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Pension Scheme Defaults: Questionable Foundations and Unconsidered Outcomes

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Section 1: Introduction

Inertia, the behaviour of doing nothing and allowing the current situation to prevail, is reported in many empirical pension studies. However, the reasons for the behaviour are not agreed. Various explanations include: fear of loss when decisions involve risk; cognitive limitations encountered when decisions are complex; inability to assess the costs of action and inaction; and a lack of self-control that inhibits proactive behaviour.

While inertia is not understood, the power of defaults is widely reported in case study research. It indicates that many employees accept the defaults even if they are inadequate or inappropriate (Madrian and Shea 2001, Carroll, Choi et al. 2009, Beshears, Choi et al. 2010). On the other hand, recent U.S.-based research using nationally representative data sets presents a different story. This research suggests that inertia is not very powerful because people vary their pension contributions in response to changes in earnings (Dushin et al. 2013), job changes and stock market performance (Muller and Turner 2013).

It is unclear if the available research provides an adequate foundation for government policy. However, the U.S., British and Irish governments agree that inertia is a problem and automatic enrolment is the solution. Legislation in Ireland and the U.S. enable employers to automatically enrol employees into private sector occupational pension scheme. By 2017, all U.K. employers will be required by law to enrol their employees into either an occupational pension scheme or the National Employment Savings Trust (NEST), a public entity providing a low-cost, long-term savings plan (Sass 2014). The U.S. (Munnell, Cannon Fraenkel et al. 2012) and Irish governments (Coyle 2015) are also considering compulsory automatic enrolment.

This research takes a step back to reflect on what we know about inertia both conceptually and empirically. It considers the different explanations for inertia to see if those differences matter in relation to policy prescriptions concluding that if inertia is caused by complexity and risk, those issues should be addressed by policy. It looks at possible causes for low pension coverage from the perspective governments and employees. It concludes that while governments believe that inertia is the main cause of low pension coverage, this is unlikely to be the reason for low paid employees, many of whom work part-time, for low

wages, for small organisations and/or in precarious employment. It considers the research on defaults and considers the implications for low income employees concluding that defaults place all of the risk on employees, who often are ill-equipped to deal with the consequences. If the intention of government policy is to take advantage of inertia to promote pension savings, employees should in some way be protected from the risk associated with an economic downturn. However, if employees can opt-out, current research indicates that many will exercise that option meaning that auto-enrolment will not have the desired effect of improving pension adequacy. A low-risk default investment fund may encourage some pension scheme members to continue saving during stock market downturns.

This research is divided into the following sections. Following this introduction, section 2 discusses the historic development of the concepts of bounded rationality and inertia and the alternative explanations for the behaviour of inaction. The third section will describe pension defaults, the policies designed to utilise inertia in order to increase pension coverage. The conflicts in research evidence on the power of inertia will be discussed in section 4. Section 5 will discuss government actions in the U.S., U.K. and Ireland to promote increased coverage through legislation that either allows or requires organisations to automatically enrol employees into an occupational pension scheme. Section 6 describes what is known about those employees who are not members of occupational pension schemes in the U.S., U.K. and Ireland. Section 7 summarises the research and makes suggestions about the implication for government policy. The final section is the conclusion.

Section 2: Bounded rationality and inertia

Simon (2008) stated that, “The term ‘bounded rationality’ is used to designate rational choice that takes into account the cognitive limitations of the decision-maker—limitations of both knowledge and computational capacity” (p. 893). Simon observed that the search for alternatives is seldom complete; it is a sub-set of all possible alternatives. Cognitive and computational limitations mean that decision makers seldom make the ‘best’ decision. Decisions ‘satisfice’ rather than optimise.

Kahneman and Tversky built on Simon’s work. Kahneman (2003) stated, “Our research attempted to obtain a map of bounded rationality, by exploring the systematic biases that

separate the beliefs that people have and the choices they make from optimal beliefs and choices..." (2003: p. 1449). Their empirical work about decision making goes further than Simon, suggesting that sometimes, rather than satisficing, decision makers choose not to act. The status quo bias or doing nothing and allowing the current situation to continue is the observed behaviour for many decision problems. They and others offered explanations for this behaviour including: fear of loss when decisions involve risk; cognitive limitations encountered when decisions are complex; inability to assess the costs of action and inaction; and a lack of self-control that inhibits proactive behaviour.

Prospect theory is a model developed by Kahneman and Tversky (1979) to explain the status quo bias observed for decisions made under conditions of risk. Prospect theory proposes that most people are loss averse; the dissatisfaction that they experience from a loss is greater than the satisfaction that they experience from a gain of a similar amount. This is not a matter of wealth. According to Kahneman (2011) "The reason you like the idea of gaining \$100 and dislike the idea of losing \$100 is not that these amounts change your wealth. You just like winning and dislike losing—and you almost certainly dislike losing more than you like winning." Outcomes are measured, according to Tversky and Kahneman (1986) "...as positive or negative deviations (gains or losses) from a neutral reference outcome..." (p. S258). The reference point is the status quo; it is the point from which the decision begins. The reference point differs for individuals and can change for an individual over time. However, when faced with risky decisions, Tversky and Kahneman (1986) suggest that people will remain at the reference point to avoid loss.

Later research by Tversky and Kahneman (1991) suggests that complexity can also lead to inaction even if the choices are riskless. Samuelson and Zeckhauser (1988, p. 34) discuss the status quo bias in relation to transition costs that occur "... whenever the cost of switching exceeds the efficiency gain associated with a superior alternative". As alternatives increase, the transition cost of switching also increases. Tversky and Shafir (1992, p. 358) state that although conflict does not have an agreed definition, it "...arises because a person does not always know how to trade off costs against benefits, risk against value, and immediate satisfaction against future discomfort." When choices are not easily compared, decisions are deferred in order to seek more information or additional options. Experiments suggest that adding alternatives can escalate conflict, increasing the tendency to defer. Tversky and

Shafir (1992, p. 361) observe that “Many things never get done not because someone has chosen not to do them, but because the person has chosen not to do them *now*.”

