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**INCREASING PENSION PARTICIPATION RATES THROUGH AUTOMATIC ENROLMENT: A CRITIQUE OF  
FIRM SIZE**

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**Abstract**

This paper focuses on the question: “Will automatic enrolment (AE) legislation impact on the participation rates for small firms?” We develop a model to explain why large organisations are more likely to offer pensions as a benefit than small organisations that includes background conditions and motivating factors. We also consider differences between the employees of large and small organisations. Building on the work of Willis (2013) we suggest that for large organisations voluntarily offering pensions as a benefit, the interests of government, pension providers, employers and employees are aligned leading to higher pension participation rates. However, we argue that legislation requiring AE in all firms will not be strong enough to overcome the unaligned interests of these stakeholders. Therefore, we predict that AE will not significantly improve the participation rates for small firms.

## 1.0 Introduction

Automatic enrolment (AE) is a design feature of some occupational pension schemes whereby employees, generally when starting a new job or after a vesting period, become members of a pension scheme. Research featuring a small number of large U.S.-based organisations (Madrian and Shea 2001, Choi et al 2002; 2004a) publicised the effectiveness of AE. Many of the individuals in demographic groups (black, Hispanic, young, low income) that traditionally failed to 'opt in' when they were required to join the occupational pension schemes offered by their employer, did not 'opt out' when automatically-enrolled. This finding excited policy makers because these groups were the most at risk of poverty after retirement because of insufficient savings. The authors' of these reports cited inertia, the behaviour of doing nothing and allowing the current situation to prevail, as the explanation for both the failure of employees to opt-in to an occupational pension scheme when one was available and to opt-out of the pension scheme after being automatically enrolled.

Based on the strength of the findings, the U.K. recently introduced a policy initiative requiring employers to auto-enrol eligible employees into a pension scheme. Similar initiatives are being considered in Ireland (Ireland. Department of Social Protection, 2015) and the U.S. (Munnell et al, 2012). Although employees in the U.K. are allowed to opt-out, policy makers hope that power of inertia will prevail resulting in improved pension coverage and adequacy.

This paper addresses the question, "Will automatic enrolment legislation impact on the participation rates for small firms?" This research fills a gap because most commentary on this topic suggests that the success experienced by large organisations, voluntarily implementing AE, can be replicated in all organisations if this policy is mandated by legislation (Sunstein, 2013; Lunn, 2012; Dolan et al, 2010). We concentrate on small employers because their employees are the least likely to save for retirement using either a personal or an occupational pension scheme. We propose that the context where these policies were implemented is important and explore the significant differences between large and small organisations in relation to pensions.

We suggest that organisations that choose to voluntarily offer pensions as a benefit generally fulfil two background conditions: they have the ability to pay for pensions for the foreseeable future and the capacity to develop and implement a pension policy. These background conditions are necessary but not sufficient and are more likely to apply to large rather than small organisations. We argue that large firms, like those discussed on Madrian and Shea (2001) and Choi et al (2002, 2004a) are more likely to be committed to pensions and motivated to offer them for one or more of the following reasons: external competitiveness in relevant labour markets, cost effectiveness, concern for employees and/or trade union involvement. Small businesses are more likely to offer a pension scheme because it is required by law. Next, we will discuss the differences between the employees of large and small organisations concluding that because of short tenure combined with low pay, the employees of small organisations may opt out of pension provision limiting the effectiveness of AE.

Building on the work of Willis (2013) we agree that in large organisations where research on AE was reported, the interests of key stakeholders including government, pension providers,

employers and employees were aligned. However, we suggest that legislation requiring AE is not sufficient to align the interests of government, pension providers, small employers and their employees. We therefore predict that the participation rates under legislated AE, if employees are allowed to opt-out, will be considerably lower for small firms than reported for large firms.

This paper is divided into six sections. Following this introduction, section 2 explains the conceptual and institutional contexts of AE. Section 3 summarizes the academic research that influenced the policy debate on AE. Section 4 identifies differences between large and small organisations relating to employers' decisions to provide the pension benefit. Next, the differences between the employees of large and small businesses, related to employees' interest in pensions, are compared. Section 5 discusses the possible impact of the aligned or unaligned interests of key stakeholders on workforce participation rates. Section 6 presents the conclusion.

## **2.0 AE context**

This section provides an overview of the conceptual and institutional contexts of AE. We begin by explaining the differences between defined benefit (DB) and defined contribution (DC) scheme. The following section defines the benchmarks used to evaluate pension policies at the national and organisational levels. Section 2.3 explains the connections between inertia, AE and legislation to promote AE. The final section outlines the extent of the problem of pension coverage for the employees of small organisations.

### **2.1 DB and defined contribution DC schemes**

DB schemes were the most common form of occupational pension schemes offered in the private sector. Employees are automatically enrolled and are not allowed to opt out. Fully funded DB schemes provide secure pension income, from retirement until death, usually based on a predetermined formula applied to years of service and earnings. DB schemes are relatively simple from the perspective of the member. 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 changes to the accounting standards and funding requirements led many organisations to either wind up their DB schemes, replacing it with a DC scheme for current members, or to offer a DC scheme to new entrants.

The replacement of DB schemes with DC schemes has become an international trend. An OECD (2012, p. 11) report reflected on the implications stating, "...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." For the individual member, DC schemes are complex. Most organisations require employees to join their pension scheme by 'standard' or 'voluntary' enrolment meaning that employees must 'opt in' deciding 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 risky and complicated for non-professional investors.

## 2.2 Benchmarks to evaluate national and organisational pension policies

Table 1 describes the benchmarks used to evaluate pension policies at the national and organisational level.

Table 1: National and organisational benchmarks

<b>National</b>	<b>Organisational</b>
<i>Pension coverage</i> - percentage of the labour force contributing to an occupational or personal pension scheme	<i>Participation rate</i> - percentage of an organisation's workforce contributing to its occupational pension scheme
<i>Pension adequacy</i> – percentage of pre-retirement income required to maintain an individual's lifestyle during retirement	<i>Contribution rate</i> - median or average percentage of income saved by the members of an organisation's occupational pension scheme

While all of these measures are important, this research concentrates on the pension participation rate because it is analyzing the likely impact of AE within organisations if employees are allowed to opt out. National pension coverage will improve if organisations' participation rates increase. Pension participation is necessary but not sufficient to achieve pension adequacy.

In the U.S. and Ireland, where employer and employee pension contributions are voluntary, pension coverage private sector workers for the U.S. is estimated at about 50% for the U.S. Munnell and Bleckman, 2014). It was 46% for the labour force (public and private) in the U.K in 2003/2004 before the implementation of AE legislation (U.K. Pensions Commission 2005). In Ireland, pension coverage for the entire labour force was about 47% in 2015 (Ireland. Central Statistics Office 2016). While these percentages are considered to be too low, only Ireland recommends a specific target for supplementary (occupational and personal) pensions of 70% of the total labour force aged over thirty (Ireland. The Pensions Board, 1998).

