

Irish Economy Note No. 2

“Irish Pensions Policy and Public Debt Management”

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## Irish Pensions Policy and Debt Management

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## **Introduction**

In common with most developed and many middle-income countries, the combination of rapid recent increases in longevity in Ireland and the asset market meltdown has heightened awareness of the challenges facing the provision of retirement income, in particular through funded schemes. The State operates unfunded final-salary schemes for its own employees as well as unfunded contributory and non-contributory (means-tested) schemes for the population at large through the social welfare system. Longevity makes these schemes more costly too and the deferred Exchequer obligations have begun to appear more onerous with less buoyant expectations about the size of the future tax base.

The Government released a Green Paper in 2007 and a White Paper is promised later in the year, as is the report of the Commission on Taxation, which can be expected to address the complex questions around the tax treatment of retirement saving. This presentation is focussed on a number of economic policy issues surrounding pensions in Ireland which seem worthy of policymakers' attention. These are

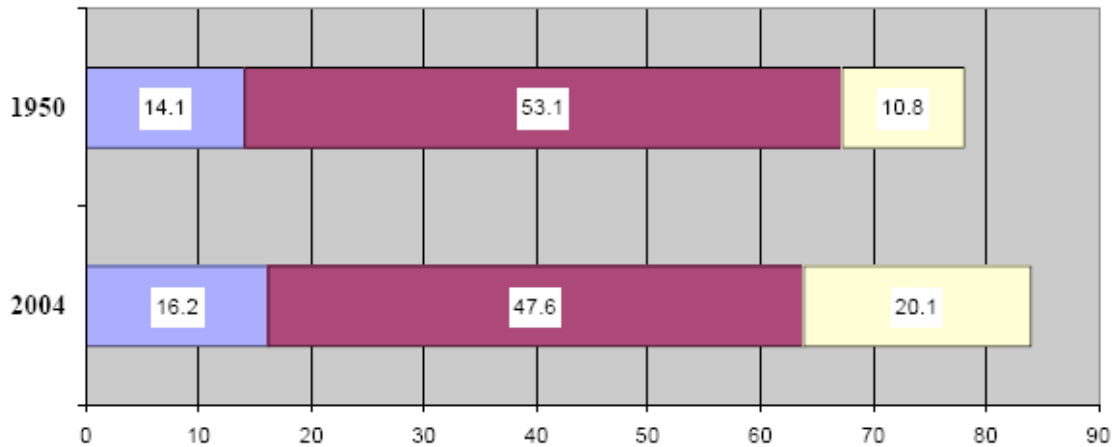
- the longevity developments, in particular the threat they pose to the financial viability of both funded and unfunded schemes and their implications for retirement ages;
- the current crisis in defined benefit schemes and the viability of the employer-sponsored model; and
- the availability of index-linked financial instruments in the context of retirement provision .

## **The Longevity 'Problem'**

It is a little strange that the extraordinary improvement in life expectancy (at all ages) has come to be seen as a problem or a crisis in the context of pension provision. The greatest current threat to lengthening lives appears to be the obesity epidemic, which is never described as a boon! When have you seen a headline in the financial press which says 'Obesity good news for pensions'? Longevity is a problem to the degree that arrangements for income provision in retirement are hold-overs from a time when the elderly had the decency to survive for shorter, more affordable, periods of retirement. Fixing statutory retirement ages in the face of sharp increases in the likely length of drawdown in retirement implies higher contributions for private funded schemes, or higher taxes in support of the unfunded State schemes. Nicholas Barr (2006) and many

others have argued that this consideration swamps the impact of poor recent investment performance from funded schemes. This chart from his paper is striking.