Spindler (2011, p. 323) suggests that individuals procrastinate “...in spite of being aware that prompt action would be better.” Akerlof (1991, p. 1) states that “Procrastination occurs when present costs are unduly salient in comparison with future costs, leading individuals to postpone tasks until tomorrow without foreseeing that when tomorrow comes, the required action will be delayed yet again.” The present costs are not necessarily high suggesting that inertia can occur even if the decisions are not very complex. Akerlof (1991, p. 6) states that procrastination is most likely to occur “...when there is some fixed cost (perhaps not very great) to beginning a task, the “periods” are short, and the per period cost of delay is low”.

Barr and Diamond (2009) discuss the causes of inertia relating it to the complexity of the pension saving problem, agreeing with Akerlof (1991) that short-term inaction concerning financial decisions leads to long-term financial problems. They state, “People often fail to make choices that maximize their long-term well-being or that of their families, and often make no explicit choice at all—a common result where excessive choice or excessive complexity becomes overwhelming” (Barr and Diamond 2009, p. 8).

Other authors believe that the underlying reason for delaying retirement savings is poor self-control; individuals have trouble resisting the temptation to consume now in order to save money for consumption in the future (Thaler 1994, Laibson, Repetto et al. 1998). This accounts for the gap between intention and action, between the desire to save for retirement and the behaviour of saving.

If the reason for inertia is time inconsistent behaviour as suggested by Akerlof (1991) or poor self-control as suggested by Thaler (1994) and Laibson et al (1998) then defaults in the form of automatic enrolment appears to be logical policy prescriptions. These defaults prompt people ‘do the right thing now’, to do what they would have done if they had more time, greater mental energy and more self-control. However, if loss aversion and complexity are explanations for inertia, then decreasing the riskiness of pension scheme defaults and the complexity of pension schemes should be considered.

Section 3: Inertia and pension defaults

Defined benefit (DB) schemes were the most common form of occupational pension scheme offered in the private sector. Fully funded DB schemes provided secure pension income for retired employees, usually based on a predetermined formula applied to years of service and earnings from retirement until death. DB schemes are relatively simple from the perspective of the saver. If employees contribute, the employer specifies the percentage of income and automatically deducts that amount from wages. Employees know the amount of income that they will receive until death in advance of their retirement. However, the combination of investment volatility, retiree longevity and onerous regulation led many organisations to either wind up their DB schemes entirely to offer a defined contribution (DC) scheme to new entrants.

A recent OECD (2012, p. 11) report observed, "...pensions are much more likely to be of the defined-contribution type, meaning that individuals are more directly exposed to investment risk and bear themselves the pension cost of living longer." This long-term trend has been observed in the U.S., U.K. and Ireland. DC schemes are more complex. In the absence of defaults, employees must decide how much to contribute and choose one or a combination of investment funds from different risk options. Ideally, the accumulated retirement savings should provide sufficient income from retirement until death though the duration of this time period is unknown at the time that decisions are made. The decisions are complicated for non-professional investors. Researchers, national governments, the EU and the OECD view inertia as being a major problem that inhibits workers from joining pension schemes and defaults as the solution.

The conceptual underpinning of these policies relate to bounded rationality and subsequent empirical pension research concerning inertia and defaults. Simon (1955, 1968) noted environments can be adapted in ways that can improve the rationality of individual decisions. While it was difficult for a single, isolated individual to make rational decisions, "...the environment of choice itself can be chosen and deliberately modified" (Simon 1968, p. 79). Simon (1968, p. 79) stated, "One function that an organization performs is to place the organization members in a psychological environment that will adapt their decisions to the organization objectives, and will provide them with the information needed to make these decisions". Kahneman (2011, p. 411) agreed stating "Although Humans are not

irrational, they often need help to make more accurate judgements and better decisions, and in some cases policies and institutions can provide that help.”

Thaler (1994) described the conditions that are required for ‘optimal’ behaviour and related this to observed inadequate retirement savings. He states, “...an optimization model is likely to be a good characterization of behaviour” if: a problem is easy to solve, opportunities exist for learning through experience or repetition and simple rules of thumb can be used to approximate an optimal solution (Thaler 1994, p. 187). Because he believes that none of the three conditions are evident in retirement savings decisions, Thaler (1994, p. 187) concludes, “On all three counts, then, saving for retirement should appear to be a domain where economics should be particularly worried about issues raised by bounded rationality.”

Thaler and Sunstein (2003) argued that organisations should adopt a “libertarian paternalism” approach “... with the goal of influencing the choices of affected parties in a way that will make these parties better off” (p. 175). They also suggest that, “In many situations, some organization or agent *must* make a choice that will affect the choices of some other people” (Thaler and Sunstein 2003, p. 175). For example, most large companies make decisions concerning their benefit package based on surveys identifying the benefit packages of their competitors (Erickson 2002, Milkovich and Newman 2011, Perkins and White 2011). Once an organisation decides to offer a pension policy it must make choices about how to structure the policy and communicate about it to their employees. The decisions the organisation makes are not neutral. Regardless of how the policy is structured and communicated to employees, it will affect employee choices.

Erickson 2002 agreed. She argued that while employers were concerned about their fiduciary responsibilities and therefore tended to make conservative choices in relation to defaults, they were never “...off the hook for threshold choices of investment funds...” (Erickson 2002, p. 92). Erickson (2002, p. 92) posed the question, “If grossly inadequate retirement savings are the result of participant passivity, could it be part of the fiduciary’s duty to take such participant behaviour into account?” Choi, Laibson et al. (2004) concur, arguing that employers who allow employees to make pension savings decision for themselves will also be held responsible. They state “...even this type of laissez-faire plan

design will itself influence outcomes relative to other design choices that could have been made” (Choi et al 2004, p. 294).

