

# ***From Corporatism to Public Utilities: Workplace Pensions in the 21<sup>st</sup> Century***

Gordon L Clark, School of Geography and the Environment, Oxford University, Hinshelwood Rd., Oxford OX1 3QY, UK and Faculty of Business and Economics, Monash University, Caulfield VIC 3145, Australia

**Contact.** gordon.clark@ouce.ox.ac.uk

**Abstract.** For many OECD countries, workplace pensions have been an important mechanism for supplementing state-sponsored social security. Notwithstanding significant differences between developed economies in the significance attached to workplace pensions, provision has been typically encouraged through preferential tax policies and corporate benefits and compensation packages. If relevant for the looming retirement of the baby-boom generation, it is doubtful that these arrangements will be as important for future generations. As state-sponsored social security has been discounted in terms of promised value and entitlement, traditional workplace pensions have been closing and replaced by retirement saving instruments that are neither as lucrative nor as dependable in terms of final value. Recognising the retrenchment in workplace pensions, governments have sought to encourage and, in some cases, develop different types of retirement savings institutions. This paper charts the decline of traditional workplace pensions, the apparent inadequacy of alternatives such as money purchase (defined contribution) schemes, and the rise of what are referred to as 'public utilities': government sponsored savings institutions that are designed to compensate for the decline (in coverage and promised value) of workplace pensions albeit at a more modest level than that associated with traditional defined benefit schemes. In doing so, I draw upon the experience of the US and the UK, Australia, Canada, and New Zealand, as well as developments in Germany and continental Europe. Essentially, it is argued that the rise of public utilities in this domain is indicative of the transformation of corporate capitalism over the past 25 years and the inability of governments to shoulder the retirement costs of their ageing societies in an era of global financial integration.

**Keywords.** Workplace pensions, capitalism, public utilities, retirement saving

**JEL Codes.** D03, D14, G23, G38

**Acknowledgements.** This paper was prepared for presentation at the conference Ageing in the Twentieth Century organised by Cornelius Torp at the Robert Schuman Centre for Advanced Study, European University Institute, Florence. It draws upon a prior presentation at an ESRC-sponsored workshop on pensions and contemporary capitalism at Birbeck College and relies upon a comparative research program at Oxford University on the nature and governance of pension institutions sponsored, in part, by the International Center for Pension Management at the University of Toronto's Rotman School of Management. The author would like to thank Keith Ambachtsheer for the support of this project, and would also like to acknowledge comments and collaboration with Csaba Burger, Adam Dixon, John Evans, Dorothee Franzen, Diyesh Hindocha, Ashby Monk, Heribert Karch, and Roger Urwin. Fieldwork for this paper and related research has been made possible by a number of firms, institutions and funds. The author would also like to thank Allan Fels, Dean of the Australian and New Zealand School of Government, and Deborah Ralston of the Australian Financial Centre for their hospitality over the past two years. Research assistance and corrections to previous drafts of this paper were provided by Olga Thönissen. None of the above should be held responsible for any errors or omissions.

## Introduction

The ageing of developed economies' populations has been widely discussed over the past two decades. Prompted, in part, by studies by the OECD (1997) as well as the World Bank (1994), nation-states have sought to rein-in future age-related spending commitments including social security, pensions, and healthcare. If a significant political issue in periods of relative economic prosperity, the new age of austerity has made more acute apparent and perceived trade-offs between spending commitments including healthcare versus higher education (current and future beneficiaries versus younger generations). In many countries, especially in continental Europe, pension reforms have, in one form or another, sought to discount future nation-state obligations through changes in the official retirement age, the indexation of benefits (against prices rather than wages), and a retreat on the promised value of so-called 'replacement' income (relative to retirees' final, earned incomes). In many respects, two decades of pension reform have fundamentally changed the structure of the post-war welfare state and have occluded previously well-defined differences between nation-state welfare regimes (see Esping-Andersen 1999 with Hamnett 2011).