**UK: Life Course, Men Retiring in 1950 and 2004**  
(years spent in education, work, and retirement)



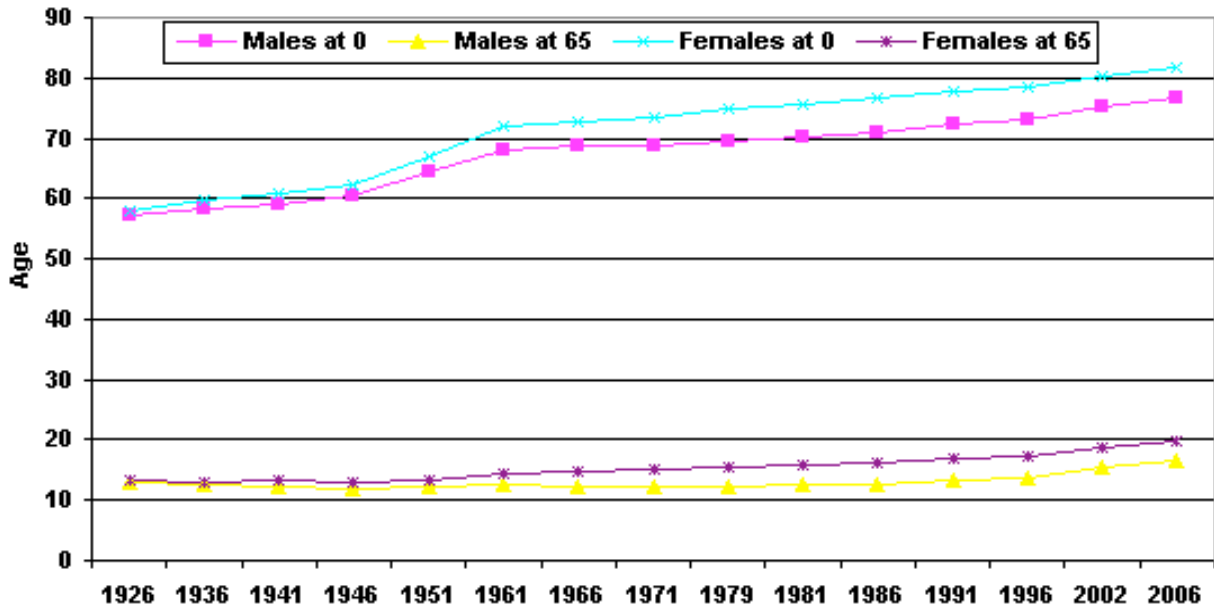
If you wish, 53.1 years of production was expected to pay for 10.8 years of retirement in 1950. By 2004, 47.6 years of production was expected to pay for 20.1 years of retirement. There is no plausible recovery in the rate of return on funded schemes (or rate of growth in the tax base in the case of State schemes) which can be invoked to rescue this kind of arithmetic. On broader issues in pension economics, see also Barr and Diamond (2006) and Barr and Diamond (2008).

Ignoring the time spent in schooling, and assuming a tribal economy producing a single non-storable consumption good (carrots), a population of constant size would have handed 20% of annual carrot production over to the elderly back in 1950. By 2004, 42% of carrots would have to be set aside by the working population for the elderly, a proportion which may continue to rise. The tribal elders in these circumstances would likely instruct the more able-bodied amongst the elderly to return to the carrot-fields.

When we understand that retirement provision is, with the veil of finance removed, about providing current consumption goods to the retired, the essence of the longevity 'problem' is clear: current expectations about retirement ages are unsustainable without sharp increases in savings or taxation.

Recent developments in life expectancy in Ireland are shown in the next chart and table.

### Life Expectancy at Birth, and at 65, Republic of Ireland



Up to the 1970s, life expectancy at birth for females had been rising more rapidly than for males, but both have risen sharply, and at about the same pace, in more recent decades. Life expectancy at age 65 is most relevant for the financial viability of (funded or unfunded) pension schemes, and the trends in the Irish figures are dramatic. Male life expectancy at age 65 was 12.6 years in 1926, barely altered over the six decades from 1926. In just two decades since then, the figure has risen to 16.6 years, or by 32%, and female life expectancy has also risen sharply. Moreover there are no grounds that I know of to expect these trends to taper off anytime soon. The Pensions Green Paper released in 2007 projected a further increase in life expectancy of about 6 years over the next half-century.