There are many pension policy choices that organisations can adopt to improve pension coverage and adequacy. This section concentrates on defaults: automatic enrolment, contribution rate, investment fund choice and automatic escalation. The four defaults are described in Table 1.

Table 1: Common Occupation Pension Scheme Defaults and Descriptions

Default	Description
Automatic enrolment	Employees, often at the time that they join an organisation or after a short vesting period, become members of the occupational pension scheme. In some cases, employees can ‘opt out’ of the pension scheme; in other cases they cannot.
Contribution rate	This is the percentage of income contribution that is deducted from pay at the time of enrolment. For most schemes, employees can increase their contributions; In some schemes, they can decrease or temporarily suspend contributions depending on their financial situation.
Investment fund choice	At the time of enrolment, the employees’ savings are invested in a fund chosen by their employer with advice from the pension provider, government departments or agencies and possibly their trustee. Employees can switch to funds that more accurately reflect their risk preferences.
Automatic escalation	The employee commits to increasing their pension contribution in the future, often timed in sequence with pay raises. Employees can change this rate depending on their financial situation.

The first three defaults are inextricably linked. If an organisation decides to automatically enrol employees into a pension scheme, they must decide the contribution rate and investment fund choice for those employees unwilling or unable to choose. Automatic escalation need not be linked to the other defaults but is more likely to be a feature of

pension schemes with automatic enrolment. Originally, these defaults were features of DC pension schemes designed by employers and their pension providers. Government responses to promote the use of defaults will be discussed in section 5.

Section 4: Pension research investigating inertia

Although there have been several articles based on case study evidence indicating that defaults powerfully influence pension savings behaviour, a close inspection of the research identified to date shows that the data was collected from four large organisations considering time periods of three years or less. A summary is shown in Table 2.

Table 2: Summary of case study organisation discussion inertia and pension defaults

Authors	Industry	Number of employees	Length of observation	Employees automatically enrolled	Outsourced pension administration
Madrian and Shea (2001)	Health care and insurance	50,000	2 years	New hires	Hewitt Associates
(Choi, Laibson et al. 2002)	Health care and insurance company (described above)				
	Office equipment	30,000	3 years	New hires	Hewitt Associates
	Food	20,000	3 years	New hires; Non-participating employees aged 40 or over eligible for 401(k) when automatic enrolment was adopted	Hewitt Associates
(Beshears, Choi et al. 2010)	Industry not stated	50,000	2 years	New hires	Not stated

Three of the case study organisations are US-based (Madrian and Shea 2001; Choi et al 2002; Choi et al 2004). Beshears et al (2010) discusses a U.K.-based firm. All organisations are large with 20,000 employees or more. Only Madrian and Shea (2001) compare the mean starting salaries for newly hired employees (\$34,264) with the U.S. average (\$28,248). However, given the size of the organisations, it is likely that the new hires of all organisations are paid above the national average. This means that these employees, on average, may have greater resources that can be devoted to savings. It is also possible that employment with these organisations is relatively stable when compared to employment with small- and medium-sized organisations. The duration of these studies is short, three years or less. Longer periods of time would more fully reflect the impact of life course events (house purchase, births, divorce, children's educations, illness) that may impact on individual's ability to save. For three of the four organisations, all automatically enrolled employees were newly hired. Only one organisation provides an insight into the behaviour of employees who are automatically enrolled some months after beginning their jobs. To summarise, it is unclear if the experience of these four firms can be generalised to other firms, to employees in less secure employment and lower paid employment and to serving employees who are automatically enrolled months or years after they were hired.

However, these case studies suggest that inertia is powerful. Research indicates that automatic enrolment increases workforce coverage (Madrian and Shea 2001; Choi et al 2002, 2004; Beshears et al 2010). Carroll et al (2009, p. 1640) summarising the research of Madrian and Shea (2001) and Choi et al (2002; 2004) observed "...a participation default (automatic enrollment) can increase 401(k) participation rates among new hires by more than fifty percentage points..." Once enrolled, employees seldom withdrew from the pension scheme although in the U.S. and U.K., the right to withdraw is protected through legislation.

Choi, Laibson et al. (2009) examined a 'Quick Enrollment' procedure implemented by two firms in the U.S. To participate, some new hires and others who had not yet joined the organisation's pension scheme were required to complete an enrolment card by a specific deadline. Although Quick Enrollment tripled the participation among new hires as compared to previous cohorts required to make active decisions, the authors note that

“Quick Enrollment has a much smaller participation effect than automatic enrollment, which typically induces near-universal participation” (Choi et al 2009, p. 79).

Choi et al (2004, p 283) observed that “...employees tend to stick with the default contribution rate and asset allocation chosen by the employer.” Based on a review of empirical research, Carroll et al (2009) report that not only do those who are automatically enrolled remain as pension scheme members, “...about three-fourths of participants under automatic enrollment initially retain both the default contribution rate and the default asset allocation.” This ‘stickiness’ is observed even if the default choices are inappropriate. Several studies (Madrian and Shea 2001; Choi et al 2002; 2004; Carroll et al 2009) compare employee choices after defaults are implemented with previous cohorts of employees for the same companies that were required to make ‘active decisions’.

The U.K-based organisation investigated by Beshears et al (2010) featured a default contribution rate of 12%. It was significantly higher than the contribution rates of the U.S.-based case study organisations and sub-optimal in the sense that it was too low to take advantage of the employer match for contributions between 12% and 18%. Only 25% of employees continued to save at the initial contribution rate while 66% remained in the default investment fund. Choi et al (2004) also found that employees tend to exhibit greater persistence in their attachment to the default fund allocation than to the default contribution rate. Beshears et al (2010, p. 9) suggest, “It is possible that the asset allocation default has a greater impact on outcomes than the contribution rate default because individuals have some confidence in their ability to choose an appropriate savings rate but have little confidence in their ability to choose an appropriate asset allocation”. Beshears et al (2010), Choi et al (2004) and Madrian and Shea (2001) found that employees on low-income are most likely to persist with defaults.

