland, its history and trends together with an international comparison, see Whelan (2006).

⁵ This was reiterated in Department of Social Welfare (1976) original Green Paper on Pensions when it stated that (paragraph 58) "there is very little statistical information available in regard to occupational pension schemes in the private sector and there is no official source from which the information could be obtained." This illustrates a key point: the state's complete failure to monitor the operation of the public-private partnership despite its financial significance.

⁶ A remarkable feature of the current debate on pensions is the absence of reliable data on the magnitude of the assets and liabilities of private sector pension arrangements, with the data not collected by the Pensions Board despite its regulatory and policy-making role in this area. This entails, inter alia, it is difficult to estimate reliably the state's subsidy to this sector.

The growth of the size of assets in occupational and private pension arrangements over the last few decades was dramatic, as captured in Figure 1.

Figure 1: Growth in Assets in Occupational and Private Pension Arrangements, 1975 -2007



Sources: OECD (1994), Table 5 for data for 1975, 1980, 1983-1987; Irish Association of Pension Funds Annual Asset Surveys, 1988-2007, augmented with Annual Report and Financial Statements, National Pension Reserve Fund, 2001-2007. Values for the amounts invested in PRSAs and other individual arrangements are only included at the end of 2007 (see Table 1), so values in earlier years are likely to be underestimates.

Despite the above marked growth of assets, pension coverage as a percentage of the workforce has not significantly changed over the last three decades. We can reliably forecast on current trends that the income divide in retirement between those that have an occupational or private pension and those that do not will widen further in the future.

3. COST OF THE STATE SUBSIDY TO OCCUPATIONAL AND PRIVATE PENSIONS

To form an assessment on whether the state is getting value for money on its subsidy of occupational and private sector provision, one needs a measure of the cost of the subsidy. The recent Green Paper on Pensions estimates the cost of the subsidy in 2006 as €2.9 billion,⁷ or 1.9% of GNP. A more detailed study in IAPF & Life Strategies (2008) puts the value of the subsidy considerably higher, as the report highlights that the Green Paper ignored the tax relief that should be hypothecated to public sector occupational pensions. That is, if the tax subsidy was withdrawn from funded schemes then the replacement cost of public sector pensions, when benchmarked against their private sector equivalents, would increase, which would need to be offset when setting public sector remuneration. The most recent estimate of the past service liability to public sector occupational pensions puts it at €75 billion.⁸ Given the size of public sector schemes and the value of their entitlements (see next section), we consider it not unreasonable to suggest that taxation subsidies to occupational and private sector schemes are of the order of 4% of GNP, and perhaps more. One reason that is not possible to be precise on this figure is because it is not known how many occupation schemes enjoy a state guarantee (see later). However, the key point is that the subsidy to occupational and private pension provision is

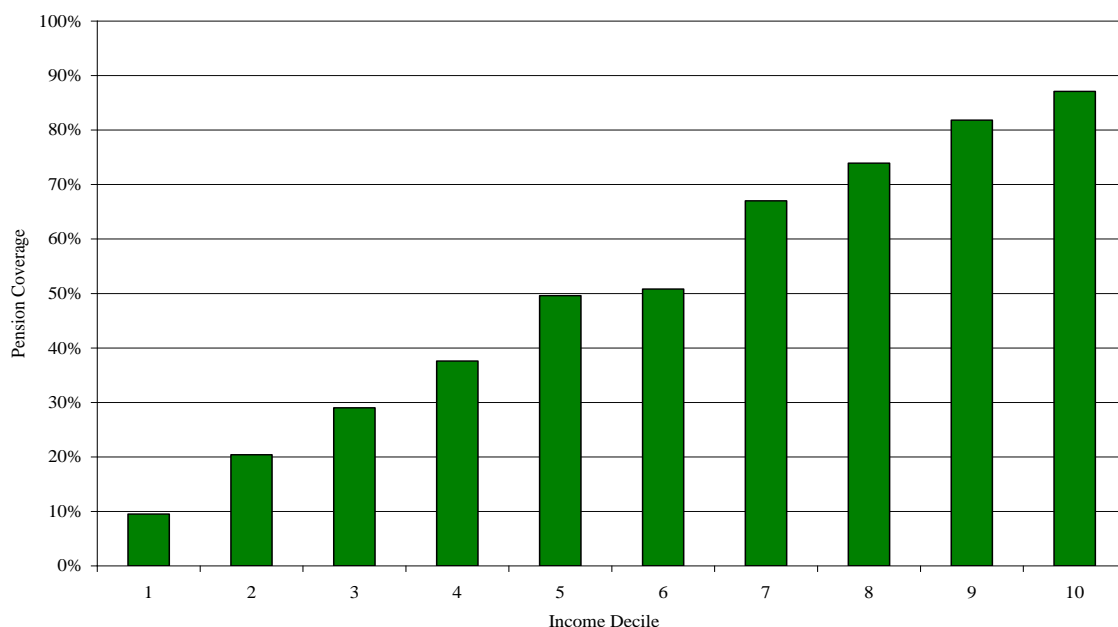
⁷ Made up of €1.9 billion in tax and PRSI relief on contributions, €1.2 billion in respect of tax relief on investment returns in a year, €0.1 billion in tax-free pension lump sum offset by €0.3 billion in tax revenues received from pensions in the course of payment (Sections 7.30-7.35 and Appendix C of the Green Paper). The offset is based on tax income from pensions currently in payment which is obviously too low as pensions are expected to be greater in the future (IAPF & Life Strategies 2008). For earlier estimates, see Hughes (1997) and Hughes (2005).

⁸ Answer by Mr Cowen on 24th April 2008, then Tánaiste and Minister of Finance, to a Dáil Question posed by Mr Alan Shatter TD (Dáil Éireann - Volume 653 – cols 77-8): Ref:- 15722/08) is our understanding that the €75 billion figure was not estimated on a fair value basis (see later), but employed a risk discount rate of 2% above salary inflation. Accordingly, the liability on a fair value basis – which allows for the value of the state guarantee - would be considerably higher, and comfortably in excess of €100 billion.

of the same order of magnitude as the annual cost of state pensions (contributory and non-contributory), which is also about 4% of GNP.⁹

Private and occupational pension coverage is not uniform over different income levels, but increasing with increasing income, as illustrated in Figure 2.

Figure 2: Pension Coverage by Income Decile, Persons in Employment in Ireland in 2004, Aged 20 to 69 Years



Source: Data from Table 4.2.1 (p. 32) in Pensions Board (2006).

IAPF & Life Strategies (2008: 25), coupled with Table 4.2.1 (ibid, 32) in Pensions Board (2006) shows that the pension subsidy, viewed as the effective net tax relief, is no more than 22% for persons in the first seven income deciles (that is, with incomes under €34,000 per annum) but it steeply rises thereafter for the latter deciles. A person comfortably in the top decile with a salary of €100,000 per annum gets an effective net tax relief of 34% on pension savings. Accordingly, the pension subsidy is not spread evenly over the different income levels but is highest to the highest earners, in both percentage terms and overall amounts.

4. THE COST OF PENSION PROVISION

“...no private employer is in a position to guarantee that his business – or means – will be able to provide payments, on the scale promised, when they become due, unless he intends to hypothecate a definite – if not specific – portion of his uncovered assets for the purpose; in default of this, his guarantee, however valuable as a personal covenant, or even in factual appearance, must be accepted with the reserve appropriate to its dependence on the future prosperity of his business.”

Honohan, W.A., *Pension Fund Principles*, Read to this Society, 17th November 1938 (Quote from p.19).

A framework has developed for valuing pension promises based on the fair value concept, viz., the price set between a willing buyer and seller who are both in possession of all relevant information (see, for example, Sharpe (1976), Black (1980), Tepper (1981), Exley, Mehta and Smith (1997), Alexander (2002), and Gold (2003)). Pensions are ultimately promises of a future stream of income and can be valued either directly from the market price of contracts that pay an identical stream or approximated by inferring from the market price of similar instruments. Applying the concept of fair value to put a cost on pension benefits leads to the following break-down of how a cost or value should be put on a pension:

⁹ Of course, these figures are not directly comparable in themselves as the subsidy to private pensions is financed by others, while the contributory state pension is partly financed by the recipient themselves. This juxtaposition of the two figures follows Richard Titmuss’s observation that, for the protests of the high cost of state pensions, there is no mention of tax foregone in subsidising occupational and private pensions (Titmuss 1958: 69).

(i) Government pension promises should be valued using risk-free discounting, that is the pension should be discounted at the interest rate at which the Government can borrow. The idea is that a traded government bond and a government pension are (almost) identical liabilities and therefore the market price of the former imputes a fair price for the latter.

(ii) Corporate pensions should be valued at a risk-free discount rate as (i) but with two further adjustments:

(a) an amount should be deducted equal to the value of any option the company has to default on delivery, and (b) an amount should be added equal to the value of the option the members have (explicitly or implicitly) to share in any surplus funding.

Pension policy advisers and others in Ireland have generally failed to adopt the fair value approach and this has introduced major inconsistencies and confusion to the current pension debate. Costings provided in Pension Board (2005, 2006), relied upon in the Green Paper, are not consistent with fair value, as they do not provide for the material cost and consequences of the different levels of investment risk assumed (Whelan 2007a&b). In short, they assume that the higher the investment risk taken then the cheaper the pension, as all possible consequences of risks borne are ignored. In particular, figures provided in Pension Board (2005, 2006) imply that the cost of a pension provided by the state is materially cheaper than that provided by the private sector, despite the state guarantee. If these costings were reliable then the solution to the problem of future pension provision in Ireland is obvious: let the state provide all future pensions and the issue should then be how each individual should be fairly charged.

