

# PERSPECTIVES ON RETIREMENT SAVING POLICIES IN IRELAND

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## 1. Introduction

There is a danger of Irish households becoming deaf to the persistent clamour telling them they are not saving enough for retirement. But with overall economic growth showing remarkable robustness, not having put aside enough during working years may now be the single biggest threat to living standards many Irish people face. Of course, under-saving for retirement is by no means a uniquely Irish problem. Large-scale studies of households in the United States, for example, show that the median household reaches retirement with very low levels of financial wealth.<sup>1</sup> And the recent Pensions Green Paper in the United Kingdom has pointed a large savings shortfall for a significant minority of the workforce.<sup>2</sup>

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<sup>1</sup> Poterba, Venti, and Wise (1996) report that median level of all personal financial assets of families with heads between 55 and 64 years was just \$8,300 in 1991. Almost 20 per cent of families had no financial assets at all. It should be noted that not all experts agree that there is widespread under-saving for retirement in the United States. Scholz *et al.* (2004) use a rich life-cycle model to argue that fewer than 20 per cent of households have less wealth than their inferred optimal targets. One criticism of their approach is that they include the equity in homes as part of household wealth, since many households are unwilling or unable to run down this equity to finance their retirement (see, for example, Venti and Wise (2001)).

<sup>2</sup> The Green Paper notes that there is no “right” replacement rate. Instead, two different benchmarks are used for assessing the adequacy of the gross replacement rate: one-half and two-thirds. The paper finds that around 3 million people appear to be seriously undersaving for retirement, with projected gross replacement rates of under 50 per cent, and there are “a further 5 to 10 million people with estimated replacement rates at the lower end of our range of half to two-thirds” (Annex 4, p. 157).

Interestingly, surveys indicate that many individuals recognize they are not saving enough and wish to save more.<sup>3</sup>

There is one reason for being especially concerned about post-retirement living standards in Ireland, however. The country is almost unique in the OECD in not having an earnings-related state pension or mandatory earnings-related private provision.<sup>4</sup> The flat-rate state pension provides a relatively low level of replacement for a worker with average earnings.<sup>5</sup> Of course, many households are not solely reliant on the state pension for their retirement income needs. Yet just over half the workforce had pension coverage in 2004.<sup>6</sup> For recent retirees, Hughes and Watson (2005) have calculated gross replacement rates averaging 51 per cent for couples and 43 per cent for singles in the year following retirement based on *all* income sources.<sup>7</sup>

These numbers suggest that many Irish households experience a significant drop in consumption at retirement.<sup>8</sup> On the basis of US

<sup>3</sup> Choi *et al.* (2001), for example, report the results of a survey where a sample of employees at a large US food company were asked about their views on the adequacy of their own savings. When they asked the employees how much they should *ideally* be saving for retirement answer averaged 13.9 per cent. When asked to evaluate the adequacy of their own *actual* savings rate, two-thirds reported that they their savings were too low relative to their ideal rate, one-third thought their saving was about right, and just 1 employee (out of 195) thought their savings rate was too high.

<sup>4</sup> New Zealand is the other exception.

<sup>5</sup> In a comparative analysis of state pension systems, the OECD (2005) finds that a worker on average earnings has a lower replacement rate in Ireland (31 per cent) than in any other OECD country. The OECD average is 57 per cent. The OECD also reports that the net replacement rate is 37 per cent, which compares with an OECD average of 64 per cent.

<sup>6</sup> Based on estimates from the Quarterly National Household Survey, 52.4 per cent of all persons between the ages of 20 and 69 years in employment had pension coverage. This compares with a figure of 51.2 per cent in the first quarter of 2002. This small increase probably reflects the introduction of Personal Saving Retirement Accounts. These accounts will be discussed later in the paper.

<sup>7</sup> Their data combines from all waves of the Living in Ireland Survey between 1994 and 2001. Unfortunately, despite the pooling from different waves the number of cases is small, with 200 pensioner couples and 60 single pensioners. Interpreting these rates is complicated by the fact that some people – often those with relatively generous occupational or personal pensions – retire before reaching 65 years. Hughes and Watson also report that in 2001 the median income of people 65 years and over was just 62 per cent of the median income of those aged less than 65 years in Ireland, which compares with an average of 83 per cent in the EU-15.

<sup>8</sup> I thank the referees for pointing out that drops in consumption can be quite different from drops in income. In addition to reductions in working-related expenses, Irish retirees receive a valuable package of non-cash benefits (free telephone, free travel, etc.). Retirees are also likely to have relatively low housing-related expenses. Work by Layte *et al.* (1999) finds that many elderly avoid severe deprivation despite having relatively low incomes. But the authors also find that a significant number of households experience both severe deprivation and have low incomes. Short of such severe deprivation, having a low replacement rate is bound to force changes to how lives are lived for many households that must rely exclusively on the state pension. This is likely to be especially true for households who experience rapid growth in earnings during their working life, so that their final

data, Bernheim *et al.* (2001) argue that it is difficult to reconcile observed drops in consumption at retirement with models of rational, farsighted life-cycle planners.<sup>9</sup> To properly understand savings behaviour, it seems necessary to introduce certain behavioural tendencies – such as bounded rationality when faced with complex life cycle planning problems and the problems of self control when faced with the lure of instant gratification – that lie outside the rational choice framework.<sup>10</sup>

In this paper, I examine a number of policy initiatives designed to increase collective and individual saving in Ireland. The resulting alphabet soup of policies – the National Pensions Reserve Fund (NPRF), Personal Retirement Savings Accounts (PRSAs) and Special Savings Investment Accounts (SSIAs) – suggest that this has been an active area of public-policy innovation. I will briefly review what I see as the merits of these programmes, and offer a suggestion for an additional policy that I believe will help households move closer to their desired saving rates without having to resort to heavy-handed government compulsion.

From an analytical perspective, the paper makes use of two relatively non-standard (but increasingly discussed) literatures. The first relates to the *political risk* that exists in all state-run pension systems. This is the risk that benefit rules will be made less generous before or during your retirement, typically due to an ageing-induced increase in the total cost to future generations of funding the benefits. Drawing on the idea of political risk, I argue that the NPRF can be viewed as a mechanism to help ensure that today's levels of benefit generosity can be sustained. The fund also makes it easier for a prudent government to increase benefit generosity for *current* retirees, despite the fact that those increases become very expensive as the elderly dependency rate rises. The second is work in behavioural economics that studies the *present bias* that hinders many of us in making the private retirement provision that we know is right for us when we adopt a more “temporally detached” perspective. The findings from this research help shed light on the surprising popularity of the SSIAs, and also provide clues to other policies for increasing retirement saving.

income is far higher than their average income (and thus capacity to save) over that life.

<sup>9</sup> Banks *et al.* (1998) also find evidence of significant drops in consumption at retirement in the United Kingdom. They find that part of the drop can be explained by the complementarity between working and consumption. They argue that the only way to reconcile the unexplained fall in consumption with the life-cycle hypothesis is to assume a systematic arrival of unexpected adverse information at retirement. Hurd and Rohwedder (2003) provide evidence that consumption changes at retirement are fully anticipated. They infer that the observed declines must be due to the ending of work-related expenses and the substitution of home production for market-purchased goods and services. An alternative explanation is the declines were anticipated, but behavioural failings made it difficult for households to put the necessary saving adjustments in place.