This research suggests that pension savings behaviour, prompted by automatic enrolment in case study organisations, is relatively stable. A nuance to this is the research conducted by Beshears et al (2010) which indicates that when the initial default savings rate is relatively high (12%), employees are more likely to change their savings rate than if it is relatively low (2-6%). Recent research, conducted using nationally representative data sets, over a slightly

longer periods of time suggests that there are other factors that also lead to changes in contribution rates.

Dushi et al (2013) reported on savings in U.S. DC schemes between 2005 and 2009, a period of economic instability called the 'Great Recession'. The data came from two sources: the Survey of Income and Program Participation (SIPP) and W-2 (personal income tax) records. This allowed a comparison of a nationally representative data set during two periods (2005-2007 and 2007-2009). The findings indicate considerable variation in savings behaviour.

Of those who were saving for pensions in 2007, "...a considerable proportion of them (39 percent) decreased their contributions by more than 10 per cent by 2009, including 16% of those who stopped contributing altogether. An additional 32 percent had relatively stable contribution (within plus/minus 10 percent), and the remaining 29 percent increased their contributions by more than 10 percent during the crisis (Dushi et al 2013, p. 89). The authors noted that the decreases in savings rates were greater in magnitude than what was observed during 'normal' times. Further, a decrease in earnings was correlated with ceasing contributions and decreasing both the amount and the rate of contributions.¹

Muller and Turner (2013) used the nationally representative data set, the Panel Study of Income Dynamics (PSID) to investigate the pension savings behaviours of families at four points: 1999, 2001, 2003 and 2005. This was compared to Dow Jones Industrial Average (DJIA) closing prices over the same period in an attempt to answer the research questions "Do workers persistently contribute to 401(k) plans over stock market cycles?" (Muller and Turner 2013, p. 52). Persistency is defined as a worker continuing to contribute "...to their plan after they make their first contribution. It also describes how long they continue to contribute" (Muller and Turner 2013, p. 52). Inertia suggests that employees will persist in their pension savings regardless of the performance of the DJIA.

Of workers who contributed in 1999, only 35% contributed over all four observations, interpreted by Muller and Turner (2013) as a low level of persistence over a fairly short time

¹ Dushi et al (2013) note that they are looking at correlations rather than causation. It is not clear from the data if changes to income are related to voluntary job changes or active decisions to change pension contributions. Changes in employment mean that the new employer may or may not sponsor a DC scheme. The 'passive' employee simply responds to this change her behaviour can be characterised as inertia. Further, changes in savings rates may also be due to changes in employers' matching arrangements.

period. Changes in the Dow Jones Industrial Average (DJIA) had a positive and significant impact on 401(k) contributions. Employees were likely to save when DJIA was high and to stop saving when it was low. In summarising their results in relation to other variables, Muller and Turner (2013, p. 62) state, “This result varies across demographic and economic groups in predictable ways, with workers in the same job over the period with high education or high income having relatively high persistency, but other groups not having a high degree of persistency.”

To summarise, case study research suggests that auto enrolment exerts a powerful influence on choice and that even a modest requirement for activity leads to lower pension scheme membership. Using nationally representative data sets, two studies report great variability of pension savings over relatively short periods of time (four to six years) related to unstable earnings (Dushi et al 2013), employment and stock market performance (Muller and Turner 2013). This research calls into question the impact of automatic enrolment if employees are allowed to opt-out or change their contribution rates. Based on these conflicting finds, the power of inertia is contested.

Section 5: Government actions to promote automatic enrolment

Pension coverage is considered to be a problem in the U.S. (Munnell and Bleckman 2014) Ireland (Ireland. Department of Social and Family Affairs 2010) and the U.K. prior to the implementation of the new policy called NEST (Sass 2014). Governments in all three countries accept inertia as a major reason why employees do not join occupational pension schemes. Policies and legislation enable (Ireland, U.S.) or require (U.K.) employers to automatically enrol employees into pension schemes. The specific policies and legislation in each jurisdiction will be briefly discussed.

In the U.S., pension coverage is estimated at 50% (Munnell and Bleckman 2014). This coverage is considered to be too low with low income workers in particular, at risk of poverty at retirement. The provision of a pension scheme is voluntary; some employers provide access to a pension scheme as part of their benefit package. The uptake of these schemes by employees is also voluntary. The U.S. Department of Labour (2006) explains, “Approximately one-third of eligible workers do not participate in their employer-sponsored

defined contribution plans (such as 401(k) plans). Studies suggest that almost all of these workers would choose to remain participants if they were automatically enrolled. The increased savings would significantly improve their retirement security.” In other words, inertia describes the employees’ failure to begin to save for their retirement.

In a paper that identifies a wide range of 401(k) design options, Choi et al (2004) identify automatic enrolment as being the most important options for governments and businesses hoping to increase the pension participation rate. They cautioned that an impediment to employers using this design option was that “...many firms worry about the potential legal liability associated with automatic enrolment, despite that fact that the U.S. Treasury Department has issued a series of opinion letters supporting the use of automatic enrollment” (Choi et al 2004, p. 283). In response to these concerns, in 2006, “The Pension Protection Act (PPA)... removed impediments to employers adopting automatic enrollment, including employer fears about legal liability for market fluctuations...” (U.S. Department of Labor no date).

Automatic enrolment can be structured in different ways ranging from a basic deduction, with or without employer matching contribution to a qualified automatic contribution arrangement (QACA), a form of automatic escalation. There are regulations regarding minimum and maximum contributions from employees, employer matching arrangements and requirements for notice to employees about the amount and timing of deductions (U.S. Internal Revenue Service 2014).