Failure to adopt the fair value paradigm has advantaged some at the expense of others. Applying a discount rate that allows for a high level of investment risk to an income stream that has a government guarantee places too low a value on the income stream. This produces material errors in the context of pensions, where discounting is over periods of fifty years and more. For instance, in the recent benchmarking of public sector remuneration to that of the private sector (Report of the Public Service Benchmarking Body (2007)), the cost to the employer of the civil service pension was estimated as about 20% of salary (with the higher discount rate applied to private sector schemes) but that figure increases to 30% of salary if the more appropriate riskless rate is applied (p. 227). The former figure was adopted in the benchmarking exercise rather than the figure closer to fair value, so public sector remuneration is underestimated.¹⁰ Again, many public sector workers have the option to buy notional years of service for their pension computation and these notional years are sold at a price considerably lower than fair value, with no benefit-in-kind liability.

Corporate pensions should be valued in the same manner as state pensions but subject to one material adjustment, being the deduction of the value of the company's option to default, and a minor adjustment, being the value of the members' option to share in any surplus in the scheme. Note that the value of both of these options will be affected by the investment strategy adopted by the trust fund. We shall ignore the members' option to share in surplus as both its intrinsic value and time value are negligible in an Irish context – there is little or no surplus in defined benefit pension schemes in Ireland at the moment, and, as we shall see, the systemic underfunding of schemes allowed by regulation means that it is unlikely to be valuable in the future.

The need for some level of asset-backing for future pension commitments is obvious given the corporate incentive to underfund and thereby increase the value of the default option.¹¹ The Pensions Act (1990), and subsequent extensions, amendments and regulations, put in place a Minimum Funding Standard (MFS) for Irish schemes.¹² In Ireland, unlike the UK and US, the members can only rely on the assets in the pension trust to meet their pension entitlements on a scheme termination - there is no recourse to the balance sheet of the company. Three questions naturally arise as we attempt to judge the "appropriate reserve" that must be attached to the employer's pension promise in Ireland when backed by assets equal in value to the Minimum Funding Standard (MFS):

¹⁰ It is possible to get into detailed arguments over whether the fair value concept is suitable by arguing that the worker is not a 'willing buyer' of the guarantee and places a value lower than the market value on it. However, the state is undoubtedly the 'willing seller', the cost to the state is its borrowing cost, which is the rate used to put a fair value on it. If the buyer does not value the benefit at at least the cost to the seller then the seller should clearly not sell – in this case, the state should reduce the pension benefit and increase the salary until the worker values the rebalanced remuneration package according to its cost.

¹¹ Ideally, the incentives to advance fund should be greater than the default option. This point is discussed briefly later.

¹² For a summary of the operation of the MFS see Chapter 10 of Government's Green Paper on Pensions (Department of Social and Family Affairs 2007). Details of the calculation basis underlying the computation of the MFS are set out in the Actuarial Standards of Practice PEN-3 (ASP-PEN 3) and PEN 2 (ASP-PEN 2) of the Society of Actuaries in Ireland.

- (i) Where is the MFS funding level set relative to the fair value of a guaranteed benefit?
- (ii) What does this imply for the credit quality being set for defined benefit pension promises in Ireland?
- (iii) How does the implied level compare with the actual credit quality of the firms sponsoring these pension schemes?

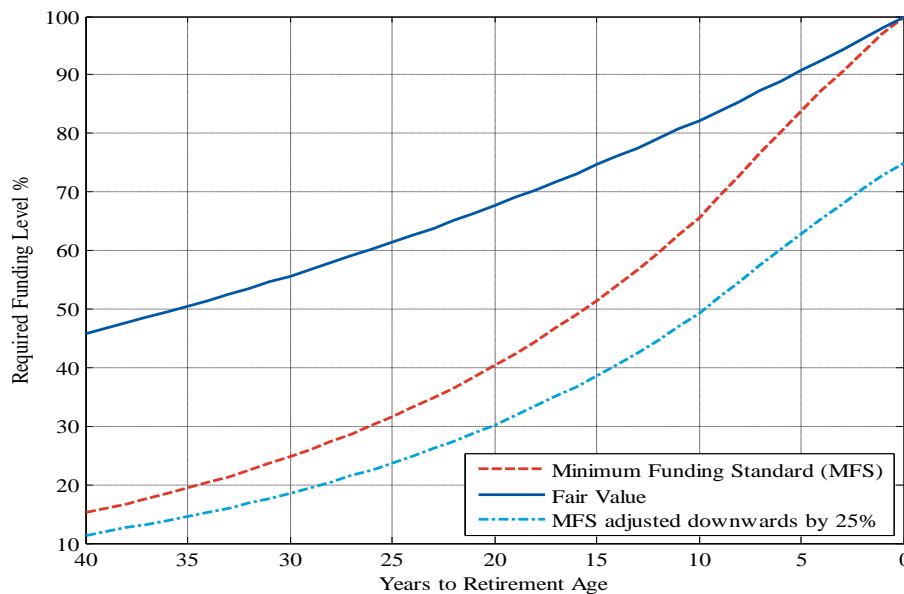
It should be noted that the Minimum Funding Standard is not, in fact, enforced as a true minimum in any real sense. Asset-backing below the MFS simply triggers a plan of action to correct any deficit over a period that may be as long as ten years, and frequently is, according to the Irish Association of Pension Funds (IAPF 2007).¹³ Finally, the rules governing the priority by which assets are assigned to meet MFS liabilities give members who have reached retirement age priority over all others. This means that any MFS deficit has a disproportionate and leveraged impact on the security of benefits for active and deferred beneficiaries. Given that a majority of Irish funds are now in deficit, this entails that security of entitlements for members at work is on average less, often considerably less, than that implied if 100% funded on the MFS.

5. THE INSECURITY OF DEFINED BENEFITS IN THE PRIVATE SECTOR

The Minimum Funding Standard (MFS) in respect of pensions-in-payment is calculated as the cost of buying an annuity from a regulated insurer, with the same terms and conditions. Accordingly, the MFS calculation is just the fair value of a (state) guaranteed pension for the pensioner, and pensioners have first call on the assets of the trust under the priority ordering of beneficiaries under the Pensions Act 1990.¹⁴

However, the position is markedly different for members in active employment and deferred beneficiaries of defined benefit schemes. For these groups, forming the greatest part of the membership, the MFS is set below the fair value of a (state) guaranteed pension. Figure 3 contrasts how the MFS for an active or deferred beneficiary compares with the fair value of a guaranteed benefit, as a function of the years to normal retirement age.

Figure 3: Comparison of MFS Liability with Fair Value if Pension (State) Guaranteed



Assumptions: The chart focusses only on differences caused by financial assumptions. The 'fair value' line was calculated using the median government bond discount rate for a set of real (inflation-linked) pension liabilities of the same term to retirement (estimated as the median values from daily eurozone real (HICPx) sovereign yield curves since 1999); the 'Minimum Funding Standard' line shows the corresponding MFS median discount rate over the same period. It is assumed that preserved benefits increase in line with inflation when in deferment.

¹³On 19th December last, the Minister for Social and Family Affairs directed the Pensions Board to allow plans greater than the ten years 'in appropriate circumstances' (Department of Social and Family Affairs 2008, see also Whelan 2009). As noted earlier, MFS deficits do not have the status of corporate debt in Ireland and, as a result, trustees of the pension trust are extremely limited in the leverage they can exercise to negotiate funding of deficits given their inability, compared with other corporate creditors, to trigger default. In addition, in the event of corporate insolvency, MFS deficits (other than those relating to any outstanding unpaid contributions) do not even have the standing of unsecured creditors.

¹⁴Pensioners are the 'super senior tranche' in the terminology of collateralised debt.

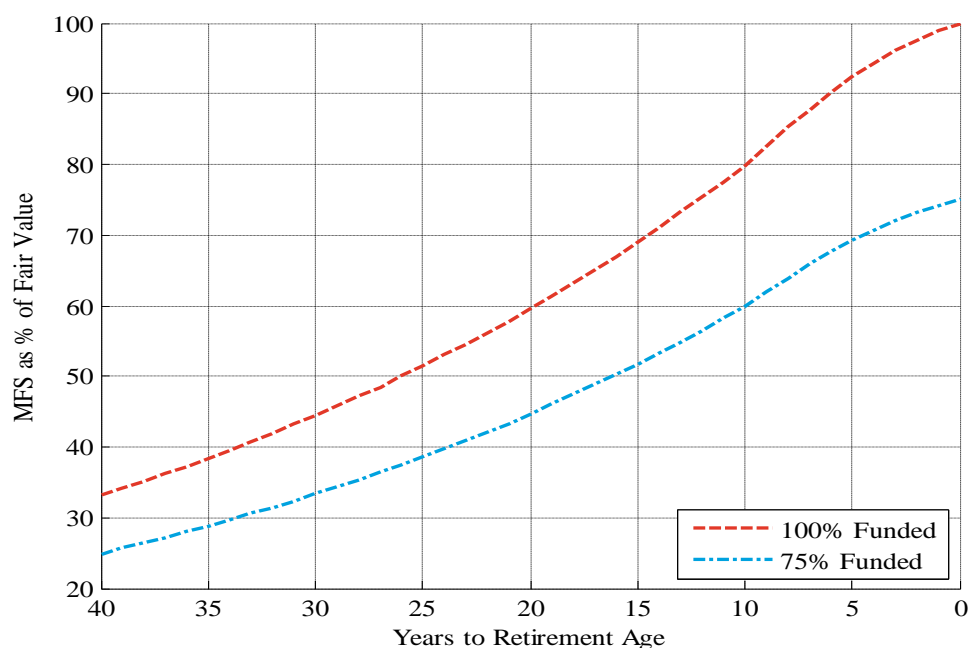
Figure 3 plots three lines; the highest is the fair value if the pension was state guaranteed, the middle line is the MFS liability for the pension, and the lowest line shows the level of benefit which would be provided to an active or deferred member in the event of scheme wind-up with a deficit of 25% of the combined value of active and deferred liabilities under the MFS.