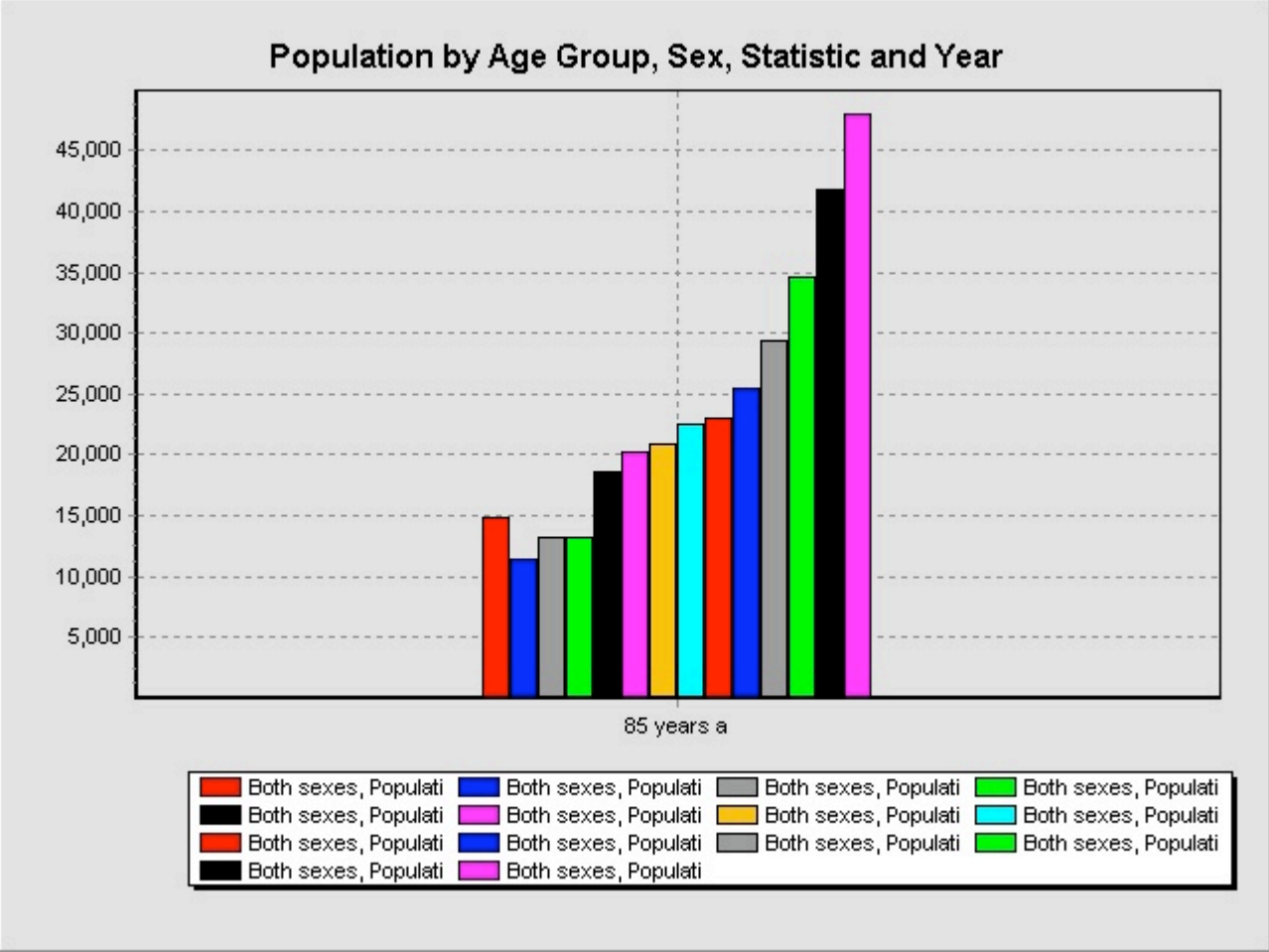
The qualifying age for State pensions in Ireland had been 70 up until the 1970s. The reduction to the current 66 coincided fairly closely with the sharp increase in life expectancy, yielding a build-up in unfunded pension obligations even greater than would have arisen from improved survivorship alone.