Those countries notionally affiliated with Anglo-American capitalism have provided rather meagre social security benefits, encouraging workplace pension arrangements and private savings to make-up the difference. In a number of cases, the foregone taxes on earned incomes due to the preferential treatment of workplace pension contributions have been so significant that they represent one of the most important yearly fiscal commitments of nation-states (Ghilarducci 2008). Even here, there have been reforms especially in circumstances where senior executives have exploited pension tax policies to shelter earned incomes. Nonetheless, it has been widely believed that workplace pensions are a vital component in many people's retirement incomes and a key distinguishing feature of Anglo-American finance capitalism (Boyer 2000). Pension reform in other countries not so obviously affiliated with the common law tradition such as Germany have also encouraged workplace pensions to supplement state-provided pensions in the hope of diversifying sources of retirement income in the context of discounted state benefits (Burger 2011).

At a time when reliance upon workplace pensions and private savings to supplement state benefits has never been more important (OECD 2007), there is a 'crisis' in employer commitment to the provision of such benefits (Pemberton et al. 2006). This crisis is manifest in different ways, in different countries. For example, in the United Kingdom (UK) private employers have either replaced traditional defined benefit (DB) pension schemes with defined contribution (DC) schemes or have closed existing schemes with no replacement at all. In the United States (US), the long-term transformation in private sector pension schemes from DB to DC is largely complete even if coverage rates are declining and the 'value' of DC pensions has been undercut by low contribution rates and volatility in financial market performance (Munnell 2006). In effect, the crisis in employer commitment to workplace pensions has reinforced rising income inequality, gender differences in earned incomes, and the impoverishment of working people at risk to economic turbulence (Ginn 2003). Policymakers have sought alternatives, including the Australian model of mandatory superannuation. But even here, there would appear to be shortcomings: so-called 'public utilities' which collect and invest contributions may be the ultimate 'solution' to the pensions crisis.

In this paper, I explain the significance of public utilities arguing that they represent a remarkable re-conceptualization of pension solidarity from the workplace to some abstract notion of shared (financial) citizenship. This requires recounting the historical link between workplace pensions and corporatism, its decline, and the problematic nature of many countries' DC saving schemes which, intentionally or by effect, elide corporate responsibility (Clark and Urwin 2011). Whereas the Australian system of mandatory contribution based upon member-profit industry pension funds would seem to be an effective way of dealing with employer ambivalence, the federal government's introduction of a generic pension product represents a profound critique of the costs and

consequences of the super industry. This brings discussion to the UK government's National Employment Savings Trust (NEST)--a nationwide cost-effective platform for employer and employee contributions, governed by fiduciary duty on behalf of those that are at risk to employer ambivalence as well as those that are at risk to an unwillingness or inability to save for retirement. The public utility model of supplementary pension provision represents the reassertion of government responsibility for long-term savings, denying core assumptions of individual sovereignty, albeit without commitment to an explicit replacement income (compare with UK Government 2003).

The argument developed in this paper is based upon a long-term comparative research programme on workplace supplementary pensions, drawing inspiration from the commonalities and differences between national pension systems in the context of global financial integration. It is informed by close dialogue with agents, institutions, and market players, working-off their motives and perceptions to the structure and logic of financial market performance. As such, it is a research programme that works from the 'bottom-up' to the imperatives driving global financial markets relying upon the insights and analytical frameworks provided by economic geography (see, for example, Clark 2003). Political science and much of economic sociology casts these issues through the lens of "varieties of capitalism" (Dixon 2011). While my approach appreciates the significance of path dependence, we show elsewhere that global financial markets, more often than not, disrupt the past while rewarding market 'players' that can find a place in a world at risk to short-term market arbitrage and leverage (see Clark and Wójcik 2007). In what follows, field experience combined with sensitivity to institution specific-forms and functions sustains the paper even if sources are not identified.

### **Corporatism and Workplace Solidarity**

Historical accounts of the establishment of workplace pensions in Anglo-American and Western European countries begin either with 19th century public institutions (Whiteside 2003) or with the first private sector pension schemes in the aftermath of the First World War (modelled on English schemes; see Sass 1997). In part, explanations centre upon the management and retention of labour recognising that such schemes differentiated between so-called white collar and blue-collar employees paying rather modest benefits in the context of limited life-expectancy at retirement. Historical accounts of workplace pensions also distinguish between commonplace gratuities sometimes paid to long-serving and loyal factotums and the design and deployment of compensation schemes that owe more to Frederick Taylor's principles of scientific management than the goodwill of employers (Clark 2000). Even so, early workplace pension schemes were highly selective in terms of who were entitled to such benefits, the value of benefits, and what was owed to different types of employees by virtue of their job tenure and life-time compensation.