The chart also shows that the MFS value converges to fair value as retirement age approaches. However, the further one is away from normal retirement age the greater the degree to which the MFS falls below the fair value of a guaranteed pension. Take a 45 year old with 20 years to go to normal retirement age of 65. The fair value of a guaranteed (specified real) pension is 67.5% of its value at age 65. The MFS requires 40% of the value of the pension at age 65, so the MFS is set at 40%/67.5%, which is 60% of the corresponding fair value of a guaranteed pension.

Figure 3 also shows that, while any shortfall of the value of assets held to the MFS affects all non-priority beneficiaries on a pro-rata basis, underfunding has a disproportionate impact on those close to retirement age. For example, a 25% underfunding of the MFS benchmark for deferred and actives implies for the 45 year old in our previous example that her asset-backing is 44% of fair value, rather than the 60% above, a drop of 16%. The corresponding shortfall for someone one day before retirement is from 100% to 75%, a drop of 25% of what is likely to be a far greater figure with no time to make it good: the difference of a day creates a discontinuity of 25%.

Figure 4 shows the MFS as a percentage of the fair value or a guaranteed pension, as before, assuming the scheme is 100% funded on an MFS basis and assuming it is 75% funded for actives and deferreds.

Figure 4: MFS as a Percentage of the Fair Value if Pension (State) Guaranteed, assuming (a) 100% funded on this standard and (b) 75% funded.



Assumptions: See notes under Figure 3.

Figures 3 and 4 answer the first of the three questions posed in the previous section. The natural extension is to ask what the ratios of MFS to fair value entail for the credit quality the regulator sets for the defined benefit pension promises in Ireland and how this compares with the actual credit quality of the firms sponsoring these pension schemes. This we now answer.

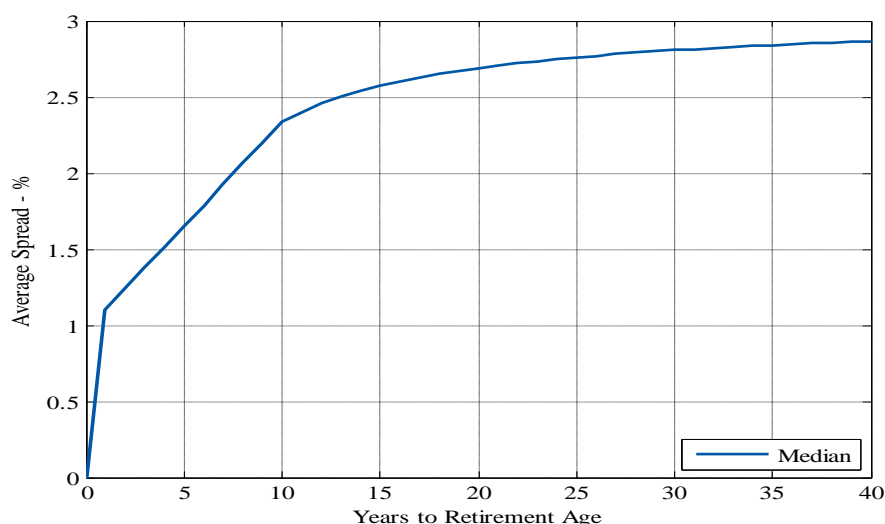
Putting aside pensions for a moment, a corporate bond represents a promise by a company to make one or more repayments in the future. The value of the bond to the holder is generally considered as the combination of the value of a risk-free bond less the value of a default option held by the issuer. At the time of issue, and in subsequent trading, holders of the corporate bond charge the seller for the default option and, as a result, the value of the bond must always be below that of equivalent risk-free debt. The difference between the yield on

the risk-free (or state) bond and the yield demanded by investors in the corporate bond is the credit spread, with spreads widening as credit quality declines. The credit spread is the price paid for the default option.¹⁵

Returning to pensions, it is a straightforward matter to estimate the ‘credit spread’ implied by the MFS. Figure 1 gives all the data required to determine the equivalent annualised ‘credit spread’ of the default option. Going back to our example of the 45 year old who is 20 years from retirement, we can determine the extra yield demanded over the period so that her pension is worth 40% instead of 67.5%. The extra yield per annum is 2.65%, calculated as: $\left(\frac{67.5}{40}\right)^{\frac{1}{20}} - 1$.

Figure 5 makes explicit the credit spread of the MFS versus the risk-free fair value (implied in Figure 3), which is a function of the unexpired term to normal retirement age.

Figure 5: Credit Spread Implied in the Minimum Funding Standard for Pensions in Ireland



Assumptions: As annotated for Figure 3.

The credit spread implied by the MFS decreases as retirement age approaches, implying a gradually increasing security level embedded in the MFS.

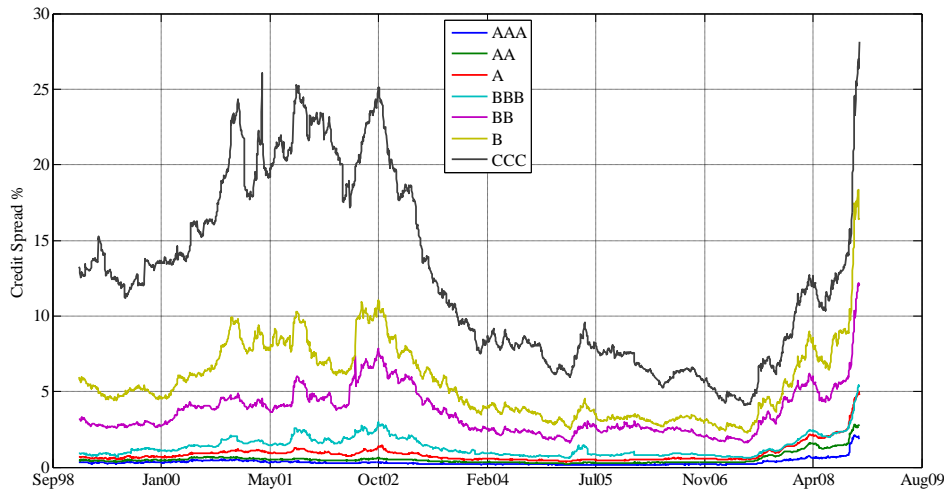
We can now draw conclusions about the targeted level of minimum security for active and deferred beneficiaries relative to the corporate sponsor’s credit rating. To do this, we will compare credit spread by term to retirement embedded in the Minimum Funding Standard with observed credit spreads on traded corporate debt across credit classes.

The credit spreads demanded by the market for corporate bonds vary according to the default risk of the issuer and the unexpired term of the bond. Indeed, corporate bonds tend to be shorter in duration when issued compared to government bonds because of the penally higher yields demanded for longer dated issues, with the result that the weight of corporate bonds outstanding is relatively short in duration – generally under ten years unexpired. It is therefore difficult if not impossible to find corporate bonds of maturities comparable with the thirty-, forty-year or even longer durations of pension payments. We use credit spreads on corporate bond

¹⁵ Strictly, observed credit spreads on corporate bonds also incorporate an illiquidity premium, which is an order of magnitude smaller than the spread for pure credit risk. Pension obligations are not freely tradeable and therefore should arguably command an illiquidity premium. However, this cannot be demanded by members of defined benefit pension schemes as it is the terms of the pension trust that creates the illiquidity (not its investments). Accordingly, observed spreads in corporate bonds are slightly too high as they incorporate an illiquidity premium. Such considerations, though, are dwarfed by the idiosyncratic nature of the credit risk run. Active and deferred beneficiaries have a large, concentrated, and undiversifiable credit risk exposure to their employer which, given the typical investment policy pursued by pension schemes in Ireland (Whelan (2002)), is highly correlated with employment market downturns. In other words, many people whose pensions represent their single biggest financial asset aside from their home, are in the invidious position of having their pension severely impaired at a time when it is most needed (unemployment close to retirement age). On balance, it seems reasonable to take the credit spread approach adopted here, and not require an even higher premium due to these other considerations.

indices to get an indication of the likely spread for short durations (less than a decade), in the knowledge that this underestimates the spread for longer durations. Figure 6 shows the credit spreads broken down by issuer rating on Merrill Lynch corporate bond indices from the start of 1999 to date.

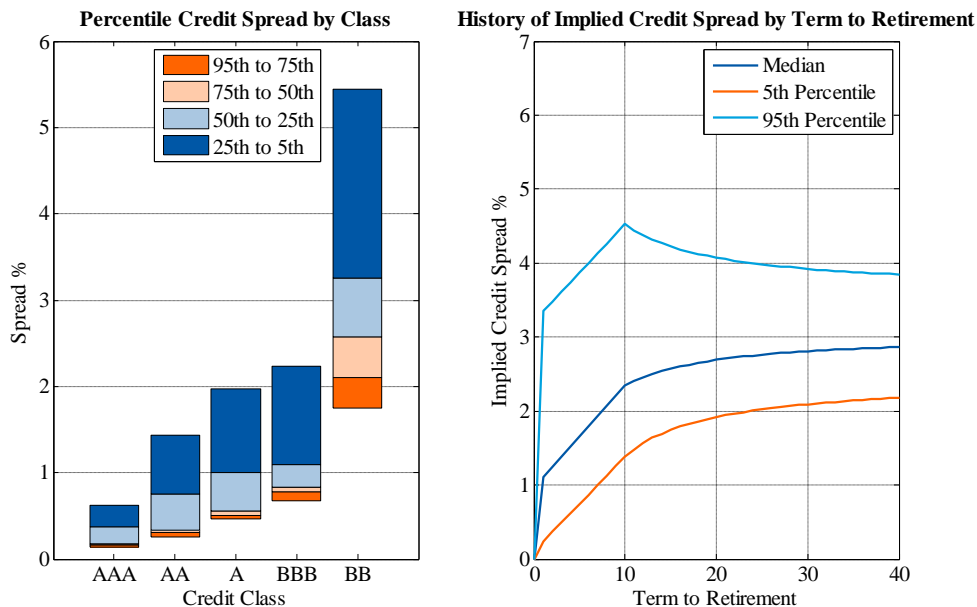
Figure 6: Credit Spread View over time on Corporate Bond Indices, by Credit Rating of Issuer



Source: Bloomberg

The credit spreads are quite volatile and linked to the economic and industry cycles as they reflect the default risk, which is judged high when the outlook for companies is bleak and vice versa. Accordingly, we must match the time periods to estimate the credit spread embedded in the Minimum Funding Standard. MFS credit spreads are taken from September 2005 (the date the current MFS calculation structure was introduced) to June 2008 (just before the so-called ‘credit crunch’). Figure 7 shows the percentile measures for spreads by credit class over the same period (left-hand subplot) compared with median, 5th and 95th percentile implied MFS credit spreads by term to retirement (right-hand subplot).