<sup>10</sup> See, for example, Thaler (1994).

The rest of the paper is organised as follows. In the next section, I provide a very brief discussion of Ireland's state pension system and discuss the merits of the recent shift to pre-funding future benefit obligations via the NPRF. Section 3 then turns to tax-based inducements for retirement saving, with particular focus on the recently introduced PRSAs. This leads to a discussion of ideas from the behavioural economics literature about how people actually make saving decisions in Section 4. Section 5 then applies these ideas to help understand the reasons for the popularity of the SSIA scheme. In Section 6, I attempt to combine the lessons from the behavioural economics research and the lessons learned from the SSIA to sketch the outlines of a policy that I think would significantly increase retirement saving in low-cost financial instruments while preserving freedom of choice. Section 7 offers some concluding thoughts.

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## 2. Pre-Funding State Pensions

### 2.1 THE STATE PENSION

The outstanding feature of the Irish pensions system is the absence of an earnings-related state pension. Among OECD countries, only Australia, Ireland, Mexico and New Zealand lack what is typically called a second-tier pension that links pension payments to an individual's earnings history (OECD, 2005).<sup>11</sup> Instead, the Irish system depends solely on two forms of *flat-rate* pension. Social assistance pensions are non-contributory, means-tested and payable to those aged 66 years and over.<sup>12</sup> Social insurance pensions are contributory, non-means-tested and payable at age 65 years.<sup>13</sup>

The strengths of the Irish system are that it is relatively inexpensive and it redistributes towards the lifetime poor (by combining flat rate benefits with earnings-related contributions).<sup>14</sup>

<sup>11</sup> Australia and Mexico mandate contributions to defined contribution private accounts.

<sup>12</sup> The maximum payment from the Old Age (Non-Contributory) Pension to a single individual is €166 per week in 2005. Benefit eligibility falls to zero if the individual has a weekly income of over €170.10 per week.

<sup>13</sup> There are actually two forms of contributory pensions. The Retirement Pension is payable at age 65 years, but is conditional on actual retirement. No retirement test is applicable to the Old Age (Contributory) Pension. However, this pension is not available until age 66. The benefit payable to an individual without dependents is €179.30 from both contributory pensions in 2005. Along with other benefits, contributory pensions are funded by contributions made by employees (4 per cent of earnings up to €44,180) and employers (10.75 per cent of earnings without limit). See McHale (2002) and Hughes and Watson (2005) for more details on the Irish pensions system.

<sup>14</sup> One problem with such a system is that the PRSI contributions are viewed as a pure tax by the employee, since additional contributions do not translate to additional benefits (assuming qualification for full benefits). This raises the overall marginal tax rate to employees who are below the contribution ceiling. The resulting additional distortion to labour supply may be significant given the well-known fact that the distortion rises with the square of the marginal tax rate.

The chief weakness of the system is that it provides low replacement rates for many workers, putting them at risk of substantial drops in living standards at retirement. Using a stylised model of the system, the OECD (2005) calculated that a worker on average earnings over their working life would have a gross replacement rate of 30.6 per cent and a net replacement rate of 36.6 per cent. A worker earning twice average earnings would have gross and net replacement rates of just 15.3 and 21.9 per cent respectively. It should be noted that some systems with complicated formulas for determining earnings-related benefits actually end up with little more differentiation in benefits than are observed in Ireland. The OECD (2005) has usefully calculated measures of benefit dispersion (measured by the Gini coefficient) as implied by their country-specific state pension models. The Gini coefficient is zero for Ireland given its pure flat-rate benefit system, which compares to an average OECD Gini of 0.16. But the mere existence of a complicated earnings-related state pension does not guarantee differentiation in benefits. Canada, for example, has a relatively complicated earnings-related system, but ends up with a Gini coefficient not much greater than Ireland's at 0.04 – the system is full of sound and fury but in the end gives all retirees roughly similar amounts. One problem with such a system is that higher earning retirees may be surprised by how little of their income the state pension replaces.<sup>15</sup> The Irish system at least has the virtue of transparency: workers can form reasonably accurate expectations of future state benefits based on widely known benefit levels for current retirees. I will return below to the question of whether this is likely to be enough to induce the saving necessary to sustain living standards in retirement.

## 2.2 THE NATIONAL PENSION RESERVE FUND

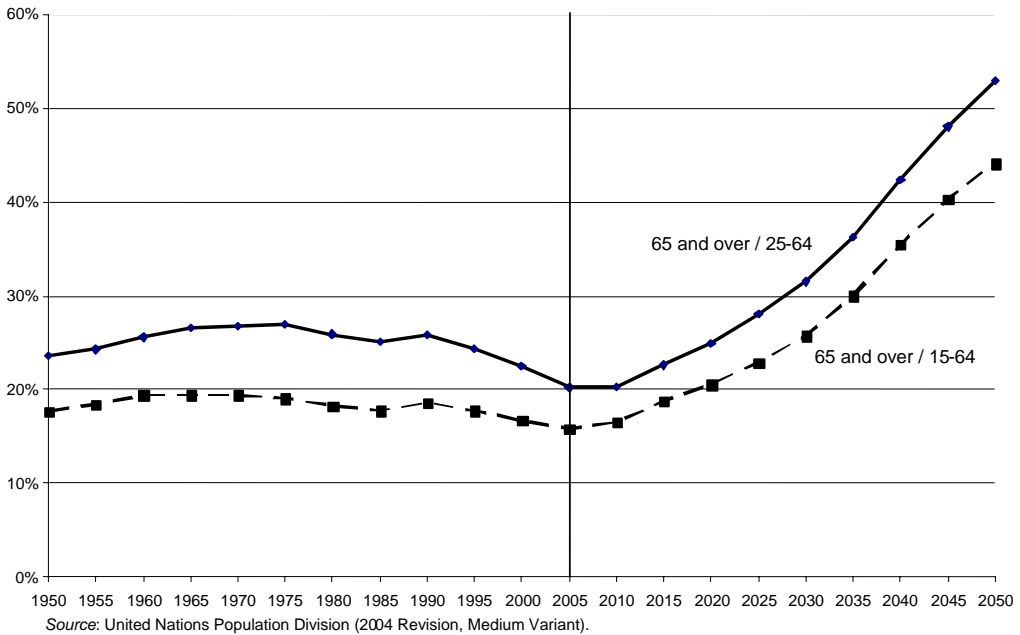
In common with all industrialised countries, Ireland faces a significant ageing of its population structure in coming decades. The resulting increases in old age dependency rates are generally very good news, reflecting as they do the fact that people are living longer. Of course, the coming surge in dependency rates also reflects the retirement of the post-WWII baby-boom generation in most countries. Helpfully, Ireland's baby boom came later than in other countries, giving the government some additional time to deal to prepare for ageing-related fiscal costs.