The Employee Retirement Security Act (ERISA) also provided a “... safe harbour for plan fiduciaries investing participant assets in certain types of default investment alternatives in the absence of participant investment directives” (U.S. Department of Labor 2006). A Qualified Default Investment Alternatives (QDIA) must be diversified and not include employer securities. The approved funds can be: life-cycle, target date fund, balanced funds or a professionally managed accounts.

Employees can opt-out if automatically enrolled. They can move their savings to an investment fund that more accurately reflect their preferences. They can change their contributions within the limits imposed by legislation and their employer’s pension scheme.

President Obama and U.S. Senator Ted Harkin both proposed automatic pension deductions for employees with no coverage or insufficient coverage. For both plans, employees could opt-out (Munnell et al 2012).

The UK recently introduced new pension policies specifically designed to improve pension coverage for the low paid through automatic enrolment. It was influenced by MINDSPACE a report commissioned by the Cabinet Office and written by the Institute for Government (2014) described on their website as "...the UK's leading independent charity and think tank promoting more effective government". In relation to pension savings, the authors state, "There are many reasons for the low level of pension saving. Joining a scheme requires an active decision, but people often display inertia when confronted with such decisions...people are more likely to defer decisions that are complex and confusing, and thus require significant mental effort – like selecting a pension scheme" (Dolan et al 2010, p. 48).

The policy implemented in the UK requires all eligible jobholders to be automatically enrolled by 2018. They can opt-out but as (MacLeod, Fitzpatrick et al. 2012) state "The policy is designed to harness the natural tendency towards inertia that people display in pension behaviour, by making people opt-out, rather than opt-in, to a workplace pension" (p. 2) A minimum contribution rising to 8% of qualifying earning by 2018 is paid by the State in the form of 1% tax relief, employers who are required at a minimum to contribute 1% at fund set-up and to increase their contribution to 3%. The balance, 4% or less, is required from the employee. Employers are required to auto-enrol all eligible employees. However, employees can decide within one month of automatic enrolment to opt-out. Their contributions, tax relief and their employer's contribution will cease. If an eligible employee begins a new job, they will be automatically enrolled; if they opt out, they must request re-enrolment.

The National Employment Savings Trust (NEST) was developed by the U.K. government "...to provide employers with high-quality, low-cost plans" (Sass 2014, p. 1). The NEST website (NEST Corporation 2015) indicates that there are eight investment funds as shown in Table

3. They are risk-rated using the European Securities and Market Authority (ESMA) seven-point scale, defined using descriptors and volatility bands.

Table 3: NEST Funds, Risk and Volatility

Risk rating	Risk classification	Volatility Band	Long-term volatility target	Funds
1	Very low	0.0%-0.5%	0.5%	Lower Growth
2	Low	0.5%-2.0%		
3	Low to medium	2.0%-5.0%	4%	Pre-retirement Fund
4	Medium	5.0%-10%	7%	2055 Retirement Fund (Foundation)
			Reduces from 11% to 4% over 10 years	2021 Retirement Fund (Consolidation)
5	Medium to high	10%-15%	10-12%	2040 Retirement Fund (Growth)
			Three phases	Ethical Fund ²
6	High	15%-25%	17%	Higher Risk Fund
			22%	Sharia Fund
7	Very high	25%+		

Source: NEST Corporation 2015

Three of the eight funds in Table 3, form the default NEST Retirement Date Fund. Referred to as Target Date Funds (TDF) or lifestyle funds, the risk varies. Risk increases during the first few years of savings, the foundation phase. Sass (2014, p. 3) explains, “The

² The Ethical Fund operates like the TDF with three phases (foundation, growth and consolidation) using the same long-term volatility targets. However, it is presented a single fund risk-rated at 5.

explanation is behavioral, not financial. When researching their investment options, NEST heard many young workers say they might stop saving if they saw the value of their account fall. So NEST adopted an investment strategy designed to produce rising nominal balances for workers just starting out” Sass (2014, p. 3). Target volatility is at its highest during the ‘growth phase’ and gradually decreases during the final years or the ‘consolidation phase’. The duration of each phase depends on the age of the saver and the length of time until retirement.

In spite of the concerns expressed by young workers, the foundation phase of the NEST Retirement Date Fund (2055 Retirement Fund) features considerable potential volatility and the impact on savings is not intuitive. According to MoneyMate (2014)“Volatility is estimated using annualised standard deviation over the previous 5 years... taking into account weekly performance observations.” The risk rating for 2055 Retirement Fund is 4 (medium) and is shown on the glide path to be in the middle of this risk rating suggesting a standard deviation of about 7.5. The long-term volatility target for this fund is 7%. Therefore, the actual return should fall between -8% and +22% in 95 years out of 100.³ For this NEST investment fund classified as ‘medium’, the rate of return in any one year is potentially negative, although in the long-run, it should average at 7%. This default choice, falling in the middle of the risk range, could be viewed as risky by an inexperienced investor, particularly if early losses are experienced.

There is no requirement to consult or to give financial advice to employees. Considerable effort has been made to communicate clearly through the NEST website and supporting documents available to savers, employers and advisors. *The NEST Phrasebook* “...is all about all about how we talk to people about pensions, using words and phrases that have been designed with them and for them” (NEST Corporation 2014, p. 2). This is the explanation for the term ‘risk and return’, “The more risk you’re prepared to take, the higher the chances of both reward and loss. Investing in things like the stock market is generally considered to give better opportunities to grow your money and make sure your retirement pot keeps up with inflation. However it can also mean a higher chance of losing

³ The range of return is calculated by multiplying the standard deviation (7.5) by 2 then adding and subtracting this amount from the long-term volatility target (7). $[(7.5*2)+/- 7]$.

money” (NEST Corporation 2014, p. 15). It is yet to be seen if these explanations will suffice during a downturn of the stock market.

