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Paper of

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Encouraging Pension Participation: Some evidence from Behavioural Economics[1]

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[1] Liam Delaney is Professor of Economics. Disclaimer of Conflict of Interest: Funding was provided to UCD from AIB to form the Professorship in this area. However, they have no role in screening research or influencing any public submissions.

1. Introduction

1.1 The purpose of this memo is to outline the role that behavioural evidence can play in informing a pension strategy for Ireland. My focus will be on the private sector, in particular on private sector workers not already covered by existing work-place pension funds. As covered in other submissions, there are substantial rates of under-coverage across a number of sectors.

1.2 This document briefly outlines the ideas behind behavioural economics and the international literature on the role of this area in encouraging pension contributions. We conclude with specific considerations in the Irish context and some potential pitfalls.

2. Behavioural Economics and Soft-Mandatory Pensions

2.1 Overview of Behavioural Economics

Behavioural Economics is the name given to a body of literature that examines how people make economic decisions. There are many different areas that have contributed to the development of this field. The current area is heavily associated with the work of Richard Thaler and a body of academics who, throughout the 80s and 90s, sought to question the standard economic model of decision making that is very prevalent in Economics. The award of the Nobel Prize in Economics to Daniel Kahneman in 2002 and Robert Shiller in 2014 is evidence of the influence of this area. This influence now extends to many real-world areas with policy-makers and regulators now incorporating behavioural economics into a wide range of activities. The two key themes in this literature are a) Bounded Rationality: people find it difficult to make decisions as the options available are often very complex and confusing. Faced with complexity, people adopt a range of decision making heuristics that may or may not be optimal. b) Bounded Self-Control: even if people know what are the best options available, often their behaviour may be influenced by factors such as inertia and procrastination. There is long body of literature showing that people are very influenced by default options and will often choose the path of least resistance when faced with choices, particularly complex choices. The behavioural economics literature has sought to take these two overarching themes and map out a range of factors that influence decision making.

A key area of research for behavioural economics has been the retirement saving literature. In standard economic models, rational consumers seek to smooth consumption over their life-cycle. To do this, they initially borrow to invest in their education, then they save and invest from their income through the capital markets to develop a stock of savings that can then be used to smooth consumption through retirement. The traditional model can be modified in many ways. For example, it may be the case that people wish to leave a bequest and this motive has been studied in detail within the traditional model. However, through the 80s and 90s, a more fundamental objection began to be developed, namely that people did not seem to be behaving according to the basic model at all. Many of the factors people have pointed to will be discussed below but a key observation is that expenditure at retirement tends to fall by more than the standard model would predict. Furthermore, people are far less likely to purchase annuities (i.e. guarantees of a regular, fixed income in retirement) than a standard model would predict.

These models have had a high degree of influence. Many firms now incorporate behavioural economics directly into the development and roll-out of financial products. Furthermore, regulators have begun to discuss how such factors might influence disclosure standards and related features of financial markets (see FCA (2013) for a detailed discussion of this). A key change that has resulted from the behavioural economics literature has been the development of the pension auto-enrolment system that now prevails in the UK. This has sought to make pension savings more active and aims to auto-enrol 13 million private sector workers into defined contribution pensions, while offering the option to opt-out for those who desire to do so.

2.2 Automatic Enrolment

An important paper on automatic enrolment is Madrian and Shea (2001). The authors analyse a firm that changed its pension enrolment criteria from employees choosing to opt-in after one year in the firm, to a scheme where, upon being employed by the firm, employees are automatically enrolled. The reason for changing their enrolment policy was due to the firm continually failing non-discrimination tests, and thus needing to make costly *ex-post* refunds to 'highly compensated' employees. Figure 1 below shows the increase in participation by Ethnicity and Race, with the left block representing the cohort of employees who took the decision to enrol in the firm's pension plan upon becoming eligible, with 3 to 15 months of tenure, and the right block represents those employees who were automatically enrolled, again with 3 to 15 months of tenure. The most dramatic effect is on the Black and Hispanic workers, with enrolment nearly quadrupling for these groups.