**Table 1: Life Expectancy at Birth, and at 65, Republic of Ireland**

Life Table Centred on	Males		Females	
	0	65	0	65
1926	57.4	12.8	57.9	13.4
1936	58.2	12.5	59.6	13.1
1941	59.0	12.3	61.0	13.2
1946	60.5	12.0	62.4	13.1
1951	64.5	12.1	67.1	13.3
1961	68.1	12.6	71.9	14.4
1966	68.6	12.4	72.9	14.7
1971	68.8	12.4	73.5	15.0
1979	69.5	12.4	75.0	15.4
1981	70.1	12.6	75.6	15.7
1986	71.0	12.6	76.7	16.2
1991	72.3	13.4	77.9	17.1
1996	73.0	13.8	78.5	17.4
2002	75.1	15.4	80.3	18.7
2006	76.8	16.6	81.6	19.8

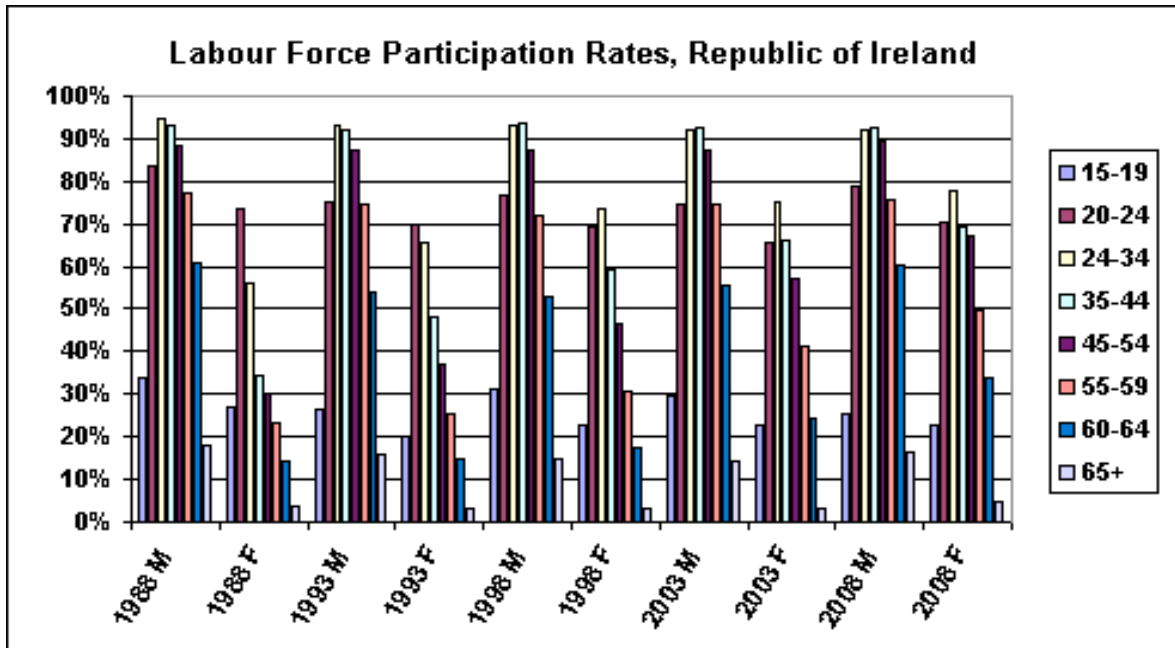
Source: CSO (2009).

In addition to the straight rise in life expectancy at 65, there has been an even sharper rise in those surviving to very great ages, a trend also evident in the United Kingdom. The next chart shows the numbers enumerated at each census since 1926 (both sexes) aged 85 and older. Since 1986, the number of these very elderly has almost doubled, from 24,458 to 48,028.