## 2.3 Inertia, AE and government legislation

Inertia is the behaviour of doing nothing and allowing the current situation to prevail. Researchers, national governments, the EU and the OECD view inertia as being a major problem that inhibits workers from joining pension schemes. However, it is also thought that inertia can be leveraged through the use of defaults, a structural feature of some occupational pension schemes. Willis (2013, pp. 1157) defines defaults as "...settings or rules about the way products, policies, or legal relationships function that apply unless users, affected citizens, or parties take action to change them." Carroll et al (2009, p. 1640) explain the popularity of defaults as a policy option, "Because defaults powerfully influence outcomes without restricting choices, the intentional use of defaults as a policy lever has become increasingly common."

Although defaults can take several forms, AE is the basic default whereby employees, often when they join an organisation or after a short vesting period, become members of the occupational pension scheme. Depending on national legislation and the terms of the scheme, in some cases, employees can 'opt out' of pension scheme membership; in other cases they cannot. Governments in the U.S. and the U.K. have taken the view that organisations and governments can improve pension coverage and adequacy while preserving choice by collapsing a complex set of choices into the decision to either 'do nothing' or 'opt out'. The report *NEST insight 2015* notes that although individuals value choice, in relation to pensions, complex choices are an impediment to joining a pension scheme. The authors state, "Auto enrolment has successfully harnessed inertia, recognizing that consumers generally don't act if they have to make a choice about pensions. This has brought about a sea-change in pension saving" (U.K. National Employment Savings Trust 2015, p. 13).

Governments have taken different actions to promote AE. In the U.S., employers decide whether or not to provide a pension benefit for their employees. Those who offer a DC-type scheme are encouraged to use AE but employees must be given the choice to remain within the scheme or to opt out. In response to organisations' 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, Employee Benefits Security Administration, no date). If employers choose defaults that are within regulations specified by the Department of Labor and the Internal Revenue Service, plan sponsors are not held legally responsible for poor investment returns resulting from those defaults. Changes are being considered to increase participation rates. President Obama and Senator Tom Harkin (D-Iowa) proposed different variations of AE for employees who are not members of occupation pension schemes (Munnell et al, 2012). Munnell (2015, p. 6) advised that "The most important policy change would be requiring all 401(k)s to be fully automatic, while continuing to allow workers to opt out if they choose."<sup>1</sup>

In 2012, the U.K. introduced a new pension policy specifically designed to improve pension coverage for the low paid through AE. It is being rolled out on a phased basis related to the size of the employer. By 2018, all eligible jobholders will be automatically enrolled into either an approved occupational pension scheme or the National Employment Savings Trust (NEST) developed by the U.K. government, "...to provide employers with high-quality, low-cost plans" (Sass, 2014, p. 1). Employers are required to auto-enrol all eligible employees; within one month employees can decide to opt-out. If an employee chooses to opt-out or if they discontinue saving, their contributions, tax relief and their employer's contribution will cease. If an eligible employee begins a new job, they must be automatically enrolled. Workers who have opted out or ceased contributions must be re-enrolled every three years; they are allowed to opt-out each time that they are re-enrolled.

In Ireland, all employers are required to organise access to a pension scheme but neither employers nor employees are required to contribute. Employers who sponsor DB and DC schemes can require mandatory employee contributions as part of their terms and conditions of employment. In a press release, the Minister of Social Protection, Joan

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<sup>1</sup> 401(k) is a DC occupational pension scheme commonly used in the U.S.

Burton, announced the establishment of the Universal Retirement Savings Group given the broad role “...to consider the constituent factors involved in constructing an efficient and effective universal retirement savings system and bring forward a recommendation in the form of a roadmap and estimated timeline for introduction” (Ireland: Department of Social Protection, 2015). It is unknown if employees will be allowed to ‘opt-out’.

This research focuses on legislated contexts like the U.K. where employers are required to automatically enrol employees but employees are allowed to opt-out.

#### **2.4 Small businesses and their employees as targets for the proposed AE legislation**

A large proportion of the labour force in Ireland, the U.K. and the U.S. are employees of small organisations as indicated by Table 2.

**Table 2: Number of enterprises and employees in private sector firm defined by size in Ireland, U.K. and U.S.**

	<b>Ireland (2012)<sup>2</sup></b>	<b>U.K. (2014)</b>	<b>U.S. (2012)<sup>3</sup></b>
<b>Size of 'large' enterprise</b>	<b>250 and over</b>	<b>250 and over</b>	<b>500 and over</b>
Number (%) of 'large' enterprises	481 (0.3%)	6,745 (0.1%)	18,219 (0.3%)
Number (%) of employees of large enterprises	390,809 (32.0%)	10,070,000 (39.9%)	59,875,575 (51.6%)
<b>Size of 'medium' enterprise</b>	<b>50-249</b>	<b>50-249</b>	<b>50-500</b>
Number (%) of 'medium' enterprises	2,407 (1.3%)	31,475 (0.6%)	201,962 (3.5%)
Number (%) of employees of 'medium' enterprises	230,641 (18.9%)	3,075,000 (12.2%)	24,360,600 (21%)
<b>Size of 'small' enterprise</b>	<b>10-49</b>	<b>10-49</b>	<b>10-49</b>
Number (%) of 'small' enterprises	14,361 (7.7%)	194,755 (3.6%)	969,542 (17.0%)
Number (%) of employees of 'small' enterprises	274,902 (22.5%)	3,807,000 (15.1%)	19,267,844 (16.6%)
<b>Size of 'micro' enterprise</b>	<b>Under 10</b>	<b>0-9<sup>4</sup></b>	<b>0-9</b>
Number (%) of 'micro' enterprises	168,281 (90.7%)	5,010,160 (95.6%)	4,536,707 (79.2%)
Number (%) of employees of 'micro' enterprises	323,502 (26.5%)	8,276,000 (32.8%)	12,434,449 (10.7%)
<b>Total number of enterprises</b>	<b>185,530</b>	<b>5,243,135</b>	<b>5,726,160<sup>5</sup></b>
<b>Total employees</b>	<b>1,219,854</b>	<b>25,229,000<sup>6</sup></b>	<b>115,938,468</b>

Sources: Ireland. Central Statistics Office (2014a); Ireland. The Pensions Board (2013); U.K. Department for Business Innovation & Skills (2014); United States Census Bureau (no date)

This table indicates that in Ireland, small and micro firms comprise over 98% of the total number of enterprises and almost 50% of all employees work for these firms. In 2012,

<sup>2</sup> There is a standard classification system used in the EU that describes organisational size based on the number of employees. It is micro (0-9), small (10-49), medium (50-249) and large (250+).

<sup>3</sup> In the U.S., the classification of business size varies by industry along two dimensions: number of employees and turnover. According to the SBA (U.S. Small Business Administration no date), it "... has established two widely used size standards – 500 employees for most manufacturing and mining industries and \$7.5 million in average annual receipts for many nonmanufacturing industries." The U.S. census data allowed for aggregation of firm size for micro and small firms using EU classifications. It is shown in this table for comparison.