Figure 1: Contributions to the Automatic Enrolment Programme

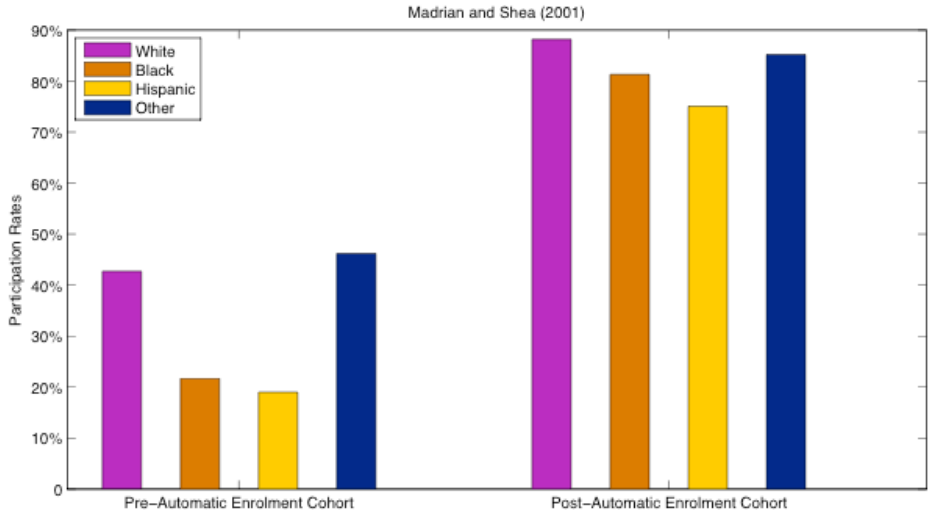
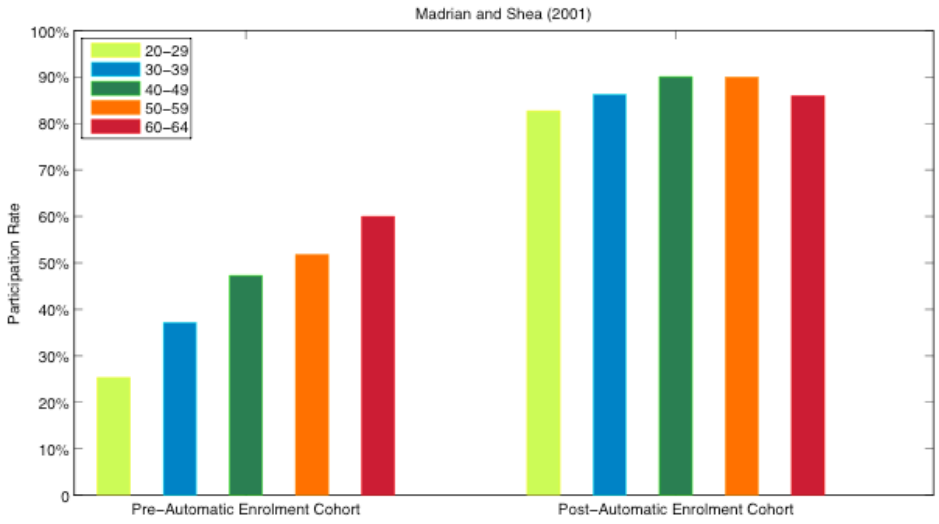


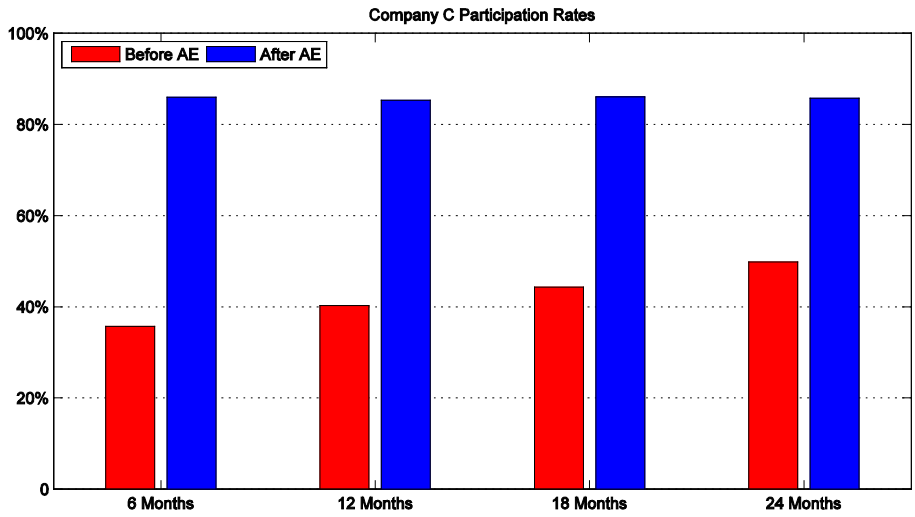
Figure 2 below shows the increase in participation rates by age group. Participation among younger employees shows the biggest improvement with auto-enrolment, and this is important in the Irish context as this group shows the lowest pension participation rates. Participation rates stay constant with tenure for the automatic enrolment cohort, and increase with tenure for the pre-automatic enrolment cohort.

Figure 2: Contributions to Automatic Enrolment by Age Group



Another result found in the study was the existence of 'default inertia', a strong tendency for people to accept the status quo: 61 per cent of employees that were automatically enrolled stuck with the default rate and allocation that were assigned to them. This is very important to consider when setting default parameters for automatic enrolment, as it shows that picking low levels of contribution and diversification will lead employees to invest less, and diversify less, than what is optimal. Choi *et al*. (2001) extended Madrian and Shea's analysis over a longer period of time and for a larger number of firms. Their results were in line with the previous study and showed that even after 2 years, auto-enrolment had a significant positive effect.