In Ireland, all employers are required to organise access to a pension scheme but neither employers or employees are required to contribute. Employers who sponsor occupational pension schemes can require mandatory employee contributions as part of their terms and conditions of employment. Therefore, it was not necessary to legislate for automatic enrolment. The Pensions Authority (previously the Pensions Board) is responsible for the regulation and oversight of occupational pension schemes. *Investment Guidelines For trustees of defined contribution pension schemes (Guidelines)* were published to provide suggestions about the structure of the schemes in relation to the number of funds and default investment fund. The *Guidelines* emphasise that the default investment fund choice should be made based on its suitability to its members. Although this suggests that the default choice made by trustees of different organisations can and should vary depending of the workforce, The Pensions Board (2013) observed that a lifestyle investment fund was the most common default investment strategy. The *Guidelines* do not cover the default contribution rate or automatic escalation. The maximum amount that individuals can contribute to their pension funds while attracting tax relief is defined by legislation.

Because the occupational pension coverage of 50% is considered too low, The National Pensions Framework (*Framework*) outlined plans to legislate for automatic enrolment with employee, employer and State contributions in the form of tax relief. The *Framework* (Ireland. Department of Social Welfare 2010, p. 30) explains the rationale for this change, “There are several reasons why people are not saving for retirement, or not saving enough. One of these is inertia – whereby people have just not gotten around to it. Automatically enrolling people into a pension scheme overcomes this problem.”

As outlined in the *Framework*, contributions would be required by all three stakeholders. Employees would contribute 4% of gross income, employers 2% and the State 2% through tax relief on pension contributions. Although enrolment was proposed to be mandatory, remaining in the scheme was voluntary. Employees could ‘opt out’ after three months and re-enter whenever they chose but, the document states, “they will be automatically re-enrolled every two years” (Ireland. Department of Social Welfare 2010, p. 32). The

Framework envisaged limited investment fund choices “...provided by the private sector through a competitive process run by the State” (Ireland. Department of Social Welfare 2010, p. 32).

At the time of the publication of the *Framework*, in the middle of financial crisis, it was acknowledged that plans could not advance until economic conditions improved. In February 2015, the Minister of Social Protection, Joan Burton, announced “...the establishment of a new Universal Retirement Savings groups “to develop a roadmap and timeline” for the introduction of a new universal supplementary retirement saving scheme—effectively a mandatory workplace pension” (Coyle 2015). It is unclear if employees will be allowed to ‘opt-out’.

The *Green Paper on Pension* (Ireland. Department of Social and Family Affairs 2007) discussed the risk incurred by individuals investing in DC schemes at length observing that without some guarantee on the rate of return on investment, “...it is unlikely that a mandatory scheme would be welcomed. It is also likely that the presence of a guarantee could be a driver for increasing pension coverage in the context of voluntary provision” (Ireland. Department of Social and Family Affairs 2007, p. 139). Admitting that absolute guarantees on investment returns were not possible, the option of a limited guarantee was actively considered, subject to further considerations of costs and risks. However, the view had changed by 2010 when the *Framework* document was published. It states, “The range of funds will include very low risk options to provide members with a high level of security on their savings. The Government will not, however, provide any guarantees on investment returns” (Ireland. Department of Social and Family Affairs (2010, p. 33). Further, the *Framework* document suggests that the requirement for investment advice given to employees would be minimal to keep pension charges low.⁴

To summarise, assessments in all three countries suggest that pension coverage is too low, inertia is the cause and defaults are the solution. The policies developed to overcome inertia are different in each country. In all three countries, employers are allowed to

⁴ PRSAs were introduced in 2003 to provide an inexpensive pension provision option, particularly for small employers. Employers are not required to advise employees about their pension schemes but they must allow pension providers or their representatives to be given access to employees during working hours either on or off-site. This *Framework* document suggests that this modest requirement will be reduced.

automatically enrol employees into occupational pension schemes. In the U.S., employer provision of a pension scheme is voluntary. In the U.K. employers are required to automatically enrol employees into a DC scheme or NEST and to contribute a percentage of income. In Ireland, employers are required to offer access to a pension scheme but they do not have to contribute. In all countries, employees are allowed to change from the defaults or to opt-out. In all three countries, employers and pension providers are protected against legal action from employees if their pension schemes comply with pension regulations, though this may be tested in the future. It is employees who bear the risk.

Section 6: Characteristics of employees who are not members of pension schemes

The U.S., U.K. and Irish governments suggest that the reason for low pension coverage is inertia. This section examines what is known about employees who are not saving for retirement to raise the possibility that there are other, more likely explanations for their behaviour. Table 4 outlines the demographic characteristics of employees or heads of families who are not saving for retirement in the U.S., U.K. and Ireland

Table 4: Demographic characteristics of workers and heads of families not saving for retirement

Characteristics	Classification of workers least likely to save for retirement	U.S. and U.K.	Ireland
Age	Young	Madrian and Shea (2001); Aizcorbe, Kennickell et al. (2003); MacLeod et al (2012)	Ireland. Central Statistics Office (2011, 2005); Ireland. Department of Social and Family Affairs (2007);
Education	Less educated	Gough and Sozou (2005); (Wu and Ruthledge 2014); MacLeod et al (2012)	O’Connell and Gash (2003)

Gender	Women	Madrian and Shea (2001); Munnell et al (2012); Wu and Rutledge (2014); MacLeod et al (2012)	Ireland. CSO (2011, 2005); O'Connell and Gash (2003); Hughes and Watson (2005); Ireland. Department of Social and Family Affairs (2007); Duvvury, Ni Leime et al. (2012)
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Table 4 indicates that there are identifiable demographic variables that are negatively associated with pension coverage. Pension coverage increases with age and education. People with more education are more likely to be working for organisations with occupational pension schemes (O'Connell and Gash 2003; Wu and Rutledge 2014) and they are more likely to save more (Gough and Sozou 2005). Women are less likely to be members of occupational pension schemes than men. In the UK, MacLeod et al (2012) reported that this finding holds for older women. They state, "The percentage of men aged 45 or older having no resources for later life was lower in each age group compared with women of the same age and the percentage having a private pension was higher" (MacLeod et al 2012, p. 23). However, there no differences found between women and men under 44 years of age.