Figure 7: Distribution of Credit Spreads from September 2005 to June 2008, by Credit Rating of Issuer and that Implied by MFS



Source: As for Figures 3 and 6 but time period restricted to September 2005 to June 2008.

The percentile ranges in the charts make clear that the credit spread implied in the MFS varies widely both with time and with period to retirement. In fact, there is no direct connection with credit spreads on corporate bonds and the MFS. Within 5 years of retirement, there is a wide disparity in implied credit quality terms with, for

example, implied MFS spreads being as high as corresponding AAA debt and as low as BB debt over the period studied. At periods of 5 years and longer to retirement, the implied credit spread in the MFS has traded within the corresponding range for BBB and BB graded corporate debt. Investment grade debt is identified as BBB or above, with grades of BB and below termed ‘speculative’ grade debt or, colloquially, ‘junk’ bonds.

The conclusions above are reasonably robust to the time period studied. In Table 2, we show the median credit spread for each grade of corporate debt over different periods and the implied credit spread in the MFS since the current MFS calculation structure was introduced in September 2005 to end October 2008.

Table 2: Median Credit Spreads of Corporate Bonds over different periods compared with that implied in MFS (new structure) with 5, 10, 20 years to retirement.

Median MFS Implied	----- Years to retirement -----		
	5	10	20
	1.7%	2.3%	2.7%
	Median Spread Over Periods to 31 October 2008 (years)		
	3	5	10
AAA	0.2%	0.2%	0.3%
AA	0.4%	0.3%	0.4%
A	0.6%	0.5%	0.7%
BBB	0.9%	0.9%	1.1%
BB	2.6%	2.5%	3.1%

Source: Merrill Lynch

Table 2 allows us to conclude that the MFS standard can be regarded as below investment grade debt for those with over 5 years to go to retirement, taking into account the implied spread and the relatively weak enforcing of the MFS. The MFS and its enforcement sets a low standard for the private sector pension promise: the promise has junk status for those with more than 5 years to go to retirement.

A better sense for what the suggested MFS ‘credit class’ above means in practical terms can be gained by looking at the likelihood of default by companies rated BBB or BB in Standard & Poors ratings or, equivalently, Baa and Ba under Moody’s system (see, for example, Jewell and Livingston (1999:7 for a conversion table). In this context, default means that a payment fails to be paid when due. Table 3 estimates the probability that a company initially rated Baa or BBB and a company rated BB or Ba will default on its debt obligations over a given specified period.

Table 3: Probability of Default on Debt over a different periods, when initial rating is Baa or Ba

Projection Year	Initial Rating	
	Baa or BBB	Ba or BB
5	3%	9%
10	7%	20%
25	24%	43%
50	46%	63%

Source: Authors’ calculations based on the transition rates between credit ratings estimated from the experience 1920 to 2007 (Moody 2008), modelled as a Markov chain. The default rates are reasonably robust to the period over which the transition rates are estimated.

Given that the implied credit quality of the MFS is below BBB/Baa, the implication from Table 3 is that this funding level is consistent with a relatively high probability of default over the long period that pension liabilities fall due.

The Green Paper on Pensions (Department of Social and Family Affairs 2007) asks: “*What would be considered appropriate security of pension benefits? Does this exist at present?*” The conclusion from this section is that private defined benefit pension promises for members in employment, if 100% funded on the Minimum

Funding Standard, have a similar security to a sub-investment grade corporate bond (or junk bond). It cannot be reasonably maintained that investing all of one's pension savings in a junk bond is prudent or wise. Yet this is in effect what the state has done by contracting out pension provision to the private sector and monitoring it with such a weak regulatory framework. Indeed, the position in reality is worse, as many schemes do not meet the MFS at the time of writing and the identified shortfall may be amortised over periods stretching up to a decade or more. The level of security provided by regulation must be regarded as below members' reasonable expectations and most likely falls below acceptable protection under European directives, which would make the state liable for the deficit.¹⁶

6. POSSIBLE POLICIES TO IMPROVE THE SECURITY OF DEFINED BENEFIT PENSIONS

The two countries most similar to our own in having tax subsidised private sector defined benefit plans with a relatively weak minimum funding standard have in place two extra elements to enhance the security of the benefit promises, to wit: (i) any deficit (below the minimum funding standard) has been given the status of an unsecured debt on the sponsoring employer; and, (ii) there is a mandatory insurance scheme financed by the pensions industry itself to help cushion any remaining deficits after the failure of the employer. Both of these measures were prompted by scheme failures leading to unacceptable financial consequences for the members.¹⁷ The US made pension deficits a debt on the employer and introduced the Pension Benefit Guaranty Corporation (PBGC) in the Employee Retirement Income Security Act 1974, prompted by the collapse of the Studebaker Corporation; the UK made deficits on pension funds a charge on the sponsoring employer's balance sheet in the Pensions Act 2003 and introduced the Pension Protection Fund (PPF) in the Pensions Act 2004. We consider briefly the consequences of each of these policy actions if adopted in Ireland.

Debt on Employer

Making any deficit on the MFS a debt on the employer would, of course, improve the security of defined benefit pension entitlements as members now have both the asset-backing of the trust fund and, should that prove inadequate, recourse (with other creditors) to the assets of the employer. Table 4 gives the implied credit ratings over several years for all Irish companies listed on the Irish Stock Exchange, which gives an indication of the strength of their balance sheets.

¹⁶ See the ruling in 2007 of the Court of Justice of the European Communities in *Robins and others v [UK] Secretary of State for Work and Pensions* (Case C-278/05).

¹⁷ The deficit was not made up from public funds as, presumably, this would appear inequitable as it would essentially mean that the many workers who do not have entitlement to an occupational pension would be paying for the fortunate ones that do.

Table 4: Implied Credit Ratings for Irish Publicly Quoted Companies

Effective date:	End 2003	End 2004	End 2005	End 2006	End 2007	1 st Nov. 2008
Number of companies by credit class						
Aaa -Aa	6	6	11	15	9	1
A	8	10	15	16	19	9
Baa	12	15	15	12	11	3
Ba	11	13	11	5	12	14
B	12	8	11	8	13	24
Caa	13	8	8	8	9	22
Total	62	60	71	64	73	73
% of companies by credit class						
Aaa - Aa	10%	10%	15%	23%	12%	1%
A	13%	17%	21%	25%	26%	12%
Baa	19%	25%	21%	19%	15%	4%
Ba	18%	22%	15%	8%	16%	19%
B	19%	13%	15%	13%	18%	33%
Caa	21%	13%	11%	13%	12%	30%
Summary Statistics						
Investment						
Grade	42%	52%	58%	67%	53%	18%
Sub-investment						
Grade	58%	48%	42%	33%	47%	82%
Market						
Capitalisation of ISEQ €bn	63	82	94	119	93	41

Source: Moody's KMV CreditEdge™

However, making any deficit on the MFS basis a debt on the employer is not materially addressing the issue. The key issue identified in the last section is that the MFS is too low a standard and set well below the fair value of a guaranteed pension. We must first establish the fair value of an employer's promise of a pension.

Two views can be taken on this issue. First, the state could demand, in exchange for the tax subsidy, that benefits in respect of past service be secured with the asset-backing equivalent to the fair value of a guaranteed pension. This would put members of defined benefit schemes in the private sector in the same position as their public sector counterparts. However, such a requirement would entail a very material funding burden (see Figure 4), as it brings the pension promise up from junk status to sovereign status. The extra funding burden, in turn, will accelerate the widespread closure of such schemes in the private sector. So the result that can be anticipated is that making the pension sovereign-secure in the private sector will mean that there will be few, if any, such pensions. The alternative is a compromise: to demand a lower level of asset-backing to the pension promise, with the reduced security that this implies. This reduced security of the pension promise is perhaps expressed as a percentage of the fair value of a state guaranteed pension. In this later case, the member should be made aware of their relative lack of security and informed of the actual percentage of the fair value of their individual entitlement that enjoys asset support. This would incentivise the individual to make additional pension provision for himself. So what level of asset-backing is reasonably achievable?

Viewed from the perspective of the private sector, the sponsoring employer could argue, as William Honohan noted earlier, that the fair value must be reduced by "the reserve appropriate to its dependence on the future prosperity of his business." This might be interpreted as suggesting that accruing pension entitlements should enjoy the security conferred by the credit rating of the sponsoring employer at the time the pension entitlement accrues. That is, the asset-backing put in place for accrued entitlements should provide a security level commensurate with the average credit rating of the employer over the period the entitlement accrued.¹⁸ Let us

¹⁸ This theoretical concept of members' reasonable expectations can later be simplified into more pragmatic measures, e.g., expressed as suitable percentage of the fair value of a state guaranteed pension.

take this viewpoint, which under our fair value paradigm, means that private sector pensions have a fair value equal to the market value that such a series of future payments by the sponsoring employer would trade at. That is, we identify the value of the pension promise with the market value of a corporate bond of identical cashflows with the same credit rating as the sponsoring employer.