Figure 1 shows the evolution of two measures of the old age dependency rate in Ireland: the ratio of the population aged 65 years and over to the population aged between 15 and 64 years, and the ratio of the population aged 65 years and over to the population aged between 25 and 64 years. With an increasing proportion of the

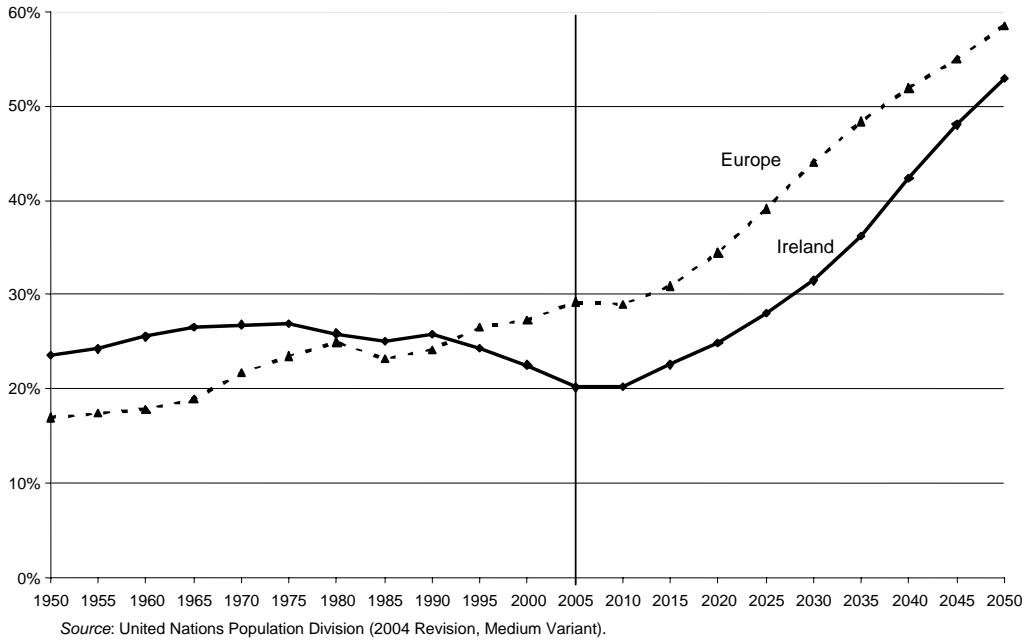
<sup>15</sup> In the case of Canada, the OECD estimates a gross replacement rate of 42.5 per cent for someone on average earnings, a rate which falls to 21.3 per cent for someone at twice average earnings.

population now staying in school until their early twenties, the latter is probably a better measure of the old age dependency “burden.”

**Figure 1: Old Age Dependency Rates in Ireland**

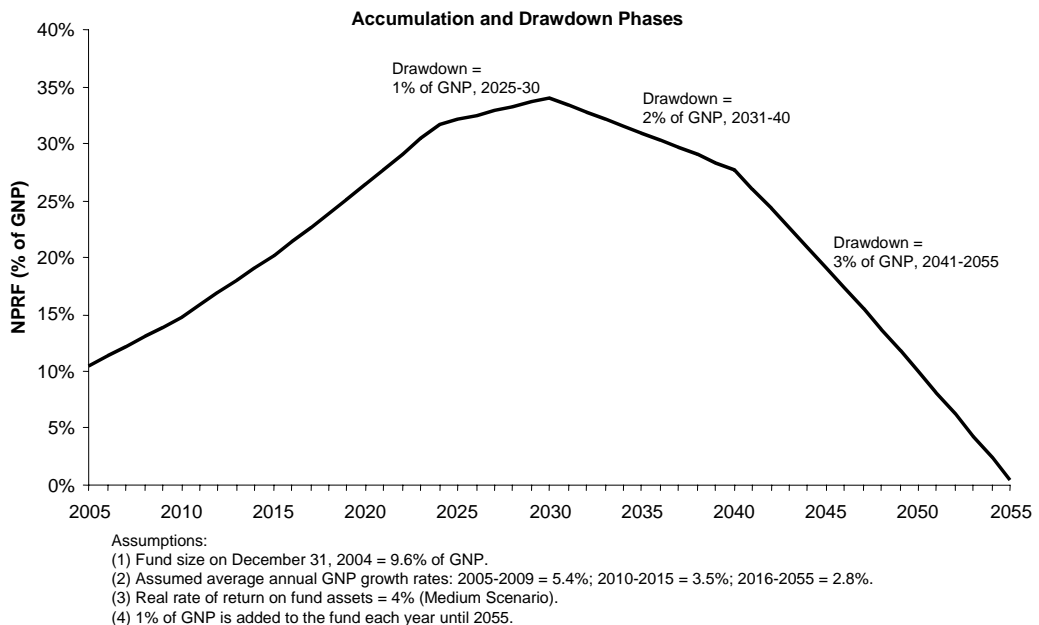


Using the latter measure also highlights the favourable demographic window that the government has to prepare for the fiscal costs of an ageing population. The dependency rate dropped after 1990 and is not projected to return to the 1990 level until after 2020. Figure 2 shows how dependency rates in Ireland have deviated from those in Europe as a whole. European dependency rates have been increasing since 1990, with the rate of increase set to rise markedly after 2010. The figure also shows the Irish dependency rate converging to the European rate by mid-century. Thus the delayed Irish baby boom only postpones the fiscal crunch. It is well known that in a pure pay-as-you-go pension system an increasing dependency rate must mean either higher contribution rates or lower benefits rates (expressed as a share of average earnings). The only way to avoid this unpleasant arithmetic is to pre-fund part of the future benefits. In effect, the current generation of workers are partly paying for themselves a part of what future workers were to have paid for.

**Figure 2: Old Age Dependency Rates in Ireland and Europe, 65+ / 25-64 Years**

In its effort to take advantage of the demographic window, the Irish government is pre-funding part of the cost of future benefits with the National Pension Reserve Fund (NPRF). Starting in 1999, the plan was to put aside 1 per cent of GNP each year until 2055 regardless of the state of the economy.<sup>16</sup> Disbursements of the fund are prohibited until 2025. The value of the fund had already reached 9.6 per cent of GNP by the end of 2004. Figure 3 shows the hypothetical evolution of the fund based on given GNP growth assumptions, a real rate of return on the fund of 4 per cent, and a drawdown schedule that would exhaust the fund by 2055. These simple calculations show that the fund should significantly ease the burden on future generations of funding the pensions of today's younger workers.

<sup>16</sup> In addition, the proceeds from the privatisation of Eircom were invested in the fund.

**Figure 3: Hypothetical Evolution of the National Pensions Reserve**

Is the NPRF good policy? The most common rationale for pre-funding is intergenerational equity. The argument is simply that it is unfair to place the burden of ageing-related costs on future workers. This rationale has been strongly questioned by the ESRI in its 2003 *Medium-Term Review* (see also Fitz Gerald, 2004). The *Review* authors point out that today's workers already face a high burden from the direct monetary and disruption costs of closing the infrastructure deficit. The benefits of this infrastructure will be enjoyed by future workers (who hopefully will also be earning substantially higher incomes), so that having these workers meet the higher pension burden does not seem like an unreasonable quid pro quo.