In the years following the Second World War, economic growth combined with labour shortages prompted many firms to extend pension entitlement to different classes of employees. If voluntary in terms of participation, in some countries pension entitlement became an important element in labour-management relations, contract negotiation, and wage settlement (Clark 1993). In those countries that allowed for or encouraged industry-wide contract negotiation, pattern bargaining diffused pension entitlement from the primary firms or corporations setting the terms of labour-management contracts to small firms at the margin of those industries. Countries such as Australia, for example, institutionalised the diffusion of pension benefits as well as the nature and value of offered pensions through administered "industrial awards". As such, the obvious correlates of workplace pension entitlement were industry, the size of firm, gender, age, and the nature of work. Through the second half of the 20th century, governments introduced legislation effectively extending entitlement for workplace pensions beyond union membership, status and entitlement.

The rationale for offering workplace pensions was premised on the scale of work, its coordination and management (Chandler 1977). One element underpinning the notional value of these pensions was the significance of job-related skills based upon training and experience. A second element driving the extension of workplace pensions to less skilled employees was the development of systems of mass production wherein productivity was deemed to be a function of job specific skills and teamwork such that shared commitment blurred traditional hierarchies of skill and authority. In combination, it was widely believed that job tenure and employee retention were important in underwriting the continuity and development of mass production systems. At the same time, recognising the health-related problems of older workers and the physical demands associated with industrial manufacturing, employers and unions had a common interest in facilitating the retirement of those who could no longer perform at the levels expected by companies. In effect, final salary defined benefit pensions were a way of paying-off older workers in an acceptable manner.

All this was made possible by economic growth and development wherein expanding markets domestically and internationally reinforced economies of scale associated with mass production systems. As is widely appreciated, corporatism or Fordism was sustained by cost-plus market pricing such that the increasing costs associated with *in situ* expansion were absorbed by final consumers (Konzelmann 2005). In any event, retirement benefits were rather modest in value and could be discounted by lump-sum payments at retirement justified (by both employers and unions) by limited life expectancy after retirement. At the peak of pension fund capitalism (circa 1990), corporatism was beset by internal contradictions and an increasingly hostile global market environment. As corporate restructuring, mergers and acquisitions, and plant closings gathered pace (Jensen 1993), workplace pensions became (paradoxically) instruments for facilitating restructuring and ultimately an impossible burden upon the manufacturing industry (Clark and Monk 2007).

In those jurisdictions that provided an administrative framework underwriting benefits and compensation negotiation, workplace pensions became increasingly remote from the circumstances of companies and industries. In some cases, the putative 'value' of these types of pensions actually increased as waves of restructuring required greater numbers of workers to take-up early retirement; not surprisingly, government-sponsored pension guarantee institutions have had to shoulder increasing underfunded liabilities. It has taken many years to pick apart what Monk (2008) refers to as the "knot of contracts" that sustained the introduction and diffusion of defined benefit workplace pensions. The costs of workplace solidarity have prompted employers to disassemble large-scale production systems to be replaced by networks of production covering the globe; the geographical segmentation of production has been one mechanism whereby legacy costs have been discounted (Grossman and Helpman 2005; Grossman and Rossi-Hansberg 2006). Inevitably, the strategy of geographical stratification has been accompanied by very different types of compensation and benefits systems none of which have reproduced defined benefit pensions.

Over the past decade, the long-term discounting of workplace pensions has been accelerated by greater scrutiny of the reported costs of these benefit systems and successive crises in global financial markets. Whereas the costs of workplace pensions were once subsumed in company-specific financial reporting practices that had little impact upon market valuation of those companies, global standards of financial transparency combined with greater market scrutiny by institutional investors and hedge funds of the financial positions of major corporations have forced even continental European companies to find ways of limiting the uncertainty associated with the future costs of workplace pensions (Clark 2003). Alternatives to these types of pension arrangements have become increasingly important in Germany and elsewhere, albeit contested (as is apparent in disputes over the virtues of Riester pensions; see Burger 2011). In other jurisdictions such as the UK, where responsibility for workplace pensions has remained the province of employers, in the space of

just 10 years global financial markets have prompted the effective closure of this institution in the private sector.