These patterns place strain on health and social service systems as well as on the financial viability of pension arrangements built around a constant age of retirement. Otto von Bismarck is generally credited with the institution of social security for the aged, based on a fixed age of retirement. It is fair to ask whether the Iron Chancellor would have designed such a system had his Pomeranian grenadiers enjoyed modern-day life expectancy. Clearly, if labour force participation rates begin to rise in the older age groups, the pressures from rising life expectancy are ameliorated. Recent Irish data are shown in the next chart and table, and the news is a little better.

For both males and females, participation in the 60-64 and 65+ age groups finally rose in the most recent five-year period to 2008. But in the male case, participation remains below the level of twenty years ago, and for females is only marginally higher. The most obvious change is the sharp increase in female participation in the middle years, while the rates for both sexes had fallen steadily throughout the twenty years covered by these data



**Table 2: Labour Force Participation Rates, Republic of Ireland**

In April		15-19	20-24	25-34	35-44	45-54	55-59	60-64	65+
1988	M	33.6	83.6	94.6	93.0	88.2	77.5	60.7	18.2
	F	27.0	73.8	56.0	34.5	30.4	23.5	14.5	3.8
1993	M	26.4	75.2	92.9	91.9	87.4	74.5	54.1	15.8
	F	20.1	69.9	65.6	48.1	37.0	25.6	14.8	3.2
1998	M	31.1	76.8	93.3	93.4	87.1	71.8	52.7	15.0
	F	23.0	69.4	73.4	59.4	46.4	30.7	17.6	3.0
2003	M	29.4	74.7	91.9	92.5	87.3	74.8	55.5	14.1
	F	22.5	65.5	74.9	66.3	57.4	41.5	24.5	3.3
2008	M	25.6	79.0	92.2	92.8	89.2	75.4	60.3	16.3
	F	23.0	70.4	77.6	69.1	67.0	49.9	33.9	4.5

Source: CSO, Labour Force Surveys, QNHS.



in the younger age-groups. For males, participation in the 15-19 age-group has dropped from 33.6 to 25.6, and in the 20-24 age-group from 83.6 to 79.0. For females the figures are 27.0 to 23.0, and 73.8 down to 70.4. Thus the pattern evident in the first chart above for the UK, of the candle burning from both ends, is also present in the Irish figures. The apparently positive factor of the sharp rise in female participation is offset by the corresponding increase in pension entitlement over the longer female life-span.

The conclusion, clearly, is that something's got to give. If current expectations about retirement ages are to be validated, that means far larger contributions to funded schemes, and far larger taxes to support unfunded State schemes. The alternative is either much lower pensions, or an acceptance that current expectations about retirement ages are not realistic.

### **Should We Mourn the (Slow) Death of Defined Benefit?**

The Irish and UK pension systems share a reliance, in the private sector of the economy and in State-owned commercial companies, on the funded, final salary model. In the UK, it has recently been reported that 70% of defined benefit (funded, private sector) pension schemes are now closed to new members. The process has been slower in Ireland, but the great majority of new schemes are choosing the defined contribution route, where investment and longevity risk are borne by the scheme member. Outside the public service, the numbers in DC schemes in Ireland are now roughly the same as the numbers in DB schemes, and seem certain to exceed the DB figures in due course.

Defined-benefit schemes as recently as a decade ago were seen as the Gold Standard in pension provision. But there are now reports of widespread under-funding and the trade unions have drawn attention to the plight of contributing members in some schemes who may lose most or all of their pension entitlement as the sponsoring companies face insolvency. In these circumstances (see Walsh (2008)) the retired members take priority and the 'backstop' liability of the sponsoring company is worthless.

The DC versus DB debate is complex, and I wish to make just a few brief points. The first is that the modern business corporation, operating in competitive markets, is not a suitable repository of long-term fiduciary obligations to retirees. The Waterford Glass workers would have been better off in a DC scheme.