This argument raises serious doubts about the intergenerational equity rationale. But there is another possible rationale for the pre-funding of future benefit obligations that is addressed directly to the self-interest of current workers: pre-funding can be a means of securing promised benefits from younger generations. The key issue here is what is referred to as *political risk* in intergenerational transfer systems. This is the risk that future politicians will change the rules that govern pension entitlement and generosity. A number of OECD governments have already substantially changed the rules applying to future retirees, resulting in substantial reductions in



pension wealth (see, for example, McHale, 2001). Most of the changes have taken place in earnings-related systems, and have involved such reforms as changed indexing rules, later retirement ages and altered formulas for linking past earnings to pension benefits.

The changeable parameters are obviously far less for Ireland's flat rate system. One possible change would be to shift from the current implicit indexation to earnings to indexation to prices. This would amount to an effective and growing benefit rate cuts assuming positive real wage growth. But with the current relatively low replacement rate and the Government's intention to see it rise, it is hard to imagine significant cutbacks in the Irish case. Having said that, *improvements* to benefit generosity are difficult for prudent governments facing rising dependency rates because they impose heavy *future* fiscal burdens even if they are quite affordable today. Thus population ageing is likely to constrain needed near-term benefit increases. The ability to pre-fund gives the government more room to increase benefits. I will argue later that it is important private provision for retirement increases so that there is less dependence on the state pension. But the state pension – limited though it is – is likely to remain a key (and for some the only) source of retirement income. The NPRF strikes me, as a helpful device in securing and sustaining needed increases in its generosity.

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### 3. Tax-Based Inducements to Save for Retirement

#### 3.1 TAX-FAVOURED SAVING IN IRELAND

Practically all OECD countries provide some form of tax inducement to encourage saving for retirement. The absence of earnings-related state pensions makes such inducements all the more central in the Irish case, as they serve as the primary public policy tool for ensuring adequate income replacement. The tax deferment mechanisms are available for employer and employee contributions to occupational pensions, and also individual contributions to personal pensions such as Registered Annuity Contracts (RACs) and Personal Retirement Savings Accounts (PRSAs). Moreover, tax relief is provided at an individual's marginal tax rate, so the value of the relief is greater for higher earners.

These inducements do not come cheap. Hughes and Watson (2005) note that the tax foregone in 2000/1 was equal to €1.5 billion – almost as much as the direct spending on the pension system of €1.6 billion. One complication in determining the cost is that taxes on contributions and fund accruals are generally deferred to the withdrawal phase rather than forgiven altogether. Thus the tax revenue sacrifice now leads to a tax revenue windfall later. Yoo and de Serres (2004) have usefully applied a common methodology for a number of OECD countries to determine the present discounted value of the net tax loss from a euro's worth of contribution.<sup>17</sup> In the

<sup>17</sup> The benchmark is a euro contribution to non-tax favoured savings.

Irish case, they find that a euro contribution leads to a tax loss of 21 cents on the contribution, 19 cents of tax loss on accrued income over the lifetime of the investment, and 11 cents of tax gain when the money is withdrawn. This gives a net loss of 29 cents in present value terms. Although substantially higher tax losses are found for a number of other countries, the overall budgetary costs (1.9 per cent of GDP) are higher for Ireland than for any of the other countries considered. The reason is that the average contribution as a share of average earnings (37.6 per cent) is higher for Ireland than for any of the other countries, which in turn is the result of the absence of a state earnings-related pension.

The biggest criticism of Ireland's tax-favoured savings regime is that the benefits go disproportionately to the better off. Based on data from 2000, Hughes and Watson (2005) find that occupational and personal pensions provide "virtually no income during retirement for pensioners in the bottom three-fifths of the income distribution" (General Summary, p. III). They stress the inequity of government providing far more support to the average holder of an occupational or personal pension than to an average recipient of the state pension.

How serious an objection is the regressivity of these tax inducements? Most people would agree that regressivity is a serious mark against a fiscal system taken in its entirety. But it is less obvious that regressivity of a component part of a fiscal system is such a damning objection. One could argue that these inducements are largely aimed at higher income individuals who, as a result of behavioural failings to be discussed in the next section, have difficulty putting aside enough for their retirement, and are thus likely to suffer significant drops in their living standards given the austerity of the state pension. To see this, suppose that these inducements were not initially present and are now introduced. Suppose further that they are paid for by having a higher top marginal income tax rate. In that case, the full burden of paying for the inducements falls on higher earners. The combined effect of the inducements (which partly go to those on the standard rate) and the means of paying for them (a higher top rate) is actually progressive. In reality, it is of course hard to determine where the burden of paying for the inducements actually falls. But to the extent that tax-favoured savings instruments are meeting an important need for higher earners – and are paid for by higher earners – they need not be objectionable on equity grounds.

What need do these tax-favoured instruments meet? One possibility is that they increase the after-tax return to saving and thus increase the amount people save. However, the international evidence generally shows savings is quite insensitive to the after-tax return (see Bernheim (1997), for an excellent survey). A more important rationale is probably that they help people overcome the behavioural dispositions that make it difficult to save for retirements that seem a long way off (again see Bernheim, (1997)). One way they might do this is by encouraging people to put their savings on autopilot to avail of the tax breaks period by period; a second benefit

is that they help people put their retirement funds off limit for current consumption by imposing large tax penalties for early withdrawal. The next section will review important lessons from recent behavioural economics research in more detail. First, however, I review one tax-favoured savings instrument that, though still very new, has not proved popular with savers.

### **3.2 PERSONAL RETIREMENT SAVINGS ACCOUNTS**

Introduced in 2003, PRSAs were designed to make well-regulated, tax-favoured retirement savings products broadly available to a dynamic workforce. The accounts are portable, thus allowing individuals to continue to build retirement wealth as they move from job to job, between from paid employment and self employment, or between employment and non-employment. Maximum tax free contributions rise from 15 per cent of non-pensionable earnings for those under 30 years, to 30 per cent for those aged 50 years and above. Employer contributions are aggregated with employee contributions in determining the maximum tax-free contributions. At the withdrawal phase, one-quarter of benefits can be taken tax free, with further withdrawals subject to income tax at the individual's marginal rate. Benefits can be taken after age 60 years and must commence before age 75 years. Restrictions on withdrawals apply for those without an annuity income of a least €12,700 per year.<sup>18</sup> At death, the remaining funds pass to the person's estate and are subject to normal inheritance taxation. In terms of product choice, PRSA offerings can come in both standard and non-standard varieties. Standard PRSAs are limited to a restricted range of investment instruments and are subject to maximum charges. Employers without an occupational pension scheme or with waiting periods to join the scheme are required to designate at least one PRSA provider.

Although still relatively new, PRSAs appear to have gotten off to a slow start. The negligible increase in overall private pension coverage from 51.2 per cent in the first quarter of 2002 to 52.4 per cent in the first quarter of 2004 represents limited progress toward the Pensions Board's goal of 70 per cent by 2006. Only 50,000 accounts had been opened by May of 2005. Part of the reason may be that even the standard accounts with their regulated charges do not seem particularly good value. A review of the charges charged by the companies offering the accounts shows that they tend to set their charges at the maximum levels – 5 per cent of initial contributions and an on-going 1 per cent of assets under management. These charges will substantially erode fund accumulation over time. But possibly more important than the direct cost is the fact that

<sup>18</sup> €63,500 must be used to purchase an annuity or this amount must be kept in the PRSA until age 75 years. Alternatively, the value of the assets in the PRSA can be transferred to an Approved Retirement Fund (ARF). But again €63,500 must be used to purchase an annuity or kept in an Approved Minimum Retirement Fund (AMRF) until age 75 years.