Employment characteristics are also relevant to the describing those who are not saving for retirement. This information is shown in Table 5 .

Table 5: Employment characteristics of workers and heads of families not saving for retirement

Characteristics	Classification of workers least likely to save for retirement	U.S. and U.K.	Ireland
Income	Low income	Madrian and OShea (2001); Aizcorbe et al (2003); Gough & Sozou	Moloney and Whelan (2009); Hughes (2003); Ireland. Department of

		(2005); Aizcorbe et al 2003; Wu and Rutledge (2014); Munnell et al 2012; MacLeod et al 2012;	Social and Family Affairs (2010)
Tenure	Less years of employment within an organisation or in the workforce	Madrian and Shea (2001); Wu and Rutledge (2014); Choi, Laibson and Madrian (2004); Choi et al 2002	O’Connell and Gash (2003)
Labour market attachment	Weak	Wu and Rutledge (2014)	O’Connell and Gash (2003); Duvvury et al (2012)
Labour market segment	Secondary sector, particular industries or occupational groupings	MacLeod et al (2012)	O’Connell and Gash (2003); Ireland. Central Stastics Office (2002; 2005; 2011); Ireland. Department of Social and Family Affairs (2007);
Firm size	Small ⁵ enterprise	Munnell et al (2012)	Ireland. Department of Social and Family Affairs (2007)
Full-time/Part-time	Part-time	Munnell and Bleckman 2014; Wu and Rutledge (2014)	CSO (2005); O’Connell and Gash (2003); Ireland. Department of Social and Family Affairs (2007);

Research from Ireland, the U.S. and the U.K. indicates that the likelihood of pension coverage increases with income. However, low wages are also related to other employment characteristics as reported by Wu and Rutledge (2014) based on research conducted recently in the U.S. They state, “We find the substantial pension gap between higher- and

⁵ ‘Small’ is defined differently. In the U.S., Munnell et al (2012) defines it as firms with fewer than 100 employees. The EU definition of ‘small’, used by the U.K. and Ireland is a business with 49 employees or less.

lower-income individuals is driven primarily by lower-income individuals' weaker labor force attachment and by their lower pension offer rates among those who do work" (Wu and Rutledge 2014, p. 2). Weak labour force attachment was also identified by O'Connell and Gash (2003) as an impediment to retirement savings. In Ireland. Workers in unstable employment, i.e. employed after period of extended unemployment or intermittently unemployed were less likely to members of pension schemes when compared to workers in stable employment.

Low income impacts on occupational pension membership in two ways. As suggested by Wu and Rutledge (2014) most people on low earnings are not employed by organisations that offer pension schemes as a benefit. In some cases, however, pensions are offered to workers on low wage who do not participate. Aizcorbe et al (2003) reported that some workers who were eligible for pensions at their workplace did not join and this was also related to income. They state, "The choice to participate appears to be related strongly to income. Of heads of families in the lowest 20 percent of the distribution, 46.4 per-cent who were eligible declined to participate; in contrast, among heads of families with incomes in the highest 10 percent of the distribution, only 15.3 percent of eligible worker declined to participate" (Aizcorbe et al 2003, p 14).

Madrian and Shea (2001) found that longer tenure of employment with their employer, the more likely that a worker will become a member of a pension scheme. Wu, Ruthledge et al. (2014)suggested that the delay may be caused by employers who require a vesting period before they will match employee contributions. O'Connell and Gash (2003) reported that people who are in the labour market for longer periods are more likely to join a pension scheme. While job tenure is related to the stability of the labour market attachment, length of time in the labour market is related to age.

In Ireland, there is evidence that workers employed in the secondary sector (O'Connell and Gash 2003) in some industrial sectors and in occupations rather than professions are also unlikely to work for organisations sponsoring pension schemes. For example, workers in the 'Accommodation and Food Service' industry and those whose occupation was classified as 'Sales' were the least likely to have pension cover (Ireland. Central Statistics Office 2011).

Research from the three countries indicates that part-time workers are less likely to be members of occupational pension schemes than full-time workers.

Pension scheme membership is more likely for employees in large organisations than in small organisations in the U.S. where access to a pension scheme is voluntary. Munnell et al 2012 explained that new SIMPLE products, designed to improve pension coverage by easing the administrative burden of pension administration on employers were ineffective. The authors suggest that this result was not surprising because “Too few employees, lack of employee interest, unstable business, and other factors are cited as more important concerns by small employers.” In Ireland, all employers are required by law to provide access to a pension scheme. However, access is not enough; when employees are required to ‘opt-in’, the majority of schemes organised in both jurisdictions have no members (Ireland. The Pensions Board 2014).

Although studies from the three countries show that women are less likely than men to be members of pension schemes, Munnell et al (2012, p. 2) reported that the data revealed, “...that pension participation among full-time, full-year workers is now equal for both men and women.” This suggests that it is the interaction of variables that impacts on the lower than average pension coverage for women. In this instance, women are more likely to be in unstable employment, part-time work and sectors where employers do not offer pension schemes.

Wu and Rutledge (2014, p. 3) consider the range of personal and employment factors that lead to low earnings. They state, “Lower-income households, perhaps because of a lack of education and skill, have weak labor force attachment – they have higher unemployment, and more frequently leave jobs, either voluntarily or involuntarily, without having another job lined up...” Although they think that automatic enrolment is an important policy initiative, a single policy to reduce the gap for those who are not occupational pension members is not enough. The state, “Improving the job prospects of lower-income individuals – not only so they have more success in finding *any* job, but so they succeed in finding the types of jobs that offer pensions and other benefits – is likely to increase pension participation among older, lower-income individuals” (Wu and Rutledge (2014, p. 3).