Figure 3: Contributions before and after Automatic Enrolment (Data derived from Choi et al 2001a)



2.3 Quick Enrolment

An alternative approach to auto-enrolling employees is to make the decision less complex. Choi *et al.* (2006) implemented a Quick Enrolment plan, reducing the complexity of 401(k) participation (401(k)s are the United States version of an Irish Personal Retirement Savings Account). When one is considering whether to join a pension plan, one must answer two questions: firstly whether to save for retirement and secondly, at what contribution rate and what asset allocation? Quick Enrolment attempts to simplify the second question, for those who want to save more, but do not do so due to the complexity of deciding an optimal saving rate and an optimal asset allocation.

In Quick Enrolment, the employee simply ticks a box (yes/no), with predefined contribution rates and asset allocation made by the employer. The authors found that this tripled 401(k) participation among new employees and increased participation among existing workers by 10 to 20 percentage points. This simplification is similar to a behavioural economics adaptation of pre-filled tax returns. Another variant on automatic enrolment is the Carroll *et al.* (2009) 'Active Decision'. In this study, a Fortune 500 company switched from a paper & pen enrolment system, where the form was submitted upon employment by the firm with other legally required documentation (e.g., tax), to a phone system, where employees could call whenever they wanted to join. Active decisions (pen & paper) raised the initial fraction of employees enrolled by 28 percentage points relative to what was obtained with the standard enrolment method (phone to join). The average three-month enrolment rate was 69 per cent for the active decision cohort, compared to 41 per cent for the standard enrolment cohort—these are significant at 1 per cent level for every hire month.

Forcing people to make a decision may overcome the issue of 'who picks the defaults', where default settings are often taken as financial advice by enrolees. Therefore, the authors conclude that the best solution is to use active decisions, i.e. requiring individuals to make a decision one way or another, when employees have very different needs and assets and are more likely to procrastinate.

2.4 Save More Tomorrow

Benartzi and Thaler (2004) is one of the most cited examples of intervention in private pension provision. Save More Tomorrow (SMarT) is a savings plan that attempts to overcome behavioural biases in saving for retirement, such as our tendencies to stick to defaults, to be impulsive, and to try and avoid loss at all costs. The perceived need for intervention in private pensions arises from a shift to defined-contribution (DC) pensions, with DC pension plans supplanting defined-benefit (DB) schemes, with the onus increasingly being on employees to provide for retirement.

The authors cite four principles on which their plan is based:

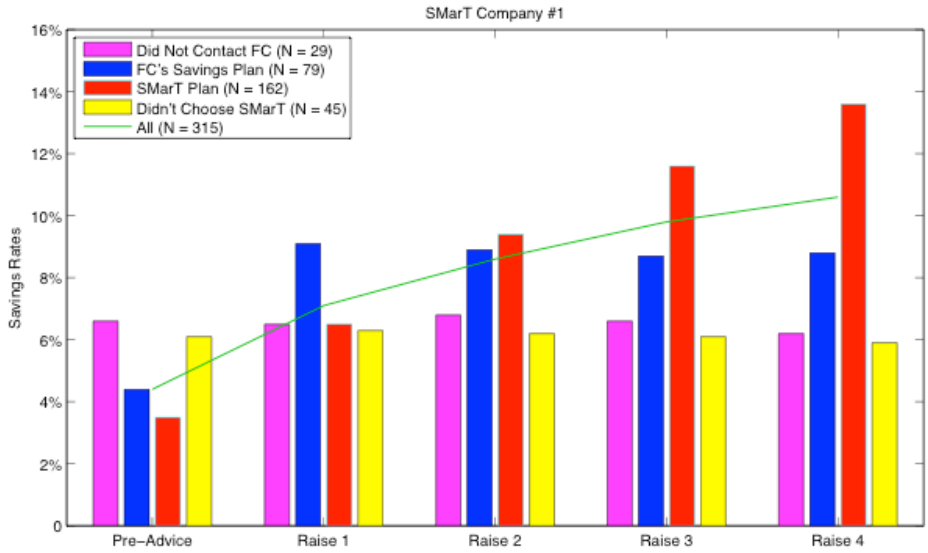
1) An employee should be approached as early as possible before a scheduled pay increase, with a commitment to save more. This exploits our impulsive tendencies in favour of the plan, where the 'loss' is not immediate, but will occur in the future.
2) The increased contributions should take place immediately after a pay increase to mitigate the effect of our aversion to losing money.

3) For each scheduled pay increase, the contribution rates rises until it reaches a specified maximum. This utilises our tendency to stick with the status quo in favour of the savings plan.
4) An employee can opt-out of the plan at any time.