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4.  
Selected  
Lessons  
Learned From  
Behavioural  
Economics  
Research

employers and employees find the setting up of the accounts to be onerous, contributing to the already substantial inertia that prevent people from getting their savings plans off the ground. I next turn to work in behavioural economics that helps us understand this inertia and other saving-impeding dispositions.

Economists are increasingly concluding that the rational choice model of savings (as embodied in the life cycle model, say) does a poor job in explaining actual savings behaviour. As a result of this work, there is good reason to believe that public policy towards retirement savings that does not allow for human foibles is likely to produce less than ideal results.<sup>19</sup> This section will just touch on some of the lessons from recent behavioural research that bear on the design of savings policies. The next two sections then apply these lessons, first to the success of the SSIA scheme, and then to a proposal for a significant new state-sponsored savings instrument.

#### LESSON 1: WE EXHIBIT A PRESENT BIAS IN OUR CONSUMPTION DECISIONS

Many of us are saving less for our retirements than we know we should. To fix ideas, suppose we are weighing the value of an extra euro's worth of consumption 10 years from now compared with an extra euro's worth 15 years from now. Both dates are sufficiently far off that we can be reasonably impartial between the two. Now fast forward 10 years so that the first date is *now*. The value of additional consumption today relative to 5 years from now is likely to be higher than the perceived relative value from the perspective of 10 years back. The problem is that we tend to be highly partial to the present – we like instant gratification – leading to what economists call intertemporally inconsistent (or hyperbolic) preferences. This is what leads us to put aside less of our income for retirement than we know (at least in our more detached moments) we should. Laibson *et al.* (1998, p. 95) point to the negative consequences of the lure of instant gratification as well as to means for strengthening one's self control:

[H]yperbolic consumers will report a gap between what they feel they should save and what they actually do save. Normative saving rates will lie above actual saving rates, since short-run preferences for instantaneous gratification will undermine a consumer's effort to implement long-run

<sup>19</sup> Richard Thaler tells a story (where I cannot remember) of a conference where he noted that the difference between himself and Robert Barro – who works very much within the rational choice paradigm – is that he (Thaler) thinks everyone else is as dumb as he is, whereas Barro thinks everyone is as smart as he is. Robert Barro purportedly agreed with this assessment. In emphasising behavioural failings, I too run the risk of generalising too much based on introspection. The evidence from the behavioural literature gives me some small confidence that I am not entirely alone.

optimal plans. However, the hyperbolic consumer is not doomed to be an underachiever. Commitment devices such as pensions and illiquid assets can help the hyperbolic consumer commit to the patient, welfare enhancing course of action. The availability of illiquid assets is thus a critical determinant of national savings rates, as well as of consumer welfare.

## **LESSON 2: WE PROCRASTINATE IN TAKING POSTPONABLE ACTIONS THAT REQUIRE UP-FRONT EFFORT**

The tendency to procrastinate is really a special form of present bias where we must incur some up-front effort – say going to the trouble of opening up an investment account – to secure an important benefit in the future. Many of us procrastinate when we have the option of postponing a burdensome action – say writing a paper – until tomorrow, especially where the costs of a short delay are small. After all, why do today what you can just as well do tomorrow? The problem is that when we have ongoing opportunities for delay we continue to take them. And the small per-period costs of delay can then add up to a big cost; such as when the editors turn out to be surprisingly insistent on the paper’s deadline, or – more seriously – reaching retirement and realising that you have saved so little that you cannot sustain anything close to your old standard of living.

Choi *et al.* (2001) provide intriguing evidence that individuals choosing savings plans tend to follow the “path of least resistance” – that is, they do what requires the least amount of *current* effort. In most cases, the least-effort action involves doing nothing at all, what they call the “passive decision.” They find that the nature of the default – what will happen if no active choice is made – significantly impacts the actual “choice” that is made. In their study, participation in a tax-preferred saving plan was significantly higher when the default was automatic enrolment. This raises the possibility that the damage done by procrastination can be lessened – or procrastination can even be turned into a positive force offsetting other broader present biases – by an appropriate choice of default.<sup>20</sup>

<sup>20</sup> A possible drawback of active defaults is that the individual would have gotten around to participating eventually. And when they finally do participate, they will choose the optimal form of participation in terms of such parameters as contribution rates and asset allocation. The danger with the enrolment default is that the procrastinating participant considers it good enough, and never gets around to choosing their optimal parameters. Choi *et al.* (2005) consider an alternative to defaults called active decisions. In this case, the individual is forced to make a choice by some specified date, with one of the available choices being “no participation.” In the context of their model, they show that active decisions are likely to be best where individuals have a strong propensity to procrastinate and savings preferences are highly heterogeneous.

### LESSON 3: WE ARE SENSITIVE TO THE WAY OPTIONS ARE FRAMED

Rational decision makers should not be affected by inconsequential details of how options are framed. In fact, many experimental studies have shown that actual decisions can be quite sensitive to details economists would typically view as inconsequential.

Consider the following hypothetical example: Mr. A earns €100, faces an income tax rate of 20 per cent, and earns a zero per cent real interest rate on any savings. The government gives him the following option: Save €20 from his after tax income of €80 and receive a government match of 25 per cent. This allows him to have €60 worth of consumption today and €25 of additional consumption in the future. This compares with a status quo €80 today and €0 in the future when the policy is not chosen. Now consider an alternative option offered by the government: Save €25 from pre-tax income and receive tax relief on the saved income. This again allows him to €60 worth of consumption today and €25 of additional consumption in the future. Once again the status quo is €80 today and €0 in the future. So both policies have the same monetary consequences for Mr. A. If he would take advantage of the first policy when it is the one on offer, then he should also take advantage of the second policy if it were offered in its place.

Clearly, the two options – though monetarily equivalent – are framed differently. In the first case, Mr. A has to save €20 and then gets €5 added to his savings account for free by the government. In the second case, Mr. A gets to avoid income tax on €25 of his income if he allocates it to saving. As noted above, numerous behavioural experiments have shown that decisions can be strongly affected by the way they are framed. In our example, an individual facing the first option might experience some pain from the €20 of saving, but feel quite good about getting the windfall of €5 (even though it cannot be consumed until later). For the second option, the saving-related sacrifice might seem greater given the need to save €25 up front, and the feeling of gain from the tax relief might be muted by a sense that it was their own money in the first place. The point of this example is not proven that an individual will view these options differently – most of us would claim to be too smart to be so confused – but rather to raise the possibility in the reader's mind that there are people out there who would be sensitive to such framing.

### LESSON 4: OUR INCOME IS NOT FUNGIBLE DUE TO THE EXERCISE OF MENTAL ACCOUNTING

In the life-cycle model, the propensity to consume out of a given increase in income should not depend on the source of that income. For instance, a €100 bonus at work should be treated the same as a €100 capital gain on your stock portfolio. That is, income is supposed to be *fungible*. In a series of papers, Richard Thaler has emphasised the tendency for people to allocate their funds to different mental accounts. Dedicated accounts are established for

particular purposes. The implications of a given income gain or loss for consumption behaviour will then depend on which account that income is in. If the stock portfolio is set aside as a retirement fund, then a capital gain will mean more funds for retirement.