Inertia is an unlikely explanation for the pension savings behaviour of the people described above. Preoccupation with the struggle of daily life on low income in intermittent employment leaves little time to consider the need to save for retirement. It is likely that pensions are simply not 'on their radar'.

Section 7: Discussion and conclusion

Inertia is considered by U.S., U.K. and Irish governments to be the reason for low pension coverage. The reasons for this behaviour are not well understood. Various explanations include: fear of loss when decisions involve risk; cognitive limitations encountered when decisions are complex; inability to assess the costs of action and inaction; and a lack of self-control that inhibits proactive behaviour. In their policy statements concerning automatic enrolment, however, all government advance the view that an important reason for the behaviour is poor self-control.

Even proponents of automatic enrolment as an organisation and government policy suggest that the complexity of the pension decision results in a failure of some employees to become scheme members (Barr and Diamond 2009; Thaler 1994; Thaler and Sunstein 2003). Further, the case study research conducted by Choi et al (2004) and Beshears et al (2010) also point to complexity as being an issue causing inertia for employees who are members of pension schemes. At least in the short-run, once automatically enrolled, employees are slow to leave default contribution rates and investment funds, even if they are inappropriate.

The characteristics of individuals that impact on their decision to save for retirement are difficult to influence by policy, but the complexity of pension schemes can be regulated. As illustrated by Table 3, the NEST pension fund choices, designed specifically for small employers and their employees, is complicated. While governments appear to be relying on automatic enrolment to maintain pension savings, there is little evidence that governments are willing to regulate to reduce the complexity of occupational pension schemes. Whether or not employees choose to understand the details of their occupational pension scheme, the pension schemes themselves should be designed and communicated so that a person with a high school education can understand the scheme.

Further, in the U.K., to keep costs low, there is no requirement for occupational pension scheme members to receive advice. The recommendations in the *Framework* document for Ireland also minimise the requirement for pension advice to keep pension charges low (Ireland. Department of Social and Family Affairs 2010). The policy of requiring people to join a pension scheme, anticipating that they will not opt-out of the defaults and not advising them about the implications of inaction should be reviewed.

The research conducted by Choi et al (2004) and Beshears (2010) suggests that low-income employees are the most susceptible to remaining in defaults, even if the defaults are inappropriate. On the other hand, the research by Muller and Turner (2013) suggests that employees are likely to 'opt out' of their pension savings during stock market downturns. Either outcome negatively impacts the low paid.

The lifestyle fund, suggested by the Irish Pensions Board and the four choices allowed for defaults under the U.S. Safe Harbor regulations appear to allow a significant level of risk, while protecting the pension sponsors. The choice for the NEST default investment fund is explained with reference to the ESMA risk rating. It follows a 'glide path' moving from a risk rating of 4 to 5 and returning to 4 before investing in the 'pre-retirement' fund, risk-rated 3. The risk ratings 4 and 5 feature significant volatility that is unlikely to be understood by the pension saver. Although the U.K. government anticipates that employees will remain within the default fund, the losses incurred are the responsibility of the pension scheme member. They bear the risk, even if they don't understand it.

If the findings of Choi et al (2004) and Beshears (2010, p. 9) are correct, low-income workers are less likely to transfer money out of the default investment fund because they have, "... little confidence in their ability to choose an appropriate asset allocation". If these employees remain with the default asset allocation, the negative impact on their pension savings can be substantial, especially if a periodic downturn in the stock market occurs during the final decade of their working life. Having sacrificed current consumption to save for retirement, the value of their savings could be far less than anticipated. If the intention of government policy is to take advantage of inertia to promote pension savings, employees should in some way be protected from the risk associated with an economic downturn.

On the other hand, Muller and Turner (2013) suggest that employees will suspend their savings during a stock market downturn. Suspending savings will not only lower the individual's cumulative pension savings, employees may become accustomed to higher levels of consumption making it difficult to resume savings. Regulators should consider accepting defaults with lower ESMA ratings to minimise volatility. While the returns will be less, the losses will be less extreme during periodic downturns. With experience, pension savers may develop a greater appetite for risk and a better understanding of shifting assets during stock market cycles.

There is always a concern about generalising the findings from case research to other settings. In this situation, three governments appear to be basing their policies on research conducted in a small number of large companies (Madrian and Shea 2001; Choi et al 2002; Beshears et al 2010). Large companies tend to pay more, to offer benefits and to communicate regularly about benefits. Whether warranted or not, employees of large organisations may trust their employer to make sound financial decisions for them. Further research is required to see if the employees of small- and medium-sized organisations will react in the same ways as their colleagues in large organisations.

Recent research that looks at the impact of changes in earning and stock market volatility on pension savings does not appear to have influenced policy makers. This research suggests that people are more likely to persist in their savings if their earnings increase, rather than decrease (Duchi et al 2013), if their job is stable and if the stock market is on an upward cycle (Muller and Turner 2013). Those on high income are not only more likely to join a pension scheme, they are also more likely to persist in their savings (Muller and Turner 2013). These studies call into question the power of inertia suggesting that if pension scheme members are allowed to opt-out of their pension schemes, they will. Automatic enrolment may be significantly less effective than currently predicted, especially for those workers on low income and in precarious employment who are most likely to 'opt out' at the first opportunity.

Government regulation in all three countries attempts to protect pension sponsors from fiduciary responsibility for pension design choices that may negatively impact their employees. Though inertia is an unlikely reason for the lack of savings of those who are not

members of pension schemes, once automatically enrolled, they may be punished for not exercising 'choice' appropriately. Relying on automatic enrolment into pension schemes that are risky and complicated, with the expectation that scheme members will remain in defaults seems to abdicate a duty of care to those who are the most vulnerable.

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