Three firms used the SMarT programme, with some differences in implementation. The first (and most comprehensive) implementation was at a midsize manufacturing firm, where employees on lower income were not saving sufficiently in the view of management of the firm. This lack of saving created a problem for executives: they could not contribute the maximum tax allowable amount to their pension plans due to U.S. Dept. of Labor non-discrimination laws.

In the experiment, employees were offered the opportunity to meet with a financial advisor – the vast majority of them opted to do so. After meeting with the advisor, those who did not want to follow the advice they had been given were offered the SMaRT programme as an alternative. As shown in Figure 4 below, the jump from 3.5 per cent to 13.6 per cent savings rate for those who entered the SMarT plan is substantial, especially when compared to the savings rate with the advisor plan and with an advisor meeting but no advisor plan and no SMaRT programme.

Figure 4: Contribution Rates in the SMART programme (Thaler & Benartzi 2004)



2.5 Autoenrolment in the United Kingdom

The UK government introduced a national auto-enrolment scheme in October 2012, which initially was restricted to large and medium-sized employers, and is currently being rolled out to cover smaller employers as well.

The latest progress report on the scheme (UK DWP, 2016) shows overwhelmingly positive numbers, and underlines the particularly beneficial impact of auto-enrolment for groups that are traditionally most under-covered. More specifically, the UK government estimates that the scheme has increased pension membership by 52 percentage points for younger workers (22-29 years old), 54 percentage points for

lower earners, and 37 percentage points for female workers – the overall increase in membership amongst eligible private sector employees attributable to auto-enrolment is also 37 percentage points, or 6.87 million workers, with 265,000 workers being automatically re-enrolled. The average contributions of workers are also up by over a percentage point since the beginning of the scheme, from 7.0% in 2012 to 8.1% in 2015.

Other noted successes include higher than expected compliance (99% of the employers expected to declare compliance have done so), lower than expected costs (the implementation costs are around £1 billion), and lower than expected opt-out rates (between 8 and 14%).

However, the roll-out of the scheme to smaller employers is still ongoing (1.8 million smaller employers are expected to have implemented the scheme by 2018, as per a 2015 press release from the UK National Audit Office), which will carry its own set of challenges. The UK government is nevertheless optimistic about this last phase, as it reports that 95% of small employers and 79% of micro-employers are already aware of their responsibilities regarding the auto-enrolment of their employees in work-place pension plans.

3. Considerations for Ireland

There is strong evidence from the literature and from the recent UK experience that requiring employers to opt people into a pension scheme would lead to a substantial increase in pension participation, and that this effect would be particularly large among people traditionally not covered by pensions. Having said that, there are a large number of considerations that should be debated before adopting pension auto-enrolment as a solution.

3.1 Understanding the extent of undersaving: Further evidence is required on the extent to which people are undersaving. While the degree of pension coverage is widely documented, it is still important to understand further the extent to which people are making other provisions.

3.2 Anchoring effects: Should auto-enrolment or a similar scheme emerge in Ireland, the extent to which people "anchor" (i.e. take the pre-determined contribution levels as implicit advice on how much to save) needs to be considered. It might even be the case that some people would end up saving less than they would have done in the absence of the policy. Communication or some form of auto-escalation, as outlined above, should be considered.

3.3 High fees: If people are auto-enrolled into workplace schemes, the extent to which this leads to people paying high fees needs to be considered, particularly if the auto-enrolled pool is less financially active than the general pool.

3.4 Substitution effects: It is possible that auto-enrolment could lead to a substitution effect from other savings or perhaps even acquiring more debt, particularly if people are cash constrained (i.e. their budgets are already strained). Monitoring the extent to which this happens at lower incomes would be particularly important.

3.5 Complexity: As noted by the OECD, the complexity of running an auto-enrolment programme for small businesses needs to be taken into account. It may be the case that such programmes are difficult to administer for smaller organisations. The extent to

which small SMEs might be exempt from such requirements or be provided would additional support would need to be considered.

3.6 Wage effects: If companies were forced to contribute, it may lead a wage effect (i.e. companies may pay their employees less to offset the cost of buying them a pension plan). There is not yet evidence that this has happened in the UK but it is something to keep under consideration.

3.7 Mandatory Savings: As noted by the OECD, an alternative model to auto-enrolment would be a system where pension savings matched by employer contributions were compulsory. This would still be in line with the behavioural evidence that people should be actively pushed to save. However, it would remove the element of choice in opting out of this arrangement. This is at least partly a matter for political consideration as people have different views on the value of having the choice.

3.8 Targeting: As noted in the OECD report, considerable attention needs to be given on who to target for active pension intervention e.g. should there be an age cut-off?; should self-employed people be covered? Again, such considerations need to be debated and do not have an off-the-shelf answer.

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