Thaler (1999, p. 196) points to the relevance of such mental accounting for the design of savings policies.

A powerful prediction of the mental accounting model is that if funds can be transferred to less tempting mental accounts they are more likely to be saved. This insight can be used in designing government programmes that are used to stimulate saving. According to the behavioural lifecycle model, if households can be persuaded to move some of their funds from the current income account to future income accounts, long-term saving will increase... My reading of the literature on this topic is that this prediction is borne out. Households who contribute to retirement savings plans display steady increases in the funds in these accounts with no apparent reduction in the funds in other accounts. That is, they save more.

## **LESSON 5: OUR SAVINGS DECISIONS ARE SUSCEPTIBLE TO SOCIAL INFLUENCES**

The decision maker in the rational choice model tends to make his/her choice in splendid isolation. Decision makers in the real world may be influenced by what other people are doing. In particular, saving levels within a social group may be “strategic complements” – I want to save more if you are saving more and vice versa. One reason for such behaviour might be that neither of us wants to be struggling while the Joneses next door are enjoying a comfy retirement. Another is that it is easier to keep up with the Joneses now, if the Joneses are socking it away for retirement.<sup>21</sup>

Suggestive evidence on the power of social influence is provided by Duflo and Saez (2003). They conduct an experiment whereby they provide a small financial incentive to selected employees from selected departments in a certain organisation to attend an informational session on tax-deferred savings plans, finding that attending the session does increase participation in these plans. Interestingly, participation increased just as much for non-attendees in the selected departments. This suggests a strong social interaction effect, whereby the knowledge and/or example of peers has significant effects on saving behaviour.

<sup>21</sup> Such other-referencing behaviour can lead to social multipliers, whereby an exogenous increase in one household’s savings can set off a cycle of increasing saving rates until saving rates settle back into a new (higher) equilibrium. When saving decisions are strategic complements, there is also the possibility of having both a low saving equilibrium where everyone saves little given that everyone is saving little and a high saving equilibrium where everyone saves a lot because everyone is saving a lot.

Thaler and Benartzi (2004) describe a real world programme called Save More Tomorrow™ (or SMarT) with a design that is rooted in the lessons of behavioural economics research. The plan has four ingredients. First, potential participants are approached about increasing their contributions well ahead of the time those increases would take effect. This increases the chance that employees make their decision in a more temporally neutral way. Second, the increases are timed to coincide with scheduled pay increases, minimising the chance that the employees perceive the increased contribution as a loss. Third, the contribution rate continues to rise with scheduled pay increases until it reaches a preset maximum, where it is hoped that inertia will keep people in the plan despite the rising current sacrifice. Fourth, employees are allowed to opt out of the plan at any time. Although the plan is still quite new, early results indicate that it has been successful in increasing saving. Significant majorities of those offered the SMarT plan chose to join, and most stayed with the plan over successive contribution increases. Most important, participants have on average quadrupled their saving rates. I will later draw on elements of the SMarT program design in suggesting a new government-backed saving programme. First, however, I turn to the example of an existing government savings policy that seems especially well-designed to counteract behavioural obstacles to more rational savings choices.

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## 5. Special Savings Incentive Accounts

The SSIA scheme opened on May 1, 2001 and closed for new subscribers on April 30, 2002. Under the scheme, individuals can contribute up to €254 a month to accounts operated by a large number of registered managers for a period of five years. The sweetener is a combination of a 25 per cent government match on all contributions and a 23 per cent exit tax that is levied only on the accumulated investment profits. However, all withdrawals made before the 5-year term is up are subject to the exit tax on principal and interest. The scheme was introduced to counter the perceived under-saving of Irish households. It is interesting to note that it was introduced at a time of significant budget surpluses, an overheating economy and strains in social partnership due to the erosion of wage gains by inflation. The scheme was thus seen as being fiscally affordable, macroeconomically justified, and a means of shoring up the partnership deal.

It is fair to say that the popularity of the SSIA's has taken most observers by surprise. Based on analysis by the Revenue Commissioners, the Department of Finance (2005) reports there were 1,170,208 subscribers on the closing date for entries on April 30, 2002, and 1,094,294 members were still in the scheme at the end of 2004. Total contributions were almost €2.3 billion in 2004, with a net cost to the government (netting out taxes on early withdrawals) in 2004 of €548 million. The average monthly subscription was €175 in December 2004, with close to 44 per cent of subscribers contributing the maximum monthly amount. Interestingly, 28 per cent of subscribers had incomes below €20,000, showing that the

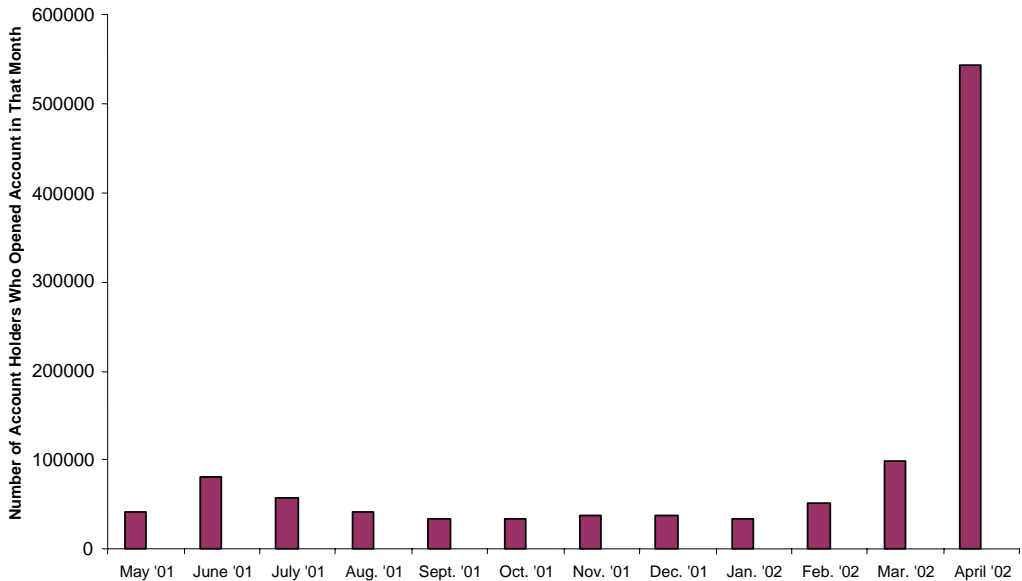


scheme was certainly not just availed of by the better off. Moreover, a survey of subscribers by the Bank of Ireland found that 76 per cent of SSIA accounts were held by first-time savers, so it seems reasonable to assume that much of the money put into the SSIA is indeed new saving.

Why has the SSIA scheme been so successful? I think that our review of selected lessons from behavioural economics research shows how a number of the scheme's features were well-designed to help people make the difficult decision to sacrifice current consumption.