### **Workplace Retirement Savings Schemes**

Defined benefit workplace pensions are anachronistic, reflecting a bygone era of corporatism and long-term job tenure. By contrast, it is commonly believed that employer-sponsored retirement savings schemes such as DC and individual retirement accounts are more appropriate to the modern economy (see generally Roberts 2004).<sup>1</sup> As is widely appreciated, these types of schemes allow employers to eschew the financial risks associated with sponsored pension plans thereby claiming greater control over market expectations as to the underlying value of traded corporate securities. As well, these types of schemes allow for employees to switch employers carrying with them their accumulated pension contributions. Ultimately, the 'final' value of such savings schemes is not the responsibility of the employer; employers are not responsible for ensuring that their employees have an 'adequate' pension upon retirement. Nonetheless, the variable nature and scope of compensation schemes can enable employers to differentiate themselves from other employers and thereby reward valued employees (Teece 2000).

In this section, we consider issues related to the design and governance of these types of pension schemes noting their heterogeneous nature as well as the advantages due to employers when designing compensation schemes to motivate productivity and commitment. At one level, the development of these types of schemes has been, as suggested above, a response to the burdens imposed on employers by DB schemes. As such, the history of DC schemes in the US can be read as a largely uncoordinated and decentralised movement towards an obvious albeit underdeveloped alternative. By contrast, the introduction of DC schemes in Australia (the second largest market for such savings schemes in the world) about the same time can be read as a deliberate government-led initiative reliant upon the federally-regulated and centralised industrial arbitration system (Coates 2004; APRA 2007). The contrast is revealing, reflecting very different cultural and political commitments as regards the nature of workplace benefits and unions' roles in modern economies.

### ***An 'accidental' institution***

While the story told about the development of US workplace pensions is dominated by large industrial corporations and the DB institution, there were different types of institutions in other sectors often combining a modest pension "guarantee" with employer-provided third-party administered savings schemes designed to supplement any guarantees. In many cases, these arrangements were offered to employees on a discretionary basis, with little regard to the participation by lower paid, less skilled employees. Governed by individual employment contracts rather than companywide negotiated labour-management contracts, participation in these schemes was often voluntary and take-up rates relatively low. According to Munnell and Sundén (2004, pp. 2-3) this changed with the Revenue Act of 1978 and subsequent clarification by the IRS in 1981 of 401(k) tax regulations pertaining to the treatment of contributions to individual retirement savings accounts. Basically, these regulations allowed employees to discount their gross salaries for tax purposes while enjoying preferential tax treatment on investment returns (Sass 1997).

Remarkably, and largely unexpectedly, 401(k) plans have come to dominate defined contribution plans whether measured in terms of assets, benefits, active participants, or contributions. Most

---

<sup>1</sup>/ Here, it should be noted that the 'modern' economy or the 'new' economy is arguably more differentiated in terms of income and employment opportunities than in the past, exaggerating income inequalities by education, gender, and social status (including immigration and race). See, for example, May et al. (2007) and McDowell et al. (2008, 2009). Whereas many DB schemes had positive consequences for income distribution amongst income classes after retirement, this is not true for most money purchase and defined contribution schemes. See also Hills (2010) on contemporary UK economic inequality.

importantly, these plans have grown dramatically in terms of numbers of participants enrolled and plan assets overtaking defined benefit plans in terms of numbers of participants in the early-1990s and overtaking defined benefit plans in terms of the value of plan assets in the late 1990s (see, for details, US Department of Labor 2010). Over the course of 20 years, 401(k) plans became the single most important instrument for US retirement savings and the preferred option for employers seeking to supplement employee compensation and benefit packages. Whereas commentary tends to equate 401(k) plans with conventional pension schemes, it should be emphasised that they are better understood as savings schemes.<sup>2</sup>