<sup>4</sup> This includes businesses with 'no employees' comprising "...sole proprietorships and partnerships comprising only the self-employed owner-managers(s), and companies comprising only an employee director" (U.K. Department for Business Innovation and Skills 2014, p. 4).

<sup>5</sup> The numbers for both employees and enterprises were calculated using tables from the U.S. Census (no date). The total number of enterprises 'adds up' to 5,726,430 while the number reported on the census is 5,726,160.

<sup>6</sup> Rounding error

approximately 75% of the employees of small firms were not members of employer-sponsored pension schemes (Maloney and McCarthy, 2015). Although the U.K. is a much larger economy, the proportion of micro and small enterprises and the number of employees working within those firms is very similar. As indicated by Table 2, in 2014, 99% of U.K. firms employed less than 50 employees and 48% of private sector workers were employees of those firms. In 2003, before the introduction of AE, the U.K Pensions Commission (2004) reported 70% non-participation in any pension scheme for the employees of firms with 1-49 employees. The U.S. economy is much larger than either the Irish or the U.K. economies. Although the proportion of firms with less than 50 employees is similar to Ireland and the U.K., the proportion of employees working in those firms is significantly smaller. The United States Census Bureau (no date) reported that in 2012, 95% of the firms employed fewer than 50 employees and about 27% of private sector employees worked in those businesses. Munnell et al. (2012) calculated that the employers of 61% of workers, employed in enterprises with less than 100 employees, do not sponsor a pension plan. Because pension coverage for the employees of small firms is low, their organisations are of particular interest and the targets of national pension policies featuring AE.

### **3.0 A summary of the academic research on AE**

In this section, we review research that was pivotal in concentrating the attention of policy makers on AE as a policy to promote pension coverage. A summary of the organisations participation in the research is shown in Table 3.

**Table 3: Summary of organisations implementing AE**

Authors	Company	Industry	Number of employees	Employees automatically enrolled	Outsourced pension administration	Participation rate of new hires (AE)*	Participation rate of new hires (voluntary enrolment)*
<b>Madrian and Shea (2001)</b>		Health care and insurance <sup>7</sup>	29,267	New hires	Hewitt Associates		
<b>Choi et al 2002, 2004a, Choi et al 2004b</b>	A	Office equipment	32,000	New hires	Hewitt Associates	98%**	70%**
	B	Health services	30,000	New hires	Hewitt Associates	88%***	58%**
	C	Food products	18,000	New hires; Non-participating employees aged 40 or over eligible for 401(k) when AE was adopted	Hewitt Associates	92%****	69%**

Source: Madrian and Shea (2001); Choi et al. (2002, 2004a, 2004b)

\*All information from Choi et al. (2004a)

\*\*Participation rate 36 months after cohort was hired

\*\*\*Participation rate 24 months after cohort was hired; \*\*\*\*Participation rate 36 months after cohort was hired

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<sup>7</sup>This company forms part of both the Madrian and Shea (2001) study and Choi et al (2004a). In Choi et al. (2004a, this company is described as competing in the 'health services' industry employing 30,000 employees. However, the authors state, "Company B is the health services firm analysed in Madrian and Shea (2001)..." (Choi et al 2004a, p. 85).

Madrian and Shea (2001) investigated a single organisation. Choi et al (2002, 2004a, 2004b) discussed findings from three organisations implementing AE including the organisation discussed by Madrian and Shea (2001). The three organisations discussed in Madrian and Shea (2001) and Choi et al (2002, 2004a, 2004b) are U.S.-based. All organisations were large with 18,000 employees or more. Three industries were represented.

For the studies described in Table 3, the researchers investigated natural experiments, observing the impact of occupational pension policy scheme changes on individual behaviour. The policy changes allowed: immediate eligibility to the pension scheme without a vesting period and/or AE (replacing standard enrolment) for new hires. One firm (Company C) also automatically-enrolled non-participant employees aged 40 years or over. Because employees were automatically enrolled, the companies chose a default contribution rate and investment fund for those employees who did not make an active choice.

The research indicated that AE increased the workforce participation rates in the three organisations (Madrian and Shea 2001; Choi et al 2002, 2004a). The results suggested that once enrolled, employees seldom withdrew from the pension scheme although in the U.S., the right to withdraw is protected through legislation. Madrian and Shea (2001, p. 1161) highlighted that AE “...equalizes participation rates across various demographic groups. The effects were largest among the groups with the lowest participation rate under the previous regime of affirmative elections: blacks and Hispanics, the young, and employees with low levels of compensation.” Many of the individuals in these demographic groups failed to opt in when they were required to join the occupational pension schemes offered by their employer, but did not opt out when automatically enrolled. This was the finding that excited policy makers because these groups were the most at risk of poverty after retirement because of insufficient savings.

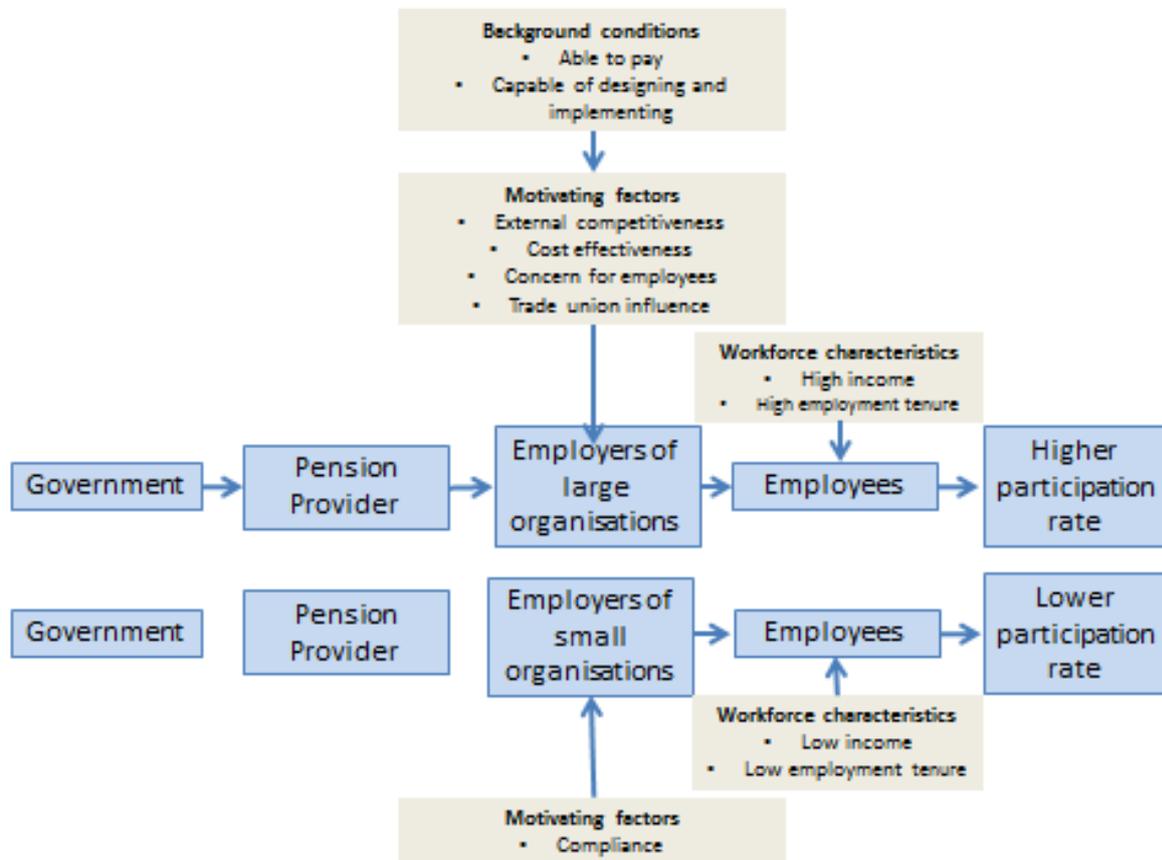
To summarise, these highly influential research projects were conducted in a small number of large U.S.-based firms. The findings suggested that AE was very successful at increasing the participation rates in these firm. In the next section, we will examine the differences between the employers and employees of large and small organisations.