- Overcoming present bias. Although people were free to reduce or even eliminate contributions once they had joined the scheme, the scheme's design – and especially its month-by-month based limits – encouraged people to make advance commitments to automatically contribute fixed monthly amounts to their accounts. This allowed for more “temporally neutral” decisions about how much to save. It is also likely that by giving the scheme a medium-term focus, subscribers were better able to imagine the benefits of their saving, thereby providing some counterforce to their bias towards present consumption. The relative lack of interest in PRSAs despite their generous tax treatment suggests the retirement consumption does not have quite the same lure.<sup>22</sup>
- Overcoming procrastination. The April 30, 2002 deadline for new subscribers appears to have been a master stroke in getting people to shake off the inertia that stops them putting their saving plan in place. The deadline meant that eventually there was “no tomorrow” for those who wanted to avail of the free government money. If one needs any confirmation that many of us wait until the last minute to do unpleasant tasks, then Figure 4 should be it. The figure shows that as many people signed up for the SSIA scheme in April 2002 as signed up in the entire preceding 11 months that subscriptions were open.
- Effective framing. In Section 4, I pointed to the equivalence for taxpayers of giving tax relief at the standard income tax rate of 20 per cent for contributions to a scheme such as SSIA and the 25 per cent government subsidy. But the two do not sound the same. Although a careful experimental study would be needed to prove people perceive the two offers differently, my guess is that framed as a 25 per cent subsidy from the government, the SSIA were perceived as an especially good deal.

<sup>22</sup> In this regard, it is interesting that an age analysis of SSIA subscribers in 2004 shows that 43 per cent were under the age of 40 years.

**Figure 4: Number of SSIA's on December 2004 by Month of Commencement**

- Establishing mental accounts. As noted above, survey evidence suggests that a significant majority of account holders are first-time savers. Work on mental accounting suggests many people cordon off certain monies for particular purposes using various devices. Such cordoning off for saving is certainly facilitated by having real world accounts that can only be “raided” for other purposes at high cost – a large tax penalty in the case of the SSIA's.
- Social reinforcement. In the early days of the scheme, I recall asking a few people if they had signed up for the scheme. The answer was always that they would be stupid not to. With a 25 per cent subsidy on offer, it is hard to disagree. But it is likely that the fear of feeling stupid was heightened by the fact that so many others were signing up (not to mention the fact that experts were saying the accounts were a great deal). The spouse with responsibility for household finances would have some explaining to do if the Joneses next door were seen building up a nice government-sponsored nest egg, but their

family's financial wizard could not get their act together to set up an account in time.

With the first accounts set to mature in May 2006, there is not surprisingly considerable interest in a successor to the scheme. One concern is the maturation of accounts worth a total of €14-€15 billion will cause a disruptive overheating of the economy. These fears are given some credence by surveys that suggest many people are planning significant consumption sprees.

A related concern is that people will lose the savings habit. I think that there is a very real danger that this will happen since the current savings are supported by a very particular institutional mechanism. If the accounts were closed and the direct deposit facilities cancelled, there is a danger that many people will simply revert to consuming the funds that they had been contributing to SSIA's. For many contributors, it is probably true that there is no real savings "habit," just a mechanism working in the background that transfers funds to their SSIA accounts on a monthly basis. Take the mechanism away, and the saving will end.

The behavioural economics literature suggests ways to minimise the savings loss from the end of the scheme. At a minimum, it seems wise to get rid of the current bureaucratic requirement to make a maturity declaration at the end of the scheme. The declaration has the understandable intent to make sure that people have kept to the terms of the scheme – e.g., that they did not pledge the assets as security for a loan; but whatever benefit comes from such a declaration, it is likely to be outweighed by the cost of interfering with the inertia that will keep many people contributing to their account even after the formal scheme ends.<sup>23</sup> This inertial effect is likely to be quite strong, since accounts can continue exactly as before, just without the government match.

Another sensible proposal is to allow people to transfer their accumulated funds to a PRSA without tax liability. The fiscal loss to the government is likely to be quite small, since the 23 per cent tax only applies on the investment returns. By one calculation, the tax liability on a deposit-based SSIA paying 4 per cent interest over the full 5-year term with maximum monthly contributions is €440, or just 2 per cent of the account's value.<sup>24</sup>

There have also been proposals for a more formal successor to the scheme. One interesting proposal has come from the Irish Association of Investment Managers (IAIM – admittedly not a wholly disinterested party). They propose what they call a 'Lifetime Flexi Investment Account'. This product is designed as a retirement savings vehicle and it attracts a government subsidy on up to €250 of contributions (to be indexed to either wage or price inflation). Those

<sup>23</sup> Requiring this declaration reminds me a bit of a strategy used by an old school master of mine when he could not identify the culprit of some misdeed. He would ask everyone in the class if they were the culprit; and he seemed to get great satisfaction out of the fact he had made a liar out of one of us.

<sup>24</sup> See Irish Association of Investment Managers (2005).

outside the tax net would receive the subsidy equal to 20 per cent of their contributions. Taxpayers would receive tax relief at the standard rate (presumably in addition to the tax relief that they are entitled to on other pension-related saving.) Every 5 years contributors would have access to 30 per cent of the previous 5 years' contributions subject to a 23 per cent exit tax.

While I see merit in trying to help people avail of their SSIA's for retirement provision, I think it is also worth exploring other government policies that are more specifically focused on this goal. I describe one possible instrument in the next section. My aim is to find an instrument that is "behaviourally realistic" in the sense that it recognises the difficulties we face with voluntary retirement saving, while at the same time avoids having the government compel people to save.

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## 6. Universal Retirement Savings Accounts

### 6.1 BASIC DESIGN

The proposal involves the establishment of a new type of account, tentatively called a Universal Retirement Savings Account (URSA or Your Savings Account). The accounts would be available to all adults with a Personal Public Service (PPS) number, and individuals would have full control over the size of their contributions and some control over their asset allocations. In what follows, I do not try to describe a fully worked out plan, but rather sketch the elements that I think a workable plan might include.

A key element of the proposal is that, like the SMarT program, there is a *default contribution rate* and a *low-cost default investment vehicle* for individuals subject to withholding. In other words, unless these individuals opt to do otherwise, there would be automatic investment of a given fraction of gross earnings into a default investment vehicle. To be more concrete, 3 per cent of gross earnings is sent to their account via direct withholding. Importantly, individuals have the opportunity to change their contribution rates – including the option of contributing nothing – at regular intervals (say once a year). Opting out would require some paperwork on the part of the saver. The default contribution rate would rise by 0.5 percentage points a year, so that it reaches 6 per cent after 6 years. Individuals not subject to withholding would be free to contribute to their accounts in whatever amounts they wish. These contributions could be made by direct deposit.

In the first year, the government provides a 25 per cent match on contributions up to €254 a month. This is obviously designed to replicate the SSIA accounts. The size of the government match could be scaled back over time and possibly phased out altogether to limit the fiscal cost.

The default investment is a low- (or even zero-) cost investment product linked to the NPRF. Individuals are free to withdraw their funds and place them in an approved PRSA account (possibly extended to other approved retirement investment vehicles). Amounts transferred to PRSA accounts would not be counted

against the normal limits on tax-favoured contributions. All other withdrawals are subject to an exit tax of 20 per cent (which effectively claws back the government match plus interest).<sup>25</sup>

## 6.2 WHY THESE ACCOUNTS WOULD RAISE SAVING

The accounts are designed with the lessons of behavioural economics and the success of the SSIA in mind.