Fifty- or sixty-year commitments from businesses to back-stop pension schemes whose liabilities can readily exceed the net worth of the companies concerned are not credible, and the faith of employee representatives in the company-sponsored DB model is misplaced. There is an obvious fallacy of composition at work, clearly in evidence since the onset of the credit crunch. The circumstances in which the back-stop of the sponsor guarantee is likely to be needed (an equity market collapse) are precisely the circumstances in which the sponsors will be least able to deliver. The result is companies like British Airways, a large pension fund with a small airline subsidiary, and pension liabilities of the order of market capitalisation. Proposals to force companies to meet

pension liabilities in these circumstances, and otherwise to repair the company-sponsored model (eg Moloney and Whelan (2009)) may prove unrewarding, because financially infeasible, particularly if everyone gets more realistic about longevity, see also Honohan (2009).

DB schemes of the final salary variety have particular problems of opacity and non-portability. Opacity includes raiding the fund through insider manipulation, such as late-career promotions and funding operating costs such as redundancies through pension enhancements.

Four principal objections to DC schemes seem to be

- the tendency to under-fund, whether by employees or employers;
- the shifting of investment risk to employees;
- the failure to pool longevity risk; and
- Fund management costs.

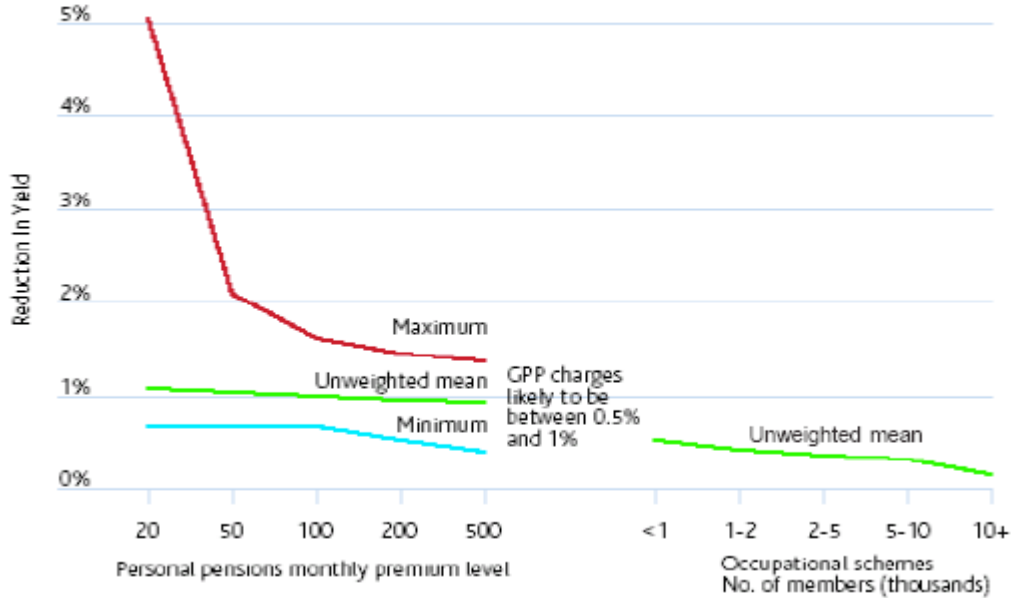
The under-funding is chosen behaviour, and not an intrinsic feature of the DC model. The solution is to be realistic about funding levels.

Investment risk has to be borne by someone, and employers seem to be particularly unsuited to the task. It may well be the case that 70% or 80% devoted to equities and property is not a sensible choice for DC fund managers, but risk can only be mitigated, even by governments, and not made to vanish. There is no feasible way to guarantee future flows of (as yet unproduced) real consumption goods to retirees.

Longevity risk can be pooled through nominal or real annuities markets, via suitably capitalised insurers or the State.