#### **4.0 Comparing small and large organisations**

In this section, the differences between large and small employers will be discussed focusing on the factors that impact on their decision to offer a pension as a benefit. Next, we discuss the differences between employees of large and small employers are focusing on those characteristics that that are likely to impact on an employee’s decision to remain within a pension scheme if automatically enrolled.

Figure 1 depicts the key stakeholders, the alignment of their interests and the differences between large and small employers and their employees.

Figure 1: Model of aligned and unaligned interests impacting on participation rates



#### 4.1 Differences between large and small organisations as pension sponsors

This section highlights the differences between large and small organisations as pension scheme sponsors. We suggest that organisations voluntarily offer pensions as a benefit if two closely connected background conditions are met: they are able to pay and they have the capacity to develop and implement pension policies. These conditions are necessary but not sufficient. One or a number of motivating factors must also exist including external competitiveness, cost effectiveness, concerns for employees and/or trade union pressure. We suggest that large organisations are more likely to exhibit these conditions and motivations while small organisations are likely to be motivated by compliance with legislation.

##### 4.1.1 Background conditions to voluntarily offer pensions as a policy

We suggest that if it is voluntary for organisations to offer occupational pension schemes, the **ability to pay** for the benefit, currently and in the future, is a pre-condition of that choice. Total labour costs significantly impact on competitiveness. Ultimately, they must be paid for by the customer (Milkovich et al 2014; McGill et al 2005). The ability of an organisation to pay more than its competitors or add benefits to its reward system is related to the productivity of its workers. Large organisations, for example, can afford to pay more

because “...larger firms have better opportunities to raise worker productivity, which can return to the worker...” in the form of pay or benefits (Hallock 2012, p. 13).

Armstrong (2002, p. 403) argues that a benefit strategy should not only be currently affordable, “...the forces that are likely to shape future benefit design and financing should also be analysed.” Costs are not limited to the percentage of income that employers’ contributed to employees’ pensions. The administrative burden of pensions requires resources to develop and implement the policy.

Organisations voluntarily offering pensions as a benefit must be capable of *designing and implementing* a pension scheme. Although the obvious cost for employers is the contribution to their employees’ retirement fund, development and administrative costs are also considerable. Caruth and Handlogten (2001, p. 165) suggest that “...it is necessary to have specialists design, administer and monitor an organisation’s program.” Organisations often seek help from pension providers, independent financial advisors, advisory firms, payroll professionals and accountants (U.K. National Employment Savings Trust 2015). The large organisations described in Table 3 outsourced pension administration to Hewitt Associates.

Large organisations are likely to have several HR managers including one or more compensation and benefits specialists to develop and implement their pension policy. Research conducted in the U.S. (McEvoy 1984; Little 1986) and the U.K. (Storey 2010) suggests that most small enterprises do not have HR or employment relations (ER) managers. Therefore the responsibility for the development and design of the pension policy is added to the responsibilities of the business owner or a manager who are likely to occupy diverse roles and to lack specialist knowledge concerning pensions.

#### **4.1.2 Motivating factors for organisations to offer a pension**

Ability to pay and the capacity to develop and implement a pension are necessary, but not sufficient reasons for an organisation to voluntarily offer a pension to their employees. We suggest that the decision is motivated by one or a combination of four motivating factors: external competitiveness, cost effectiveness, concern for employees and/or trade union influence. Organisations that do not voluntarily choose to offer a pension policy will generally do so to comply with legislation. This section explains the reasons organisations offer pensions to their employees.

Organisations are concerned with *external competitiveness*, their ability to attract, motivate and retain the caliber of employees required for success within their industry. As stated by Lawler (1983, p. 5), “Because it is important to most people, pay has the power to influence their membership behavior and their performance.” A recent salary and benefits guide published by Morgan McKinley (2014) refers to the importance of the pay mix in attracting and retaining ‘talent’ in Ireland. It states, “One of the conclusive findings from our research is that companies with a strong employer brand, offering good career opportunities and employers who offer above market rate” (Morgan McKinley 2014, p. 3).

Although higher pay and more benefits may help to attract, motivate and retain employees, most businesses are reluctant to allow their labour costs to be out of line with their competitors. To determine if their reward system is externally competitive, organisations

use a variety of informal information sources (reports of new hires, job leavers, current employees and professional networks) and formal information sources (reports from governments, professional bodies, recruitment agencies and surveys).

Organisations conduct or purchase salary surveys, described by Caruth and Handlogten (2001, p. 101) as "...a systematic attempt to obtain relevant information on wages and salaries, benefits, compensation policies, and pay practices from other institutions competing in the same labor market for similar personnel." Large organisations benchmark themselves against other large employers, generally competing within the same industrial sector and/or operating in the same geographic location. The competent use of surveys, "...enables an organization to (1) compensate its jobs at rates that are consistent with the rates paid by other organizations, (2) provide benefits comparable to those offered by other employers, and (3) keep its pay policies, procedures, and practices up to date" (Caruth and Handlogten 2001, p. 102).

Surveys are considered to be the most reliable and costly alternative to establish external competitiveness. It is likely that the information sources used by small businesses are informal and inexpensive. Research indicates that small business owners offer pensions as a reaction to labour market competition (Hall 2010, Brandon, 2013, Fuscaldò 2013; Schwartz 2007). McGill et al (2005, p. 355) observed that while large organisations compete internationally and nationally, "...the jobs they offer are in local communities. ...Thus the effects of large employers offering retirement plans in their national labor markets force smaller employers operating in more restricted markets to offer plans as well."

Other research, however, suggests that many small business owners are not interested in pensions because they are unconvinced that pensions will be valued by their employees. Research conducted in the U.K. (Forth et al 2012, p. 22) reported that small business owners cited as the third most common reason for non-provision of pensions that "Staff don't want pensions/never asked for a pension". U.S. research found that small business owners believed that increasing wages (EBRI 2003) or subsidizing health care (Brandon 2013) are more important to attract, motivate and retain the caliber of employees that they required.