While it is difficult to make generalisations, the standard 401(k) plan is premised upon individual sovereignty: a core principle underpinning the structure and management of saving plans and reinforced by strong notions of self-interest and rationality (Schick 1997). By convention, employees are offered the option to contribute to the employer-sponsored savings plan with the option to choose the level of contributions in the context of matching contributions by the employer. Through third-party providers, plan sponsors offer participants a suite of investment options typically provided by the mutual fund industry. Based upon participants' retirement income aspirations and risk preferences, they are encouraged to create diversified portfolios of investment vehicles mixing and matching investment styles and asset allocation across investment classes. Ideally, individual participants base their investment strategies upon their long-term goals informed by modern portfolio theory and financial markets structure and performance (Sharpe 2007).

In fact, many participants have faced significant problems in realising their retirement aspirations. Most obviously, the lack of transparency as regards the underlying costs associated with competing investment options combined with difficulties in judging the relative and absolute performance of various investment options has meant that many participants have found it difficult to formulate and execute effective long-term investment programmes (Choi et al. 2002). At the same time, the cacophony of choice and the possibility that the available choice offered participants reflects the interests of plan sponsors and third-party providers rather than participants adds a level of confusion and distrust to an already complex problem (Clark and Urwin 2011). Furthermore, it is apparent that many participants are less than perfectly rational in the sense that their decision-making is subject to recognised behavioural biases and anomalies including inertia, herding, framing, and risk aversion (Samuelson and Zeckhauser 1988). Analysis of decisions taken by 401(k) plan participants has exposed these and many other problems (see Mitchell and Utkus 2004).

If problematic, these issues have been amplified by increasingly hostile financial markets where untamed volatility carries the prospect of systematic losses and institutional failure. Where institutional investors have struggled to deal with market volatility including events such as the global financial crisis, individuals appear to be significantly disadvantaged against these institutions trading on their own account (Shiller 2008). Basically, the US 'model' of supplementary workplace pensions is compromised by an over-reliance upon individual decision-making, the reluctance or unwillingness of plan sponsors to take responsibility for the welfare of their employees, and an inadequate regulatory framework in the face of the predatory behaviour of third-party providers. These issues have been addressed by academics and consultants as well as, more recently, by the Obama administration (Ezra et al. 2009). In the absence of a well-conceived and regulated national framework, it is likely that workplace pensions will not play the positive role in supplementing workers' retirement incomes as once assumed.

---

<sup>2</sup>/. It is widely recognised that these retirement savings schemes are vulnerable to 'leakage'; withdrawals by participants during their working lives for the purpose of subsidizing consumption, taking lump-sums upon retirement for spending on property etc., and the spend-down of account balances rather than their conversion into annuities upon retirement (Ghilarducci 2008).

### ***Institutional innovation and management***

The structure and management of workplace pensions was also on the agenda for the Australian government in the early 1980s. In this case, however, there was a national debate about how best to design a comprehensive legislative framework consistent with government commitment to provide a universal entitlement whatever existing industry practices, union preferences and employer arrangements. In doing so, the Labour government of the time prompted by its Treasurer (Paul Keating) sought to deal with problems of macroeconomic management and government budget planning through the medium of a national workplace retirement saving scheme that would have beneficial effects for productivity and economic growth. Even at the time, there was recognition that the government pension would be inadequate in the face of the problems posed by an ageing society. Mandatory supplementary pensions were deemed to be the answer to a number of overlapping and reinforcing problems albeit based upon the DC model rather than the DB model.

Compulsory superannuation has prompted the closure of many employer-sponsored pension plans: in 1995 there were 4211 such plans; by 2004 there were 1406 such plans, and; by 2010 there were just 168 such funds (APRA 2004, 2011). Employers have devolved responsibility for the retirement savings of their employees to the superannuation system. The government set employee and employer contributions with a modest tax supplement with the aim to bringing yearly contributions to 12% of workers' gross salaries and ultimately (sometime in the future) 15% of workers' gross salaries. The rate of contributions has been subject to ongoing political debate. Finally, and most importantly, the government provided for a variety of institutions and market agents to become the 'managers' of the compulsory superannuation system. The peak organisation of the Australian union movement took the opportunity to promote the establishment of industry-based, multi-employer, pension funds piggybacking on the existing federal industrial awards system to claim the loyalty of member-participants. Member-profit union-sponsored industry funds have claimed the spotlight in the provider-landscape of the Australian workplace pensions system.<sup>3</sup>