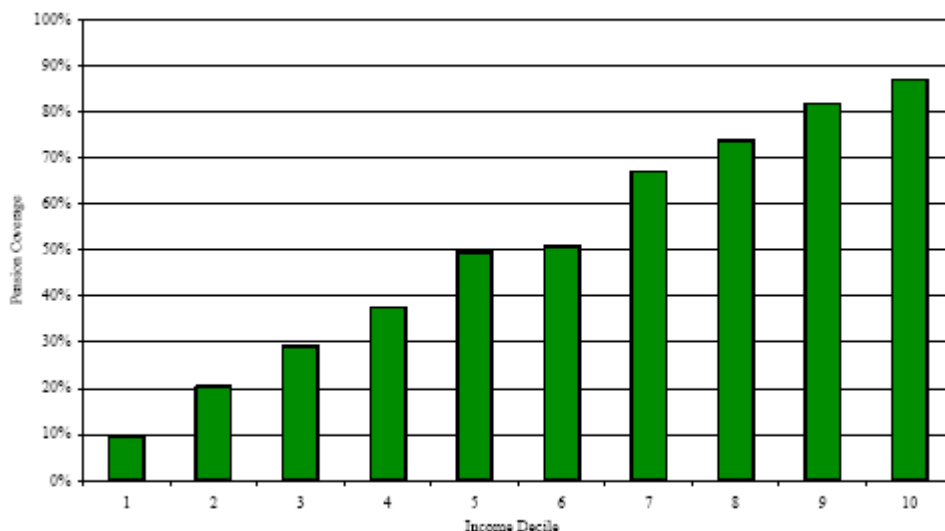
The chart below is also from Barr (2006). It shows that funded personal schemes can be costly, and that company-sponsored DC-type schemes may offer some cost reductions. I do not have Irish figures to hand, but note that they include some taxes: the stamp duty on equities in Ireland is in large degree a tax on funded pension schemes.

### Administrative Costs of Pension Schemes in the UK



Finally on second-pillar schemes, this chart from the Green Paper is interesting. There is regular hand-wringing that pension coverage (by which is meant second-pillar occupational coverage) is ‘only’ about 50%, and has not been rising. But this is an all-ages figure, and coverage is naturally low in the younger age-groups, and also happens to be low in the older age-groups, reflecting, I assume, lower educational attainment and a different occupational mix. The highest penetration is in the 45-54 age-group, where it is a respectable 65%.

*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).

The chart shows that pension coverage is low in the lowest income deciles. We know that household income in these deciles consists mainly of social transfers, and it is hardly surprising that people in these deciles are not keen to defer consumption off into the distant pastures of retirement, particularly given the likely high transactions costs and poor value they would face. Lifetime consumption has already been smoothed for these groups, since it is dominated by social transfers. It follows that the apparent ‘low’ rate of second-pillar coverage may not be so low in any economically useful sense.

### **Time to Issue Index-Linked Bonds?**

The Irish authorities have never issued Exchequer index-linked bonds. Several Eurozone countries do so, with France the benchmark issuer. France issues bonds linked to both the French HICP and the Eurozone HICP, including short, medium and long maturities. I believe there would be pension fund and retail demand for Irish index-linked issues, and their availability would provide the opportunity for DC schemes to reduce risk. Pricing off the current secondary market bond spreads, an Irish 5-year index-linked issue might pay a coupon around 2.50, versus 4.00 for the bullet of the same maturity. Of course the coupon would be index-linked, but who thinks the Irish HICP is headed North rapidly enough to bridge that gap? In the longer term, it is not reasonable to expect that index-linked would cost less, there would be swings and roundabouts, but in current conditions, NTMA might have a fresh think about an index-linked issue. A full set of maturities would eventually permit the emergence of an index-linked annuities market, pooling longevity risk, and would facilitate the replacement of the current lump-sum compensation system for accident victims with a UK-style structured-settlement (ie real

annuities) model. As a matter of social policy, and in order to cut litigation costs, consideration should be given to a system of periodic payments as an alternative to lump-sum settlements. At least one member of the High Court has indicated dissatisfaction with the existing arrangements, which load both investment and longevity risk on to plaintiffs.

Golfers are allowed to carry fourteen clubs, not all of which have to be used. Debt management agencies can issue commercial paper, Treasury bills, floaters, bullet bonds or index-linked. Investors in sovereign debt currently come in three sizes. Those worried about deflation (sell them bullet bonds), those worried about inflation (sell them index-linked) and those in two minds (sell them floaters or bills). With a lot of golf to play, in blustery conditions, there is no point in venturing out without the full set of clubs.

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