Some employers offer benefits because they are *cost effective*, benefitting employees in two ways. First, organisations can offer benefits through group schemes at lower costs than the individual would pay if contracting for the same service (Milkovich et al, 2014). Large organisations are more likely than small organisations to have the market power to negotiate for reduced costs for pension benefits. *A Report on Pension Charges in Ireland* found, "There is evidence that larger pension schemes incur lower pension costs. This is likely due to both efficiencies of scale, and the potential 'buying power' of trustees of schemes with larger contributions and asset values" (Ireland. Department of Social Protection 2012b, p. 11).

Second, income is taxable and some benefits, including pensions, attract tax relief. For example, a matching pension contribution from an employer is deferred income which is not taxed in the period that it is received. Further, for employees in Ireland, the U.K. and the U.S., pension contributions are deducted at source and employees receive immediate tax relief. While most retired employees will pay income tax, it is generally paid at a lower marginal tax rate than the tax relief received for contributions.

Small employers do not have buying power and therefore they have to either pay higher costs or pass them on to employees. Tax relief is available to employees of large and small organisations. However, because tax relief is related to income level, employees of small organisations, generally on lower pay (discussed the next section), may receive a lower marginal rate of tax relief than higher paid employees.

Employers may be *concerned for their employees* and believe “...they have an obligation to provide for the welfare and well-being of employees and their families” (Caruth and Handlogten 2001, p. 155). This behaviour is often labeled as paternalism meaning that the employer is making decisions for their employees assuming that individual choices are often inferior to organisational choices. For example, pensions are deferred income provided for employees who given a choice, may consume in the present rather than save for their retirement. Some organisations hire employees with specialist knowledge about pensions who can assist other employees to make prudent, long-term decisions.

Large organisations, inclined toward paternalism, generally have the resources to cover pension costs. Although the owners of small businesses may believe that they should provide pensions as a benefit, they may not be convinced that they have the resources to pay for the development and ongoing costs associated with pension schemes (Brandon, 2013; Hall, 2010; EBRI, 2003).

Many organisations offering pensions as a benefit are *trade union* organised (Wu and Rutledge 2014; Milkovich et al 2014; Armstrong 2002). Shuey and O’Rand (2004, p. 457) observed that “Labour union victories also helped bring about the rapid expansion of employer-sponsored pension coverage...” after World War II. Therefore, this benefit is a result of negotiations, perhaps offered to ensure industrial peace. Small organisations are unlikely to be trade union organised or to face pressure from trade unions to provide pensions as a benefit.

For small organisations, *compliance* with legislation is the main motivator to offer a pension to their employees. For example, as discussed in Section 2, legislation was enacted in Ireland during 2002 that required employers to provide access for all employees to a pension scheme. This initiative followed similar legislation in the U.K. that went into effect in 2001. Both national governments were attempting to increase pension coverage, particularly for the employees of small organisations. Although employers complied with legislation by organising access to a pension scheme for their employees, the policy was ineffective in improving pension coverage (Sass 2014; Maloney and McCarthy 2015; OECD 2013). The policy failure prompted the U.K. policy change; by 2018, all employers will be required to automatically enrol employees into an occupational pension scheme (Sass 2014).

This relatively recent experience with legislation in Ireland and the U.K. suggests that while small employers can comply with legislation, the policy objective of increasing pension coverage can be difficult to achieve. This theme will be explored in Section 5 in relation to the alignment of interests with policy objectives.

## 4.2 Workforce differences between large and small organisations

This section concentrates on two significant differences between the employees of large and small organisations: employment tenure and income. We argue that these differences are likely to make AE less effective in increasing the pension participation rate in small organisations.

Research suggests that under conditions of voluntary enrolment, pension participation increases with *employment tenure*. Before AE was enacted, Madrian and Shea (2001, p. 1159) reported that, “Much of the increase in participation occurs during the first ten years of employment, with only small increases in the participation rate after that.” Similarly, Choi et al (2004a, p. 83) state, “Prior to automatic enrollment, 401(k) participation rates ranged from 26 to 43 percent after six months of tenure at these three firms, and from 57 to 69 percent after three years of tenure.”

Beeferman and Becker (2010) suggest that the findings from these case study organisations may not be replicated with AE legislation because employment in large organisations is relatively stable when compared to employment with small- and medium-sized organisations. They refer to a study conducted by Hope and Macken (2007) for the U.S. Small Business Administration, Office of Advocacy using data collected by survey since 1979 for the National Longitudinal Survey of Youth (NLSY). The research considered the impact of several variables on tenure of employment. Hope and Macken (2007, p. 28) reported that “...we were able to determine that, even after accounting for the effects of union membership, fringe benefits, and earnings differences, employees of large establishments stay in their jobs longer than employees of small establishments.” In the U.K., Johnson et al (2010) recognised that although ‘job churn’ impacts all enterprises, the workforce turnover for small organisations is greater. They state, “There is a trend in job churn by employer size, with the smallest firms having the highest proportion of workers with less than a year’s tenure” (Johnson et al 2010, p. 49).

Several studies suggest that pension plan membership increases with *income* in the U.S. (Aizcorbe et al., 2003; Munnell et al., 2012; Wu & Rutledge, 2014), the U.K. (Gough & Sozou, 2005; MacLeod et al., 2012) and Ireland (Hughes, 2003; Ireland. Department of Social and Family Affairs, 2010 ; Moloney & Whelan, 2009). The significant differences in average weekly wages for the employees of different sized enterprises operating in Ireland and the U.S. are shown in Table 4.

**Table 4: Weekly wages by firm size for businesses in Ireland and the U.S. (2014)**

Number of employees	Ireland (average)	U.S. (range)
<50	€525	\$770-\$850
50-250	€625	\$935-1035
>250	€795	\$1200-1700
Average	€670	\$1034

Ireland. Central Statistics Office (2014b); U.S. Bureau of Labor Statistics (2014)

In Ireland, for example, the average weekly wages for the employees of small firms is approximately two-thirds of the income of employees of large firms (Ireland. Central Statistics Office, 2014b).

The acceptance of AE by employees with less employment security and on low income has yet to be tested.

## 5.0 Impact of aligned interests on participation rates

Willis (2013) explained the success of AE in terms of aligned interests stating “With respect to the defaults examined here, the key is whether the interests of the parties are aligned. In the retirement-savings context, the employer, pension-plan provider, and most employees generally benefit from greater participation rates” (Willis 2013, p. 1155). With aligned interests, Willis (2013) argued that defaults are likely to ‘stick’ meaning that employees will maintain their pension contributions following AE. We agree with Willis (2013) that in the large U.S.-based organisations where the research was conducted, participation rates increased because the interests of pension providers, employers and employees were aligned. We add government to that list of aligned institutions as shown in Figure 1.