The above interpretation of the value of the pension promise is surprisingly contentious, not because of its underlying logic but because of its consequences (as we detail below). The main argument used against this approach to fair value runs along the lines that (1) the sponsoring employer only made pension promises to those who stay in his employment until retirement age, which was contingent on his ultimate discretion of continuing the scheme; (2) in particular, he made no or little commitments to early leavers, or active members if he decided to terminate the scheme - it was the Pensions Act 1990, and subsequent legislation and regulations, that determined the entitlements under these circumstances; (3) the Pensions Act 1990, and subsequent legislation and regulations, set down rules on how these entitlements can be valued; and, (4) the employer (and trustees) complies with all the legislation and regulations. This line of argument is true: the fault does not lie with the employer or trustees. The fault lies with the regulation of the industry.

Occupational pensions are monitored by a 'light' touch regulatory system, despite its importance to both the state and the individual. The protection of the interests of the beneficiaries has only been a relatively recent focus, as outlined earlier, and while improved by the 1990 Pensions Act and other statutes, it still falls short of giving a satisfactory level of protection for pension entitlements. The evolution of more adequate protection of members' interests has been opposed by employers as it increases their funding commitments and oftentimes benefits the early leaver (to which the sponsoring employer has traditionally had a limited commitment). Fundamentally, it is difficult to regulate the voluntary provision of pensions as more onerous regulation might simply discourage it and thereby reduce national coverage. Ultimately, though, the state has not measured its subsidy to this industry, or monitored if it has achieved a satisfactory outcome. To do so requires, *inter alia*, that pension entitlements be properly valued. We believe that the concept of the fair value of a pension, defined earlier, is appropriate for this purpose.

Identifying the fair value of the pension promise with the market value of a similar corporate bond requires that we must factor in the employer's covenant to determine the value of the pension. To do this requires that we analyse the private sector defined benefit schemes in Ireland by sponsoring employer.

Table 5 lists all the defined benefit schemes in Ireland with assets of €100 million or over disclosed in the IAPF Yearbook 2008, together with membership details.

Table 5: Fund Size & Membership Statistics for IAPF Scheme Members with Assets > €100m

Company	Assets	Irish Scheme Membership Statistics			
		Actives	Deferreds	Pensioners	Total
	€m				
AIB Plc.	3,693	18,550	2,500	2,950	24,000
An Post	2,091	9,542	1,363	4,364	15,269
Bank of Ireland Plc.	3,967	15,500	3,500	3,000	22,000
Bord Gais	244	783	149	388	1,320
Bord Gais	238	783	149	388	1,320
Bord Na Mona	179	1,401	269	1,774	3,444
C&C	160	725	217	325	1,267
Caledonian Life	220	289	560	610	1,459
CIE	1,549	9,627	1,297	6,120	17,044
CIF Execs	527	2,377	12,116	750	15,243
CIF Workers	1,000	94,200	187,140	7,060	288,400
Coillte Teo	179	866	110	1,176	2,152
CRH Plc.	1,846	N/A	N/A	N/A	N/A
Diageo	1,486	1,116	758	3,718	5,592
Eagle Star	303	957	465	131	1,553
ESB	3,830	8,000	900	6,000	14,900
FAS	520	904	50	920	1,874
FBD	110	852	118	51	1,021
Gallaher	122	72	79	230	381
Glanbia Plc	383	2,000	1,500	1,100	4,600
Greencore Group	547	428	412	1,010	1,850
GSK	205	977	451	324	1,752
Independent News & Media Plc.	271	N/A	N/A	N/A	N/A
Intel	250	4,200	1,750	13	5,963
Irish Airlines	2,500	6,000	3,000	4,000	13,000
Irish Aviation Authority	203	636	36	180	852
Irish Ferries	240	260	685	682	1,627
Irish Life & Permanent Plc.	1,262	1,738	1,080	561	3,379
Irish Shell	330	42	146	581	769
John Player	198	59	148	568	775
Kerry Group	700	N/A	N/A	N/A	N/A
NUI Galway	119	1,052	50	243	1,345
RTÉ	997	N/A	N/A	N/A	N/A
UCC	272	2,300	170	360	2,830
UCD	366	1,870	530	594	2,994
Unilever	263	459	660	855	1,974
VHI	115	801	121	35	957
Waterford Wedgwood	705	1,056	707	671	2,434
Total	32,189	190,422	223,186	46,332	459,940

Source: Annual Reports & Accounts; IAPF Yearbook 2008

Table 5 captures about half of the schemes in Ireland subject to the funding standard by asset size and a higher proportion in terms of membership numbers. It was not possible to find further information (in the public domain) on some of the schemes listed above. The universities, for instance, do not publish accounts and, as there is a proposal by the Government to nationalise the assets and liabilities of these schemes, these are perhaps more appropriately classed as state guaranteed. If so, then their fair value is known from our earlier analysis of public sector schemes.

We must restrict our analysis to only those schemes where further information is available in the public domain. This shortens the list to the 11 publicly quoted Irish companies and the 8 state-owned companies for which accounts are publicly available. Assets of this subgroup total €22.8 billion or 33% of the total asset base of private sector defined benefit schemes subject to the MFS (Table 6).¹⁹ The average size of the remaining schemes subject to the MFS is just €3 million.

Table 6: Key Financial Statistics for Large Irish Pension Schemes

Company	Size of Corporate			Size of Group Sponsored DB Liabilities			Source
	Group Net Profit / Surplus	Group Net Assets	Market Capitalisation (30/10/2008)	DB Pension Scheme Assets	DB Pension Scheme Liabilities	Funding Status	Published Annual Reports Dated
	€M	€M	€M	€M	€M		
State Owned							
An Post	43	255	-	2,091	(2,193)	95%	31/12/07
Bord Gais	142	1,263	-	238	(235)	101%	31/12/07
Bord Na Mona	17	234	-	179	(245)	73%	28/3/07
CIE	28	121	-	1,549	(1,711)	91%	31/12/07
Coillte Teo	40	1,204	-	179	(245)	73%	31/12/07
ESB	432	3,366	-	3,830	(5,182)	74%	31/12/06
RTÉ	26	181	-	997	(979)	102%	31/12/07
VHI	112	415	-	115	(136)	85%	28/2/08
Sub-total – State Owned	840	7,039		9,178	(10,926)	84%	
Private Sector							
AIB Plc.	1,949	9,827	3,214	3,693	(4,062)	91%	31/12/07
Bank of Ireland Plc.	1,704	6,482	1,634	3,967	(4,752)	83%	31/3/08
C&C Group Plc	249	898	441	170	(154)	110%	29/2/08
CRH Plc.	1,438	7,954	8,882	1,846	(1,931)	96%	31/12/07
FBD Holdings Plc	137	392	332	110	(116)	95%	31/12/07
Glanbia Plc	60	235	786	383	(497)	77%	30/12/06
Greencore Group	112	283	244	547	(573)	95%	31/12/07
Independent News & Media Plc.	196	747	419	271	(336)	81%	31/12/07
Irish Life & Permanent Plc.	452	2,643	595	1,262	(1,293)	98%	31/12/07
Kerry Group	246	1,229	3,151	700	(806)	87%	2/1/08
Waterford Wedgwood	(233)	(320)	85	705	(853)	83%	3/1/08
Sub-total Private Sector	6,310	30,370	19,784	13,653	(15,373)	89%	
Grand Total	7,150	37,409	19,784	22,831	(26,299)	87%	

Source: From published accounts, as noted on final column.

¹⁹ The table excludes two noteworthy schemes: the eircom Superannuation Scheme and two schemes which cover employees and pilots of the Irish airlines industry. The airlines schemes are excluded since they are defined contribution from the companies' perspective according to the notes of Aer Lingus's accounts. The accounts note, however, that Schemes are subject to the MFS, which applies only to defined benefit arrangements. The eircom Scheme is also excluded as the publicly available information is not complete. The history and scale of the operations of both eircom and Aer Lingus would suggest comparatively large liabilities.

The pension fund liability figures shown are calculated on the basis of the accounting standard IAS19 which give a sense for the order of magnitude of pension liabilities. It is not possible however to draw definitive conclusions about the level of underlying MFS funding given the structural differences in the underlying calculation methodologies. In the absence of other information, though, it would not be unreasonable to assume that liability figures are between the corresponding MFS and fair value measures.

A rough-and-ready estimate can be made to get an idea of the magnitude of the shortfall of pension assets to the above value of the liabilities. The market value of assets of €22.8 billion relates to, on average, the start of 2008. The investment return of pension funds over 2008 was about -35% and net contribution income was, say 5% of assets. This entails that the updated asset value at end of 2008 was about €16 billion. The liabilities would have increased with increasing service and salaries and their capitalised value increased further as a result of declining bond yields. Let us speculate that the value of the liabilities increased from about €26.3 billion at the start of 2008 to, say, €30 billion by the end of the year. Accordingly the shortfall at the end of 2008 was of the order of €14 billion. The subgroup above is only one-third of the total by asset value, which would imply a total deficit of €42 billion or so. The figure is conservatively estimated, with liability estimates probably below fair value. We conclude that the magnitude of the shortfall relative to fair value is likely to be in the region of €40 billion to €60 billion at the end of 2008.²⁰

The schemes above are grouped into those where the state is the 100% shareholder and the others. In the first group, it is a moot point as to how much security such schemes can derive from the covenant of the company's ultimate owner. We note that many are monopolies or near-monopolies and may be considered more price-setters in their industries than price-takers, a position that could be used to ensure that insolvency is not a realistic scenario. From this perspective, the pension schemes effectively enjoy state protection and the pensions should be valued at the fair price of (state) guaranteed benefits. Such an explicit acknowledgement of a state guarantee would require explicit recognition of the enhanced value of the pension benefits, which would presumably mean that other remuneration increases for some years to come would be considerably lower than would otherwise be the case.