In contrast to the US 401(k) model, Australian employees do not have the option to opt-out of supplementary retirement savings: participation is compulsory and the yearly contribution rate of 12 per cent of gross salary mandatory.<sup>4</sup> Auto-enrolment is the norm, as is the automatic collection of contributions at the workplace by the employer and their transfer to the nominated third-party provider. Employers typically choose the super fund consistent with their industry affiliation, although loyalty to industry affiliation has degraded over time as the funds, themselves, have sought enrolments from employers outside of their historical and geographical boundaries; Australia's largest industry fund (AUSUPER) is the result of a merger between two related funds with ambitions to provide nationally superannuation and related financial services to members whatever their industry or geographical location. Nonetheless, just as employers have given-up responsibility for workplace pension savings they have also tended to go-along with their industry super fund rather than making an active choice as to the preferred provider of these and related financial services.

These elements matter a great deal in terms of the comprehensive nature of Australian supplementary retirement saving and the contribution rates of employers and employees. Nonetheless, the Australian model shares with the US model the commitment to individual sovereignty and, in particular, individual choice as regards asset allocation and investment products.

---

<sup>3</sup>/. In fact, the system is quite complex notwithstanding the rather simple parameters of government policy and regulation. So, for example, in 2010 there are more than 400 thousand small superannuation entities controlling about 820 thousand member accounts with \$339.5 billion assets whereas the 65 industry funds controlled about 11.5 million accounts with \$226.2 billion assets (see APRA 2011, 21).

<sup>4</sup>/. Along with the review superannuation, the Australian government also recently announced that the mandatory contribution rate will rise to 15 per cent of gross salary.

As in the US case, the options available to participants in Australian super funds and related retail institutions varies a great deal determined, in part, by the heterogeneity of participants measured in terms of earned incomes, the stability of employment and enrolment, and age and income-related retirement aspirations. But, unlike many US 401(k) plans, Australian super funds offer participants the option to devolve responsibility for choice of investment product to the fund by remaining with the institution's default retirement savings product (typically, a balanced portfolio of stocks, bonds, and similar conventional investment instruments). In fact, in most cases, participants are automatically allocated to the default fund upon enrolment and must opt-out of the default option if they are to make their own choices about investment (Gallery et al. 2004).

At the same time, participants are entitled to make their own choice as to the fund in which they are enrolled. In this respect, 'fund choice' is an organised market wherein competing funds and related retail institutions report on a quarterly basis fund performance and costs; it is assumed that this information is essential if individuals are to make informed and reasoned choices about the advantages and disadvantages of switching between funds. Funds compete for high income participants with significant account balances. While switching between funds is uncommon just as individual choice outside of the default option is relatively rare, there are a minority of participants who are willing to bear the costs and consequences of assuming responsibility for their own decision-making. Inevitably, their effectiveness may be compromised by behavioural biases and anomalies such as those identified by Kahneman and Tversky (1979) amongst others.

### **Model Form and Function**

Both the US model and the Australian model of workplace retirement saving provide for the conservation of accumulated assets (through individual accounts), the portability of assets and entitlements between employers, the separation of retirement savings assets from employers' financial commitments and structure, and tax preferred status (subject to meeting government requirements). For those countries burdened by the legacy of public and private defined benefit pension plans, either model would seem to be an attractive alternative. However, this is not nearly as obvious as many assume; there are significant problems with both models. Understanding these shortcomings is an essential step in coming to terms with recent developments in Australia and the UK focused upon establishing or making available what is, in effect, a public utility model of workplace pension saving and asset accumulation.

### ***Individual sovereignty***

When considering shortcomings associated with the US 401(k) model, it was noted that the centrality attributed to individual sovereignty carries with it strong assumptions about the ability of participants to act rationally with respect to their best interests. This issue is also evident in the Australian model, though not the same extent given compulsory participation and mandated contributions. Nonetheless, doubts about the robustness of individual sovereignty as the governing ethic underpinning the design and management of supplementary pension systems has informed debate on both sides of the Pacific Ocean.