Madrian and Shea (2001, p. 1153) explained the organisation’s reason for voluntary to automatic enrolment stating, “The study company adopted automatic enrollment because it was consistently failing to satisfy the IRS nondiscrimination tests required for employee 401(k) contributions to be excluded from taxable income.” These tests stipulate that pension benefits cannot discriminate in favor of highly paid employees. In other words, the company needed more, lower paid employees to participate in the occupational pension scheme to pass the nondiscrimination test so that they could use tax efficient pension savings as a benefit to attract and retain highly paid employees, able to avail of tax relief at the higher rate.

Choi et al (2002) discuss the actions of U.S. government departments to allay the concerns of employers that AE could lead to legal difficulties. Two opinions were issued by the U.S. Department of the Treasury. The first, “...issued in 1998, sanctioned the use of automatic enrollment for newly hired employees. A second ruling, issued in 2000, further validated the use of automatic enrollment for previously hired employees not yet participating in their employer's 401(k) plan” (Choi et al 2002, p. 75). Subsequent U.S. legislation offered further protections to employers to ensure that they were not held legally responsible for poor investment returns as long as their pension scheme defaults adhered to ‘safe harbor’ guidelines (U.S. Department of Labor, Employee Benefits Administration no date). This suggests that the interests of the government and large employers were aligned.

Willis (2013, p. 1201) explains that “Plan service-provider compensation often increases when more employees participate or when more assets are under their management.” Large employers, like those discussed outlined in Table 3, are potentially attractive clients to pension providers because many of the costs associated with setting up and running a scheme can be spread over more employees. Because management costs for investment funds are generally paid as a percentage of assets, more assets result in higher revenues

making large organisations potentially profitable to pension providers, in spite of the reduced costs negotiated by large firms with market power.

Only Madrian and Shea (2001) compare the mean starting salaries for newly hired employees (\$34,264) with the U.S. average (\$28,248). Given the size of the two additional case study organisations discussed in Choi et al 2002, 2004a, it is likely that the new hires of all of the organisations were paid above the national average because, in general, large U.S.-based organisations pay more than small (Hallock 2012). All employees in the case study organisations benefitted from matching arrangements (Choi et al 2004a) and tax relief. Though not stated, these large firms possibly passed on cost savings resulting from their market power to their employees, making it less expensive for employees to invest in their occupational pension than an individual pension.

Wu and Routledge (2014) suggest that employees who seek employment in large companies may have a preference for pensions. Findings from Choi et al (2004a) suggest that the increase in the participation rate for Company A, of those employees automatically enrolled, had two components. They state, “First, some employees who initially opted out of 401(k) participation eventually elect to participate. Second, employees who opt out of 401(k) participation have a slightly higher turnover rate than those enrolled in the plan so that, as tenure increases, the sample of employees used to calculate the participation rate is increasingly composed of individuals who did not choose to opt out” (Choi et al 2004a, p. 88). Further research is needed to understand if employees’ decisions to seek employment and remain with or leave a company are related to their preference for pensions. However, based on higher income, lower costs and possible preferences for pension, it is likely that the interests of these large employers and their employees were aligned. We suggest that the alignment of all stakeholders resulted in higher participation rates as shown in Figure 1.

The research question is, “Will automatic enrolment legislation impact on the participation rates for small firms?” Can we expect participation rates similar to those reported by large firms voluntarily offering pensions as a benefit? We suggest that the answer is ‘No’, because the stakeholders’ interests may not be aligned in the same way as for large firms.

Governments promote AE as a way of improving workplace participation rates and ultimately pension coverage. In the previous section, we discussed the impact of government legislation in Ireland and the U.K. to improve pension coverage. Although there is evidence that small firms complied with legislation, pension coverage did not increase, suggesting that the interests of governments and small employers were not aligned. Further, experience in the U.K. indicates that the interests of pension providers are not always aligned with their government or with employers. In the U.K, medium-sized businesses recently completed the mandatory AE process for their employees. Research conducted by NEST (U.K. National Employment Savings Trust, 2015, p. 29) with employers found that 35% “...had approached their existing provider or another provider but found that they were not willing to enrol their entire workforce.” Although the reasons for these actions were not explained in the NEST publication, a report based on qualitative research conducted with U.K. pension providers in the lead up to AE provides an insight. Pension providers held different views on the ultimate impact of AE. Most believe that their costs will increase in the short-run. Some thought that the costs would fall as more business was written while others believed that, “Conversely... automatic enrolment would lead to the

creation of many very small pension pots, which, combined with high employee turnover, would lead to an increase in administration costs, with large numbers of members needing to be enrolled and de-enrolled on a regular basis, while contributing little to their pension schemes. Their funds might, therefore, never reach the level required to generate significant revenue...” (Wood, Wintersgill and Baker 2012, p. 84). Pension providers in the U.K. may be refusing to enrol groups of employees that they believe are unprofitable. It is likely that small employers with a few relatively low-paid employees with lower employment tenure will be viewed as unprofitable.

As discussed in the previous section, many small organisations lack both the resources to pay for pensions on an on-going basis and the capacity to develop and implement a pension policy. Patricia Callan, the head of the SFA (Small Firms Association, 2015) in Ireland, in a statement to the Universal Retirement Savings Group voiced the fundamental opposition of the SFA to mandatory pension provision. She stated, “Mandatory pension provision will prove costly to employees, to business and to the Exchequer, without any associated benefits in the long term. As such, the willingness of both employees and employers to accept compulsory pension savings is seriously questionable.” Using a model of bounded rationality developed by Simon (1983), Maloney and McCarthy (2015) observed the low participation rate of the employees of Irish small businesses, following legislation requiring employers to provide access to an occupational pension scheme. They suggested employers could either ‘organise’ or ‘sponsor’ a pension arguing that employers who organise, do the minimum required to comply with legislation while those sponsoring a scheme are more likely to be committed to its success. Maloney and McCarthy (2015) argued that this could explain the large number of schemes without members. Further, they suggest that the importance of employer commitment in promoting pension participation is not sufficiently understood and this gap of understanding may hinder subsequent policies to improve workplace participation rates.

According to Willis (2013), a lack of commitment by employers can lead to ‘slippery’ defaults. She states, “When a party opposes a policy default imposed by the law, that party can minimize transaction barriers so that these will not bolster the default, and can even erect transaction barriers that favour opting out” (Willis, 2013, p. 1174). As long as legislation allows the individual the opportunity to opt-out of the default, this can be legally accomplished. Using an example from the banking industry, Willis (2014, p. 1174) describes the circumstances that favour slippery defaults, “(1) one party opposes the default strongly enough to incur costs trying to make the default slippery, (2) that opposed party has access to the party the default aims to aid (typically a consumer) when the consumer is in a position to opt out, (3) the consumer finds the decision confusing, and (4) the consumer lacks clear preexisting preferences about the decision.” Should the owner of a small business oppose pension provision, it may be easy to convince their employees to opt-out of pension participation. The small employer has access. Their employees are likely to find pensions confusing and unlikely to have strong preferences in favour of pensions. As suggested by Callan (Small Firms Association, 2015), the interests of the employers and employees of small organisations may not be aligned with government resulting in lower participation rates for small organisations.