For the publicly quoted companies, Table 7 shows current market-implied credit ratings²¹ together with a history of movements in these ratings over the last five years. The market-implied ratings are especially useful since a majority of these companies do not have issuer ratings from the main rating agencies.

Table 7: Market Implied Credit Rating for Selected Irish Publicly Quoted Companies

Effective Date:	End 2003	End 2004	End 2005	End 2006	End 2007	End 2008
Glanbia	Baa	Baa	A	Baa	A	Baa
Bank of Ireland	A	A	A	Aa	A	B
AIB	A	A	Aa	Aa	A	Ba
C&C	N/	A	Aa	Aa	Baa	Ba
CRH	A	A	Aa	Aa	A	A
FBD	B	A	A	A	Ba	Ba
Irish Life & Permanent	Ba	Ba	Baa	A	Baa	B
Independent News & Media	Ba	Baa	A	A	A	B
Greencore Group	Baa	Ba	A	A	A	Ba
Kerry Group	Aa	Aa	Aa	Aa	Aa	A
Waterford Wedgwood	Caa	Caa	B	B	Caa	-

Source: Moody's KMV

²⁰ This estimate is double the €20-€30 billion estimate of deficits made in a confidential briefing memorandum to the Government by the Minister for Social and Family Affairs, reported in the Sunday Tribune on 30th November 2008 (McMorrow 2008). Presumably, the €20-€30 billion figure is the estimated shortfall relative to the MFS.

²¹ These ratings are from the Moody's KMV service which uses an extension of the Black-Scholes-Merton framework to modelling default probability (Moody's KMV (2003)).

A majority of the companies shown, therefore, were above investment grade of Baa or higher for most of the period. In particular, all but Waterford Wedgewood have credit ratings at or above Baa - investment grade – at the end 2007. The impact of the recent market turmoil has been a sharp decline in the credit quality of Irish corporates and therefore, under this interpretation, the fair value of their pension commitments.

So, up to the most recent developments in stockmarkets, the fair value of pension promises of the majority of publicly quoted companies was worth more than the value placed on them by the MFS, though some way below that of a state guaranteed pension. This suggests that there is scope to improve the security of the pension promise in the private sector by both (1) increasing the asset-backing of accrued pension entitlements above that imposed by the MFS and (2) making the pension liability a debt on the employer.

The implications of making pension promises a debt on the employer are well understood. Without effective regulation and ignoring taxation relief effects, companies will attempt to underfund pension promises in order to increase the value of their option to default. Taking the taxation incentives into account suggests that firms can be distinguished in their optimum strategies for shareholders by their credit rating, and can be divided into three categories of companies:

- (1) For high credit quality firms, pension fund promises should be fully funded and fully hedged as the option to default is available more cheaply outside the pension scheme.
- (2) Lower credit quality firms should similarly adopt hedged investment strategies but should seek to underfund their pension plans to a level whereby tax benefits to funding and the reduction in the ability to default offset each other – this occurs above the point at which pension fund promises would be discounted using corporate debt-borrowing cost since the tax effect is positive.
- (3) Firms near distress should underfund and pursue risky investment strategies.

A full discussion on the considerations that justify these strategies as optimum can be found in Alexander (2002). The incentive to underfund for all but the highest rated companies is exacerbated in Ireland because Ireland's relatively low rate of corporation tax means that the benefit to funding is proportionately lower here, for example, than that for identical firms operating in the US or UK.

It is of interest to determine which of the three categories above Irish publicly quoted companies will fall into, as it determines the form and extent of the regulatory regime necessary to support it. In Table 8 we attempt to summarise the impact of pension liabilities on the balance sheet and profit and loss account of the companies. We include the state-owned companies for completeness.

Table 8: Pension Fund Debt: Impact on Corporate Balance Sheet and Profitability

	SOME MEASURES OF THE FINANCIAL ABILITY OF GROUP'S TO UNDERPIN EXISTING DB PENSION SCHEMES & THEIR UNDERLYING DB LIABILITIES		INVESTMENT RISK		PENSION FUND PROFITABILITY IMPACT	
	<i>Number of Years of Group Net Profit / Surplus Required to Eliminate a Net Pension Accounting Deficit</i>	<i>Company DB Pension Liabilities / Company Net Assets</i>	<i>Company DB Pension Liabilities / Market Cap</i>	<i>No. of Years Group Annual Surplus Taken to Cover DB Pension Gross Liabilities</i>	<i>% of Assets in Non-Bonds</i>	<i>% of Net Profit Attributable to Expected Return on Pension Fund Assets</i>
	Years			Years		
State Owned						
An Post	2.4	8.6		51	75%	98%
Bord Gais	-	0.2		2	66%	3%
Bord Na Mona	4.0	1.0		15	67%	22%
CIE	5.7	14.2		61	82%	82%
Coilte Teo	1.7	0.2		6	78%	7%
ESB	3.1	1.5		12	92%	20%
RTÉ	-	5.4		38	75%	62%
VHI	0.2	0.3		1	86%	2%
Sub-total	2.1	1.6		13	83%	21%
Private Sector						
AIB Plc.	0.2	0.4	1.3	2	83%	4%
Bank of Ireland Plc.	0.5	0.7	2.9	3	74%	4%
C&C Group Plc	(0.1)	0.2	0.3	1	92%	1%
CRH Plc.	0.1	0.2	0.2	1	67%	2%
FBD Holdings Plc	0.0	0.3	0.3	1	79%	1%
Glanbia Plc	1.9	2.1	0.6	8	75%	8%
Greencore Group	-	2.0	2.3	5	84%	12%
Independent News & Media Plc.	0.3	0.4	0.8	2	80%	3%
Irish Life & Permanent Plc.	0.1	0.5	2.2	3	81%	5%
Kerry Group	-	0.7	0.3	3	74%	6%
Waterford Wedgwood	-	(2.7)	10.0	(4)	52%	-2%
Sub-total	0.3	0.5	0.8	2	76%	4%
Grand Total	0.5	0.7	1.3	4	79%	6%

Source: Authors' computations based on latest published accounts (see Table 6).

Under the accounting standard IAS19, advance credit is taken for expected risk premia so that equity and other risky asset investments by pension funds flatter reported corporate earnings. The ‘Pension Fund Profitability Impact’ column in Table 8 shows the effect on reported earnings for each company of removing this expected higher return. The impact is particularly extreme for the state-owned companies listed. For example, pension fund equity investment accounted for 98% of An Post’s 2007 earnings and 82% of CIE’s. While this is not surprising given the relative size of each entity’s pension fund compared with its (book) value – over 8 times in the case of An Post and 14 times in the case of CIE - from a purely financial perspective, these entities could be viewed as large pension companies with a sideline in delivering letters or transporting people.

Table 8 highlights the difficulties with the premise that pension security can be markedly improved by the simple expedient of making it a debt on the employer (or, indeed, by self-insurance scheme run by the industry). The measure will improve security but not to an acceptable level: the pension liabilities and the investment risk assumed are simply too big to derive much support from the company’s balance sheet. The table also suggests that the optimum strategy for many Irish firms would be to underfund and pursue risky investment strategies if fair value of the liabilities is made a debt. Accordingly, making pension deficits a debt on the employer cannot, in itself, be expected to change the contribution plans of the employers or the investment strategies adopted by the schemes.

Waterford Wedgwood requires highlighting. Table 8 shows that, at the time of writing, pension fund liabilities are ten times the market capitalisation of the company. Its market-implied credit rating, as noted earlier is ‘C’, which Moody’s (2008) describes as “*the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.*” The IAS19 pension fund liabilities at the end of 2007 exceeded its assets by €150 million for all its schemes (Irish and others). Over the calendar year to date, its equity investments will have since fallen by of the order of €100 million. All of which suggests that we might unfortunately witness a corporate event that might prompt revision of the current regulation of defined benefit pension funds sooner rather than later.²²

A Pension Protection Fund

The considerations in the last section suggest that a pension protection fund self-financed by the occupational pensions industry will not be successful. Simply, firms in the industry do not have the surplus to make up for each others deficits. Even if it did, the operation of any such insurance scheme would, in effect, be a transfer of value from one sponsoring employer to another (unless premiums paid reflected relative risks run). Such a cross-subsidy would not be entertained long in a voluntary industry: the financially weak would drive out the financially sound.

However, and perhaps more fundamentally, the pre-conditions necessary for a successful insurance scheme are not in place. The pensions industry is currently incentivised to take investment risk and, in Ireland, pension funds have the highest exposure to equities of any OECD country. This was noted by the Society of Actuaries in Ireland (2008):²³

“Thus, the current regulatory system places a lot of faith in the ability of equity markets to deliver on benefit expectations. Arguably, the current regime encourages companies and trustees to take extra risk in order to restore a scheme to solvency without any material consideration of the risks. In particular, the contribution requirement is generally reduced by making higher allocations to equity and property and taking advance credit for the expectation of higher return on these asset classes, without reference to risk and employer covenant.”

Risk-taking, being incentivised, creates moral hazard which, in turn, undermines the foundations of any insurance scheme. Simply put, it is foolhardy to insure a scheme when it is being rewarded for risk-taking.

So the pre-conditions for any insurance scheme require that risk-taking is not rewarded. There is just one way to ensure that this is achieved: to set the insurance premiums so they reflect properly the risks borne. In this case,

²² Waterford Wedgwood went into administration on 5th January but the consequences for employees’ pension entitlements have not yet come to light.