- Present bias and procrastination. The accounts would pit one aspect of the self control problem – i.e., the desire for instant gratification – against another – the tendency to procrastinate when engaging in presently costly actions such as the hassle of changing the default. The evidence from the SMarT programme shows that inertia can win out over the lure of greater current consumption, so that a well-chosen default can move people closer to their optimal savings rate. This effect could be reinforced setting an advance deadline for changing the default for the coming year. When forced to choose in advance, present-biased individuals will tend to be less biased towards sooner over later gratification.
- Framing and mental accounts. By initially adopting the matching feature of the SSIA, the accounts would be framed as being “SSIA-like.” This suggests a double advantage: the framing of the matching rule for the SSIA has already been shown to be effective; and the new accounts gain by association with the popular SSIA scheme. Moreover, by clearly labelling the accounts as being for retirement and by imposing a penalty for early withdrawal – i.e., the loss of the government match – the design helps individuals mentally cordon off the accounts as being for retirement.
- Social multipliers. The experience of the PRSAs shows the difficulty of building participation in purely voluntary accounts. The proposed accounts are likely to start off with a relatively high level of participation simply because the default is to contribute. To the extent the individuals are more likely to want to contribute when others do likewise, high participation is likely to be self reinforcing, so that there is a greater chance of settling into a high participation equilibrium.

## 6.3 LIMITATIONS OF THE SCHEME

Although I believe the plan is likely to achieve higher saving without resorting to government compulsion, it is not without drawbacks. First, some procrastinating individuals who would eventually have

<sup>25</sup> The size of the exit tax should fall over time based on how the government scales back its matching rate.

gotten around to setting up a retirement saving plan are likely to view the default as “good enough.” Thus, although the default may get them to start saving earlier, the default plan may induce them to stick with a non-optimal savings plan for longer than they otherwise would.

Second, the plan places additional administrative and fiscal burden on the government. The design of the plan attempts to minimise this burden by tying the contribution mechanism to the current withholding system, piggy-backing on the NPRF for asset management, and allowing for a phase-down of the government match. I have not attempted to cost any of this, but the overall burden is clearly substantial.

Third, the plan is likely to be opposed by several vested interests. As outlined, the plan minimises the involvement of the private financial sector, although it is possible to increase their role by allowing for a greater range of eligible investment options. It is easy to imagine the plan also being opposed by the NTMA, who might plausibly fear the complexity and political ramifications of being responsible to millions of small account holders. (Note, however, that the management of the accounts could be separated from the management of the fund.)

Fourth, and related to the previous point, the accounts run the risk of politicising the investment strategy for the NPRF. At present, the fund appears to be well insulated from political pressures, but this could change if people’s wealth was directly tied to its performance.<sup>26</sup>

Fifth, tying both the pre-funding of state pensions and the default accounts to the performance of the NPRF makes retirement income overly dependent on the performance of a specific asset portfolio. Poor performance of the NPRF would increase both the political risk of lower state-pension benefits at the same time that the NPRF-linked investment accounts yielding poor returns. One way around this problem is to establish a separate fund for the default URSA that is relatively uncorrelated with the NPRF.

This list of problems shows that URSA would be a complex administrative and political undertaking. But I think the potential for helping households deal with their under-saving without resorting to one-size-fits-all compulsion makes them worth considering.

## **6.4 LIBERTARIAN PATERNALISM**

Believing that individuals are usually the best judge of their own interests, economists are usually loath to advocate paternalistic policies to protect people from their own bad decisions. When it comes to retirement saving decisions, however, the findings of behavioural economics show that our partiality to present consumption often trumps the savings plans that we recognise as

<sup>26</sup> On the positive side, tying individual wealth to the performance of the fund should be a counterweight to pressures for more domestic or socially responsible investments.

desirable in our more impartial moments. Recently, a number of authors have explored the merits of a light-handed paternalism that would help people avoid the often severe costs of our behavioural failings, while still leaving the fullest possible menu of choices for those who might want to exercise them. I think that the proposed URSAs with default contributions fit this bill. The accounts should help under-savers come closer to their own optimal retirement savings plans, while imposing little constraint on those who want to make their own choices about how much to save and in what form they want to hold their savings.

This type of policy has been labelled “libertarian paternalism” by Thaler and Sunstein (2003). With regard to the URSAs, the libertarian part is the complete freedom to override the default. The paternalism part recognises that the choice of default matters for saving behaviour – and this includes today’s default of no contribution – and responsible governments have a duty to recognise this when they design savings policy. Camerer *et al.* (2003) use the term “asymmetric paternalism” in defending a similar idea.<sup>27</sup> Again in the specific context of the URSAs, the asymmetry would be in the likely large benefits for those who are now saving far too little to sustain their living standard in retirement, while imposing small costs on those wishing to opt-out of the programme because they do not need or desire the policy help.

Under current policies, it is doubtful that the government will reach its private pension coverage target of 70 per cent for some years. This is likely to lead to serious consideration of a mandatory coverage plan. Mandatory coverage is not without merit where the alternative is a significant number of households experiencing substantial falls in their living standards at retirement. But it certainly is a blunt instrument. As reviewed in this paper, retirement saving innovations by paternalistic employers in the private sector may point the way for alternative public policy approaches that better balance the need to achieve retirement income adequacy and desire to preserve freedom of choice.

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## 7. Concluding Comments

Retirement income provision is often referred to as a “three-legged stool”, with retirees receiving support from state benefits (cash and non-cash), employer-sponsored pensions, and voluntary private savings. This paper has reviewed recent policy efforts to shore up the various legs. I have argued that the National Pensions

<sup>27</sup> Camerer *et al.* (2003, p. 1212) describe what they mean by asymmetric paternalism as follows:

Our purpose in this Article is to argue that in many cases it is possible to have one’s cake and eat it too. We propose an approach to evaluating paternalistic regulations and doctrines that we call “asymmetric paternalism.” A regulation is asymmetrically paternalistic if it creates large benefits for those who make errors while imposing little or no harm on those who are fully rational. Such regulations are relatively harmless to those who reliably make decisions in their best interest, while at the same time advantageous to those making suboptimal choices.

Reserve Fund helps secure existing levels of pension generosity for current and future generations of workers in the face of anticipated population ageing. It also increases the scope for prudent, forward-looking governments to provide needed increases in pension generosity for current retirees despite the high long-term cost of such commitments. Turning to tax-favoured saving vehicles, I argued that, while well-designed tax inducements for regular retirement saving can help people get closer to their own desired saving targets, the recently introduced Personal Retirement Savings Accounts seem poorly designed from a behavioural perspective. In contrast, the success of the Special Savings Incentive Accounts shows the potential for a well-designed package of savings inducements to help overcome the lure of instant gratification. Finally, I outlined the broad elements of a proposal called Universal Retirements Savings Accounts that incorporate key lessons from behavioural economics and the success of the SSIA's. The central idea is to make retirement saving the default option, but to preserve maximum freedom of choice for a diverse population with different preferences and needs. Experimental research from the private sector has shown this to be effective in moving savings rates closer to desired levels. Although there are a number of ways this basic idea could be implemented, I have sketched an approach that leverages the current tax-withholding system and low-cost asset management through the NTMA. I believe the broad approach would yield substantial increases lifetime welfare for many households, while not forcing more saving on those who do not want or need the policy help.



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