## 6.0 Conclusion

This paper addressed the question, “Will automatic enrolment legislation impact on the participation rates for small firms?” We started by explaining that the movement from DB to DC schemes as the occupational pension scheme of choice is an international trend (OECD, 2012). The decisions for DC pension scheme members are more complicated than for DB members. Policy makers and researchers argue scheme complexity leads to inertia (Sunstein 2013; Lunn 2012; Dolan et al 2010; Madrian and Shea 2001; Choi et al 2002; 2004a). Some employees delay joining their employer’s occupational pension scheme; other employees never save for retirement. The problem is the most serious for the employees of small organisations. Evidence suggests that these employees are the least likely to be members of either an occupational or personal pension scheme and are therefore at risk of poverty when they retire.

With inertia identified as the problem, using AE as a default requiring employees to join the company’s occupational pension scheme is considered to be the solution. The enthusiasm for AE followed the publication of research by Madrian and Shea (2001) and Choi et al (2002; 2004a). Natural experiments were conducted in a small number of large U.S.-based companies where the workforce participation rates increased when these organisations changed from voluntary enrolment to AE. However, we argue that these results may not be replicated for small organisations because both employers and employees differ from large organisations.

We suggest that for an organisation to voluntarily offer a pension scheme for their employees, fulfilling the background conditions (ability to pay and capacity to develop and implement the scheme) are necessary but not sufficient. The organisation must also be motivated by one or more of the following factors: external competitiveness, cost effectiveness, concern for employees and trade union influence. International research suggests that higher income and longer tenure of employment are associated with greater employee participation rates. It is likely that these employer and employee characteristics will be found in large organisations. With or without legislation requiring AE, large organisations are likely to offer a pension as a benefit to their workforce and their employees are likely to become members.

Small organisations are unlikely to fulfill the background conditions. If they are confronted by the motivating factors, particularly competitiveness, they will potentially offer pensions to their employees but this is likely to be the exception rather than the rule. Figure 1 suggests that compliance is necessary to motivate the owners of small businesses to offer a pension to their workforce.

Building on the work of Willis (2013), we suggest that the success in increasing the participation rate in the three large companies discussed by Madrian and Shea (2001) and Choi et al (2002; 2004a) was a result of the aligned interests of four key stakeholders: government, pension providers, employers and employees. We argue that for small organisations, the interests of pension providers, employers and employees may not be aligned with government. Government legislation requiring AE may not prove as powerful and the ‘sticky’ default observed in large organisations may be ‘slippery’ in small organisations.

The model presented in Figure 1 requires further research. A review of the literature makes it obvious that little is known about the impact of the employer on employee pension choices. It is clear that AE changed employee behaviour in large organisations but there is little explanation of why this happened. Case study research in large and small organisations would help to identify the attitudes of employers toward pensions and the employers' impact, if any, on employee pension decisions. It would help to identify the reasons for the behaviour of employees who are automatically enrolled. The organisational context may be an important but ignored element in explaining the workforce participation rates. Legislation will not provide that context.

## REFERENCES

- Aizcorbe, A., Kennickell, A. & Moore, K. (2003). Recent Changes in U.S. Family Finances: Evidence from 1998 and 2001 Survey of Consumer Finances. *Federal Reserve Bulletin*, 89(1), 1-32.
- Armstrong, M. (2002) *Employee Reward*. Third Edition. London: Chartered Institute of Personnel and Development.
- Beeferman, L. and Becker, M. (2010) *Going on Automatic: The Right Path toward Retirement Income for All?* Harvard Law School: Capital Matters Occasional Paper Series.
- Brandon, E. 'Why Small Business Don't Offer Retirement Plans', *US News & World Report*, Available at: <http://money.usnews.com/money/retirement/articles/2013/08/12/why-small-businesses-dont-offer-retirement-plans> (Accessed: 10 August 2014).
- Carroll, G., Choi, J., Laibson, D., Madrian, B. and Metrick, A. (2009) 'Optimal Defaults and Active Decisions', *Quarterly Journal of Economics* 124(4), pp. 1639-1674.
- Caruth, D. and Handlogten, G. (2001) *Managing compensation (and understanding it too): a handbook for the perplexed*. Westport: Quorum Books.
- Choi, J., Laibson, D., Madrian, B. and Metrick, A. (2002) 'Defined Contribution Penions: Plan Rules, Participant Choices, and the Path of Least Resistance', in Poterba, J. (ed.) *Tax Policy and the Economy*. Volume 16. Cambridge: MIT Press, pp. 67-113.
- Choi, J., Laibson, D., Madrian, B. and Metrick, A. (2004a) "For Better for for Worse Default Effects and 401(k) Saving Behavior" in Wise, D. (ed.) *Perspectives in Economics of Aging*. Chicago: University of Chicago Press, pp. 81-121.
- Choi, J. Laibson, D. and Madrian, B. (2004b) 'Plan Design and 401(k) Savings Outcomes', *National Tax Journal*, LVII(2, Part 1), pp. 275-298.
- Coyle, D. (2015) 'Joan Burton warns on the importance of pension reform', *The Irish Times*, 3 February.

- Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). *MINDSPACE Influencing behaviour through public policy*. London: Cabinet Office, Institute for Government.
- EBRI (2003) 'The 2003 Small Employer Retirement Survey (SERS) Summary of Findings', Available at: <http://www.ebri.org/pdf/surveys/sers/2003/03sersof.pdf> (Accessed: 31 August 2014).
- Forth, J., Stokes, L. Fitzpatrick, A. and Grant, C. (2012) *Employers' Pension Provision Survey 2011*. U.K.: Department for Work & Pensions.
- Fuscaldo, D. (2013) 'Reasons to Offer 401(K) Plan, Despite Murkiness', *FOXBusiness Small Business Center*. Available at: <http://smallbusiness.foxbusiness.com/legal-hr/2013/08/26/reasons-to-offer-401k-plan-despite-murkiness/> (Accessed: 14 August 2014).
- Gough, O., & Sozou, P. (2005). Pensions and retirement savings: cluster analysis of consumer behaviour and attitudes. *International Journal of Bank Marketing*, 23(7), 558-570
- Hall, S. (2010). *Preparing for pension reform: The information needs of small and micro employers at auto-enrolment*. Norwich: Her Majesty's Stationery Office.
- Hallock, K. (2012) 'Go Big: The Firm-Size Pay (and Pay-Mix) Effect', *workspan*, 12(3), pp. 12-13.
- Hope, J. and Macken, P. (2007) *The Relationship Between Employer Turnover and Employee Compensation in Small Businesses*. U.S.: Small Business Administration Office of Advocacy.
- Hughes, G. (2003) Private pensions and equity in Ireland and the UK. *Pensions*, 8(2), 167-178.
- Ireland. Central Statistics Office (2016) *Quarterly National Household Survey, Pension Provision, Quarter 4 2015* Available at: <http://www.cso.ie/en/releasesandpublications/er/q-penp/qnhsmoduleonpensionsq42015/> (Accessed: 4 July 2016)
- Ireland. Central Statistics Office (2014a) *Business in Ireland 2012*. Dublin: The Stationery Office.
- Ireland. Central Statistics Office. (2014b) *Earnings and Labour Costs Quarterly Q2 2014(Final) Q3 2014 (Preliminary Estimates)*. Available at: <http://www.cso.ie/en/releasesandpublications/er/elcq/earningsandlabourcostsq22014finalq32014preliminaryestimates/#.VM4vy02zVjo>. (Accessed: 1 February 2015).
- Ireland. Department of Social Protection (2015) *Tánaiste announces package of measures aimed at widening pension coverage and improving consumer confidence in pension system*. Available at: <http://www.welfare.ie/en/pressoffice/pdf/pr030215.pdf> (Accessed: 9 July 2015).