²³ See, for a more complete development of the issues, the Report on Investment Risk in Defined Benefit Schemes (Society of Actuaries in Ireland (2004)). In fact, the problem of perverse incentive for corporate agents to encourage risk-taking in pension funds is not solely an MFS issue: a similar incentive exists under the relevant accounting standard for pensions (IAS19).

the risk premium would take into account any current underfunding and mismatch risk run by the investment strategy. Proper pricing of such risk will mean that premium increases neutralise any risk-taking benefit. Such risk-based premiums would also stop cross-subsidies. There is just one practical flaw with such a scheme: the premium rates would be unaffordable for those who most need the insurance. McCarthy and Neuberger (2005a, 2005b) explore these issues in more detail.

As noted earlier, the US not only made pension deficits a debt on the employer but also, since 1974, introduced the Pension Benefit Guaranty Corporation (PBGC) as an insurance fund to further protect pension beneficiaries. The experience over the subsequent thirty years was, as theory predicts, not happy. Underfunding of US pension schemes was exacerbated, estimated as reaching \$450 billion at the end of 2004, and the PBGC is in deficit of €23.3 billion at the end of 2004 (when account is taken of probable claims) (McCarthy & Neuberger (2005a).

7. CONCLUSION

“Adequate provision for the contingencies of old age and dependency is now widely accepted as a priority social commitment which, willy nilly, must be met, the only matters to be settled being the size of the provision, the mechanisms required and the distribution of the burden. It has to be faced that this is an expensive burden involving legal commitments which are not easily reversible.”

Honohan, W.A., *Financial Aspects of a National Income-Related Pension Scheme*, Read to this Society, 16th December 1976 (Quote from pp. 93-94).

In this paper we considered only the mechanism by which pensions are delivered in Ireland, and further restricted our consideration to earnings-related pensions provided by the defined benefit model. The defined benefit pension scheme is often held to be the ideal structure to deliver pensions and it has played a dominant role in private sector provision in Ireland in the closing decades of the 20th century. We report a surprising result, quite at odds with popular opinion: the defined benefit scheme in Ireland provides benefits that are highly insecure outside of the public schemes (and perhaps schemes of entities fully owned by the state). We argue that the current funding standard is too weak, giving members little security and the state a poor return on its considerable subsidies. We show that there is no straightforward way to improve the security in the short to medium term but, to help to some modest extent, we advocate making a percentage of the fair value of a guaranteed pension as a debt on the sponsoring employer. Practically, though, the security of such pension promises cannot be made satisfactorily secure in the short to medium term. Members of such schemes should be made aware of the insecurity of their benefits by, say, informing them annually of the percentage of the risk-free fair value of their entitlement that has asset-backing. This disclosure might prompt individual additional provision through other channels.

The measures above are intended simply to manage, with some sense of order, the demise of the defined benefit scheme in the private sector. Projections of the evolution of pension arrangements in Ireland over the next half century made in the Pensions Board (2005) anticipate no such schemes at the end of the period. Such trends are already well-advanced in Ireland, the UK and elsewhere, and accelerating in more recent times: the only debating point is the time period of their demise. Our analysis suggests that this demise might not be altogether a bad thing.

The broader issue on the role of the private sector in the future of pension provision in Ireland has been recently discussed at this Society (Hills 2007; Whelan 2007c) and, indeed, discussed at two earlier symposia of the Society – Symposium on Pensions: Implications for Public Policy (1997) and Symposium on the Government Green Paper "A National Income-Related Pension Scheme" (1976). Defined contribution schemes, or any scheme based on funded individual accounts investing in the capital markets, have been shown to be less efficient than a sustainable PAYG system, producing pensions lower by at least 10%, and probably closer to 20%, due to the higher administration costs (Whelan (2007a)). If such retirement accounts invest in risky assets such as equity or property then the volatility of these assets will appear in the labour market as unpredictable retirement ages, with workers timing retirement by reference to market values (postponing retirement if values are depressed and vice versa) at a personal and macro-economic cost (MacDonald & Cairns 2007). The issue is whether these structures in the private sector deliver value for money to the state on its large subsidy, and that the subsidy is divided equitably.

This paper highlights the significant cost, subsidy and insecurity of occupational pensions in Ireland. Despite the problems associated with the current mechanisms used to deliver pensions over and above the state flat-rate pension, Ireland must nevertheless be considered reasonably well-placed in a European context to create a sustainable pension system that helps enhance dignity in advanced years. We have one of the youngest populations in Europe and have funded pensions (albeit below the true cost of those commitments) on a more

significant scale than elsewhere. This starting position affords a bold plan. The size of provision and the distribution of the cost can be reviewed without pressing constraints. However, as developed in this paper, the existing mechanisms for pension provision in the private sector require radical restructuring.

We call for the following policy actions as a matter of urgency:

- (1) A revision of the current Minimum Funding Standard (MFS) so the asset-backing it provides to the pension promise is higher than its current junk status. Figure 4 earlier shows how the current MFS relates to the fair value of a state guaranteed pension. We suggest that the MFS be raised for all durations to retirement and that it should never be less than, say, 50% of the fair value of a riskless pension. Increasing the MFS towards fair value will pose a cost burden on firms, so how fully and quickly this is done will have to be set pragmatically.
- (2) The priority rules in apportioning the assets when the scheme is wound up and in deficit under the (revised) MFS should be revisited, enhancing the security of those close to retirement.
- (3) The deficit, if any, under the (revised) MFS should be made a debt on the sponsoring employer with immediate effect.
- (4) The Pensions Board should be given greater powers to enforce funding to the MFS.
- (5) The pressure to establish a pension protection fund, which can be anticipated on the wind-up of a pension fund in deficit under the (revised) MFS, must be resisted.
- (6) Annual disclosure should be made to scheme members of the asset-backing of their pension promise, described as a percentage of the fair value of a riskless pension. In addition, the Pensions Board or other official body should collect data on the assets and (revised MFS) liabilities of pension funds.
- (7) Public sector pensions should be valued on a fair value basis and this higher value used to constrain pressures for remuneration rises in the immediate future.
- (8) The state should make explicit (and perhaps nationalise) those schemes in the sheltered economy which implicitly enjoy a state guarantee. Such an explicit guarantee will again allow a higher value to be put on the pension part of the remuneration package, constraining pressures for further rises in the immediate future.

The long-awaited White Paper on Pensions,²⁴ outlining possible frameworks for pension provision in the 21st century, must take account of the demise of the defined benefit scheme outside the public sector and the high subsidy (and its regressive application), high administration costs and low contribution rates associated with defined contribution, PRSA and the other pension arrangements in the private sector. In short, the White Paper should propose a scheme that provides value-for-money for both contributors and the state. It should employ the fair value approach to costing pension provision. In the event of a state earning-related component or a state-mediated enhancement to the flat-rate state pension, the state can provide, on a cost-neutral basis, a neat solution to the legacy liabilities of private defined benefit schemes. Simply, the state can offer to undertake the scheme's (revised) MFS liabilities by giving, on a cost-neutral basis, a lower state-guaranteed pension in return for the scheme's assets plus, if in deficit, a corporate bond from the sponsoring employer equal in market value to the then market value of the deficit on the (revised) MFS basis.

One hundred years ago, after inadequate reserving and investment mismatch created solvency problems in friendly societies and other provident institutions, the state old age pension began to be paid, despite experts' reservations on its affordability (see, for instance, Hendricks, 1892) and its desirability (see, for instance, Paulin, 1896). Given the failure of the private sector to develop adequate structures in the meantime, the state must play an even greater role over the next hundred years.

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²⁴ We have been awaiting a White Paper on Pensions for over three decades now. The Green Paper on Pensions of 1976, discussed at this Society that year, was never followed by a White Paper (although, according to McCashin (2004, 267) one was drafted but not published). That Green Paper highlighted the need to increase the security of occupational schemes and, because of 'the fundamental defect' of its lack of adequate coverage, had ruled out the current system as a viable system (see especially, paragraph 176 and also Collins, 1976).

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VOTE OF THANKS PROPOSED BY PROFESSOR PATRICK HONOHAN, TRINITY COLLEGE DUBLIN

Michael and Shane have given us a most interesting paper with some novel perspectives on a topic which is already generating growing interest and is sure to come even more centre stage in the years ahead. I have much sympathy for the general viewpoints expressed, so my comments will focus more on some aspects of the reasoning, the framing and specific conclusions which I feel do not hit the mark.

The provocative title, Pension Insecurity in Ireland, is itself a bit of an oversell, in that the paper concentrates more or less exclusively on some elements of insecurity in the private defined benefit sector, which now accounts for fewer than a quarter of a million covered persons. The paper's main focus is on whether the funds backing these participants offer sufficient security. Ironically, this group has enjoyed much higher funding than any other group – with the relevant pension funds totalling €69 billion at the end of 2007, or over a quarter of a million euros per person on average. (To be sure these amounts have fallen sharply since then, but the relative position will have been maintained).

So I think we need to keep the paper's discussion in perspective. The pension concerns of most workers and their dependents are not treated at all.

Let me stress that I do agree with the major points, for example the fact that most schemes are currently underfunded by any standard is a source of worry, not least because of the fragile financial situation of sponsoring companies. In the case of company failures in the ongoing recession this will have a devastating effect on some of those persons relying on underfunded schemes. For the remainder underfunding is a problem whose impact and resolution will be over a longer time-frame.

Before analysing the sufficiency of these funds, and of the additional security coming from scheme sponsors, the authors make a digression to discuss the cost of "taxation subsidies" to occupational and private pensions. Drawing on work by the Green Paper on Pensions and a recent study by Mulligan, they suggest at a total taxation subsidy of 4 per cent of GDP. Of course, I also agree that public sector pensions are very valuable and costly. But it is when we come to the details that I have some issues. I had a bit of difficulty with this tax subsidy estimate for two reasons.

First, more than half of this estimate is a notional amount relating to tax that would be paid by public sector employers including the central government if pension contributions were taxable, and if the government was taxable! I can see the general drift of this line of argument, as there is no doubt that public service pensions are very costly, but it is a bit odd to include it under the rubric of tax relief. Discussion of such issues needs to be very precise in this area if the kinds of policy conclusions drawn—which seem broadly correct—are to command acceptance.

Second, I want to draw attention to an important caveat not often enough made when considering calculations of tax relief on pension contributions, inasmuch as the reference point for these calculations is the general income tax structure. But is this the correct reference point? After all, a standard if simple economic efficiency analysis can suggest that an expenditure tax (effectively deferring tax on income until it is spent, and as such avoiding the double-taxation of income from saving) achieves higher social welfare. That is why the first Commission on Taxation (1982) recommended that, above a low standard rate, income tax should be replaced by a progressive expenditure tax. Against that benchmark, the cost of the existing regime would appear much lower. There is also the point that most EU states have either an EET system like ourselves, or a TEE system, and the Commission called in 2001 for convergence on the EET system. As such, the EET system could be considered the benchmark – implying a cost of zero. I am not fully wedded to this perspective, as I do believe that pension contributions can be and have been used as a means of tax avoidance to the great benefit of the already well-off, but the question is more subtle than has been allowed for here.

Let me now turn to Figure 3, which is used by the authors to suggest that the Minimum Funding Standard MFS leaves the scheme participant with too little security. In large part this should be seen as another aspect of a continuing debate between the advocates of equities and the more conservative advocates of fully matched bond portfolios for pension fund investment. The solid line in Michael and Shane's plot (seductively titled "fair value") is what it would take to buy a fully hedged/matched portfolio guaranteed to deliver the promised pension. The MFS assumes that the fund can do better than bond returns over the relevant period. How much better? Well this is where reference to "junk bonds" comes in. Michael and Shane point out that, in order to generate enough return to pay the pension, schemes satisfying MFS would have to earn yields corresponding to those prevailing on junk bonds. That does not mean that the MFS places pension obligations on a par with junk

bonds, and it is an abuse of language to claim, as the authors do, that “the pension promise if tradeable would have junk bond status”. For one thing, there is the employer promise, but even more to the point, little of these funds is invested in junk bonds; reliance has been placed on equities and property for returns. The debate should be about whether the equity premium, through which equities have yielded much higher returns than bonds for lengthy periods, is likely to continue. Not about the straw man of junk bonds. Now here is a genuine point. Recent equity market collapses have sensitized us to the great volatility of equity prices and have dampened confidence in the equity premium. Real equity prices can remain broadly flat for decades. This debate has been running for some time: Jeremy Siegel and Zvi Bodie are prominent protagonists on either side. Bodie takes the conservative anti-equity view; I teach from Bodie’s textbook, reflecting my sympathy with his perspective. But that does not make we want to sign up to every framing of the issue.

As to whether the MFS should be tightened. Well there is an argument for giving the members more security. To be sure, they are not wholly reliant on investment returns, but can hope that the sponsoring employer will fill up any deficiency as promised. But we know that some employers will not manage to do this. The authors discuss the implicit credit rating that can be inferred by Irish firms’ “distance to default” using the estimates of KMV. Here I would like to have seen two additional extensions. First, what percentage of pension fund participants (as distinct from the percentage of firms) fall into each risk category? Second, how to combine the value of the fund with the value of the employer’s hoped-for top-up, allowing for risk of default? We have discussion of these two separately, but no attempt is made to figure out the combined impact.

Yes it would be good for the participants if employers put up more money up front, reaching the fully-matched standard to which Michael and Shane aspire. But mandating this would certainly close more DB schemes sooner, exposing more workers to the risks of DC schemes, which might be worse. I missed any treatment of this crucial question and of the equilibrium responses of the system in each case.

Finally, although investing more of pension funds in gilts would ease the government’s borrowing challenge, I would question whether, in the current climate, seeking this degree of security for a small segment of the population, is consistent with the deleveraging of finance required to restore balance in this and other economies.

SECOND VOTE OF THANKS PROPOSED BY ORLAIGH QUINN, DEPARTMENT OF SOCIAL AND FAMILY AFFAIRS

Introductory Remarks

The paper presented by Moloney and Whelan is most welcome and presents an interesting analysis of private pension provision in Ireland. It is timely for a number of reasons. Not least of which is the fact that the Government is currently developing a National Pensions Framework. Unfortunately, it is also a time when the economic and financial environment in which we find ourselves is challenged to an almost unprecedented extent. Pensions, of course, are not immune from the downturn and many schemes have suffered major losses in the past year, particularly due to the losses in equities markets.

I propose not to comment on the individual results presented in the paper given my current role in the development of the Pensions Framework. Instead, I will focus on the challenging task we face and the policy process in this area.

The recent economic downturn has meant that the challenges facing pensions in Ireland have become more urgent. Employers and trustees are finding it increasingly difficult to manage defined benefit schemes, while members are concerned about their future benefits. Members of defined contribution schemes have also seen the value of their funds eroded due to the sharp fall in equities. There are no easy answers to these problems but the Government is currently developing a package of measures to underpin pension provision in Ireland.

Short-term measures aimed at reducing the pressure on under-funded DB schemes have recently been introduced which allow greater flexibility and time for pension schemes to recover funding positions. More longer-term approaches will be introduced in legislation shortly.

Structure and Objective of the Irish Pension System

The pensions system in Ireland comprises two main elements. The first is the State run social welfare system and the second comprises voluntary supplementary pensions provided through a variety of arrangements and regulated by the State.

Social Welfare pensions are the basis upon which the rest of the pension system rests. This year marks the 100th anniversary of the State pension. However, it is interesting to note that when the pension was introduced for those aged 70 and over, average life expectancy was 50 years of age! The pensions provided under the Social Welfare system are intended to provide an adequate basic standard of living. There has been significant improvements in the real value of the State Pension which has resulted in a very significant reduction in the level of poverty among older people with just 2% of older people now in consistent poverty, representing a halving of this rate in the last five years. While means testing remains an important part of the system, it is becoming less so. The social insurance system is now very comprehensive and the numbers relying on means-tested pensions has decreased significantly in recent years.

The second pillar is comprised of pensions sponsored by the employer which may be defined benefit or defined contribution schemes, and personal pensions such as Retirement Annuity Contracts and Personal Retirement Savings Accounts. Contributions made by both employees and employers receive tax relief at the appropriate rate which is provided by the State through tax foregone.

The overall objective of our pensions system is to provide an adequate basic standard of living through direct state supports and to encourage people to make supplementary pension provision so that they may have an adequate income on retirement.

Green Paper

In October 2007, the Government published the Green Paper on Pensions. The Green Paper outlined the challenges facing the Irish pensions system in the years ahead, including the sustainability of the system over the longer term in light of demographic change and the adequacy of contribution levels and benefits. Specific issues in relation to State pensions were also set out, as well as considerations in relation to key aspects of the system including tax treatment, security of pension provision, the regulatory regime, public service pensions and work flexibility in retirement. It also set out key questions to be addressed in formulating the Government's response to these challenges.

Publication of the Green Paper was followed by an extensive period of consultation. Written submissions were received from over 320 individuals and 62 organisations. Six regional seminars were held in early 2008 at which the 300 people who attended had an opportunity to discuss the issues involved and to make their views known. In May 2008, an international seminar was held in Dublin with speakers from the OECD, World Bank, United Kingdom, New Zealand, Australia and Ireland. All of these submissions and conference papers can be found on the Green Paper website at www.pensionsgreenpaper.ie.

The response to the consultation process reflected the wide range of views and interests held by individuals and organisations throughout the country. While there was no consensus on ways to respond to the challenges facing the pension system, it was clear that there were significant issues and problems that people wanted addressed.

National Pensions Framework

Following this consultation phase, the Government is currently developing a National Pensions Framework which is expected to be published before the end of the year and which will shape the direction of pension policy in Ireland for years to come. The framework will address the many and varied issues that were raised in the Green Paper consultation process and that cut across all areas of our pension system – the social welfare pension, occupational and personal pensions, public sector pensions and retirement age.

Some of the key issues that the Framework will need to address in preparing a sustainable pensions policy include:

- The population aged 65 and over will increase by 59% to 2021 and by a further 142% to 2061;
- There will be a relatively rapid and severe decline in the Pensioner Support Ratio – the ratio of the number of people of working age to the number of people over pension age – from about 6 to 1 at present to less than 2 to 1 in 2061;
- In the years ahead, the State faces an additional bill for pensions which amounts to some €8 billion in today's terms;
- The pension coverage rate for people at work has been hovering between 50 and 55%, despite vastly improved awareness of pension issues and the need for people to provide for their retirement;

- Even where people are contributing to pension schemes, the adequacy of those contributions may not be enough to meet their expectations in retirement.

These figures are real and they allow us to see the scale of the challenge ahead. But they tell us little about the very real human impact of pension problems on the people of this country.

Conclusion

There are many challenges facing pension policy and provision in Ireland. These include issues such as pensions coverage and the adequacy and sustainability of our pensions system generally. A good, robust pensions system is costly no matter how it is organised. The challenge faced by Government is to strike the appropriate balance between those involved, including employers, people in employment and the State.

Our objective must be a pension system which will deliver an adequate retirement income for all which is, at the same time affordable and sustainable for the State, and those who sponsor and provide occupational pensions systems.

Pension reform is an extremely complex issue and the Government must ensure that it has considered all of the issues involved before making decisions which have such a strong impact on people's livelihoods. The input of papers such as the one presented tonight by Moloney and Whelan assist in the analysis of that decision-making process. It is expected that the framework will be published before the end of the year.