Ireland. Department of Social Protection (2012b) *Report on Pension Charges in Ireland 2012*. Available at: <http://www.welfare.ie/en/downloads/pensionchargesireland2012.pdf> (Accessed: 18 January 2013).

Ireland. The Pensions Board. (2013) *Annual Report and Accounts 2012*. Dublin: The Pensions Board.

Ireland. The Pensions Board (1998) *Securing Retirement Income: National Pensions Policy Initiative*. Dublin: The Pensions Board.

Johnson, P., Yeandle, D, and Boulding, A. (2010) *Making automatic enrolment work: A review for the Department for Work and Pensions*. London: Department for Work and Pensions.

Lawler, E. (1983) *Pay and Organization Development*. Reading: Addison-Wesley Publishing Company.

Little, B. (1986) 'The Performance of Personnel Duties in Small Louisiana Firms: A Research Note', *Journal of Small Business Management*, 24(4), pp. 66-69.

Lunn, P. (2012) 'Behavioural Economics and Policymaking: Learning from the Early Adopters', *Economic and Social Review* 43(3), pp. 423-449.

Madrian, B. and Shea, D. (2001) 'The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior', *Quarterly Journal of Economics*, 116, pp. 1149-1187.

Maloney and McCarthy (forthcoming) 'Pension Provision by Small Employers in Ireland: An Analysis of PRSAs Using Bounded Rationality', *Irish Journal of Management*.

McEvoy, G. (1984) 'Small Business Personnel Practices', *Journal of Small Business Management*, 22(4), pp. 1-8.

McGill, D., Brown, K., Haley, J., Schieber, S. (2005) *Fundamentals of Private Pensions*, Eighth Edition. Oxford: Oxford University Press.

Milkovich, G., Newman, J. and Gerhart, B. (2014) *Compensation, Eleventh Edition*. New York: McGraw-Hill Irwin.

Moloney, M., & Whelan, S. (2009). *Pension Insecurity in Ireland*. Dublin: The Statistical and Social Inquiry Society of Ireland.

Morgan McKinley. (2014) *2014 Irish Salary & Benefits Guide*. Dublin: Morgan McKinley Group.

Munnell, A. (2015) 'Falling Short: the Coming Retirement Crisis and What To Do About It', *Issues in Brief*, 15-7. Chestnut Hill, MA: Centre for Retirement Research at Boston College.

Munnell, A. and Bleckman, D. (2014) 'Is Pension Coverage a Problem in the Private Sector?', *Issues in Brief*, 14-7. Chestnut Hill, MA: Centre for Retirement Research at Boston College.

Munnell, A. Fraenkel, R. and Hurwitz, J. (2012) 'The Pension Coverage Problem in the Private Sector', *Issues in Brief*, 12-16. Chestnut Hill, MA: Centre for Retirement Research at Boston College.

OECD (2013) *Review of the Irish Pension System, Preliminary version 22 April*. Dublin: Department of Social Protection.

OECD (2012). *OECD Pension Outlook 2012*, OECD Publishing.

Sass, S. (2014) 'The U.K.'s Ambitious New Retirement Savings Initiative', *Issues in Brief*, 14-15. Chestnut Hill, MA: Centre for Retirement Research at Boston College.

Schwartz, M. (2007) "Benefits 101 The basics of offering benefits to small business employees", *Gifts & Decorative Accessories*, June, pp. 28-36.

Shuey, K. and Rand, A. (2004) 'New Risks for Workers: Pensions, Labor Markets, and Gender', *Annual Review of Sociology*, 30, pp. 453-477.

Simon, H. (1983) *Reason in Human Affairs*. U.S.: Basil Blackwell

Small Firms Association (2015) Submission on a Universal Retirement Savings Scheme to Department of Social Protection Universal Retirement Savings Group, May.

Storey, D., Saridakis, G, Sen-Gupta, S., Edwards, P. and Blackburn, R. (2010) 'Linking HR Formality with Employee Job Quality: The Role of Firm and Workplace Size', *Human Resource Management*, 49(2), pp. 305-329.

Sunstein, C. (2013). The Storrs Lectures: Behavioral Economics and Paternalism. *The Yale Law Journal*, 122(7), 1836-1899.

U.K. Department for Business Innovation and Skills (2014) *Statistical Release: Business Population Estimates for the UK and Regions 2014*. London: National Archives.

U.K. National Employment Savings Trust (2015) [NEST insight 2015](#). London: NEST Corporation.

U.K. Pensions Commission (2005) *A New Pension Settlement for the Twenty-First Century, The Second Report of the Pensions Commission*. Available at: <http://webarchive.nationalarchives.gov.uk/+http://www.dwp.gov.uk/publications/dwp/2005/pensionscommreport/main-report.pdf> (Accessed 23 June 2015).

U.K. Pensions Commission (2004) *Pensions: Challenges and Costs, The First Report of the Pensions Commission*. Colgate, Norwich: Her Majesty's Stationery Office.

United States Census Bureau (no date) *Statistics of U.S. Businesses*. Available at: <http://www.census.gov/econ/susb/> (Accessed 11 June 2015).

U.S. Bureau of Labor Statistics, (2014) *Quarterly Labour Statistics*. Available at: [http://www.bls.gov/cew/apps/data\\_views/data\\_views.htm#tab=Tables](http://www.bls.gov/cew/apps/data_views/data_views.htm#tab=Tables) (Accessed: 1 February 2015).

U.S. Department of Labor, Employee Benefits Security Administration (no date) *401(k) Plans For Small Businesses*. Available at: <http://www.dol.gov/ebsa/publications/401kplans.html> (Accessed: 22 June 2015).

U.S. Small Business Administration. (no date) *Small Business Size Standards*. [On-line] Available at: <https://www.sba.gov/content/guide-size-standards-0> (Accessed: 11 June 2015).

Willis, L. (2013) 'When Nudges Fail: Slippery Defaults', *The University of Chicago Law Review*. 80(3). pp. 1155-1229.

Wood, A., Wintersgill, D. and Baker, N. (2012) *Pension landscape and charging: Quantitative and qualitative research with employers and pension providers*. London: Department for Work and Pensions.

Wu, A. and M. Ruthledge (2014). 'Lower-Income Individuals Without Pensions: Who Misses Out and Why?' *Working Paper*. Boston Center for Retirement Research at Boston College.