Inspired by behaviouralism, critics of individual sovereignty have provided a sustained, empirically-informed account of the individual cognitive shortcomings affecting decision-making in the context of risk and uncertainty (Krueger and Funder 2004). Were this simply an argument about first principles, for and against individual sovereignty, it is doubtful that the critique would have made much headway in the face of its centrality to contemporary conceptions of liberal democracy (Macedo 1989). Actually, the research programme underpinning the behavioural revolution has challenged core assumptions of economics and the related social sciences (Baron 2008). It is not just that people are subject to self-defeating biases and anomalies in behaviour; this much was recognised by the social sciences over the 20th century. It is the fact that these biases and

anomalies have been shown to be systematic human traits amplified by environments such as financial markets subject to risk and uncertainty (Clark 2010; Iyengar et al. 2004). When it is also recognised that choice is made more problematic because of systemic information asymmetries, academics and policymakers alike have come to accept that 'choice' is unlikely to deliver adequate supplementary pensions (Huberman and Jiang 2006).

It has also been recognised that, if left to themselves, most people are unlikely to save for the future in a timely manner nor commit sufficient resources to retirement saving relative to current consumption (O'Donoghue and Rabin 1999). Most people, most of the time, are myopic (Kahneman et al. 1997). That is, they neither appreciate the significance of beginning a savings program early in their working careers nor are they apparently willing to compromise appropriately on current consumption in favour of the standard of living to which they aspire to upon retirement (Lusardi and Mitchell 2007). Where employers are involved in workplace pension saving schemes, conflicting interests and motives may conspire to reinforce their employees' short-termism. Characteristic of the modern economy, employers do not value nearly as much as they once did the long-term commitment of employees or for that matter the job-specific skills employees might accumulate over a lifetime of work.

However, care should be taken not to exaggerate the scope of these findings. There is evidence of considerable heterogeneity in the cognitive skills and decision-making capacities of individuals especially as regards to saving for the future (Clark et al. 2012). Furthermore, the primacy attributed to individual sovereignty in liberal democracies suggests that the design of any retirement savings system would likely begin with, or allow for, individual volition and choice (Thaler and Sunstein 2003).

### ***Market failure***

In a number of ways, the Australian model solves many of the problems bedevilling the US model of defined contribution pensions. Their differences can be attributed to the coexistence of competing conceptions of society including liberalism but also social democratic traditions. It is notable, in this regard, that industry super funds have survived and prospered even as governments have changed and the retail or commercial financial services industry has continued to lobby for tax policies providing incentives for individuals to take-up products and services outside the industry fund system. And yet, there remain concerns about the cost efficiency and governance of the Australian super industry, being of sufficient significance and scope to prompt the recent government enquiry (Cooper Review 2010) and recommendations to establish a type of public utility parallel to and perhaps replacing elements of the industry.

As originally conceived, the Australian model was to be "government-sponsored but privately managed" and reliant upon market competition between providers to sustain the cost efficient provision of workplace pensions (quoting Paul Keating, federal Treasurer responsible for the design of the Australian model; Editors 2004, 12). On the surface, it would seem that competition for the management of superannuation assets should be national in scope rather than balkanised by state and industrial award. However, notwithstanding the massive amount of publicly available data on costs and investment performance as well as public sensitivity to the issues and the putative 'promise' embodied by the compulsory contribution system, there is evidence of market failure. Here, we consider four separate but related instances wherein market discipline is either pernicious in effect or lacking bite on crucial issues affecting the long-term value of workers' accumulated pension balances.

*Short-termism:* fund investment and costs of management data are publicly reported on a quarterly basis suggesting or implying that differences between funds according to these measures of

performance are sufficient to either prompt inflows and outflows or the threat of these flows. While it is very difficult for the average participant to judge the significance of any differences between funds relevant to their own circumstances, even more problematic is the likelihood that participants could or would switch on the basis of quarterly reports. Chasing short-term returns and cost advantages is likely self-defeating (as suggested by evidence from the global mutual fund industry). In any event, it would appear that quarterly reporting has prompted funds to converge upon industry norms so as to minimise the prospect of being publicly identified in the media as 'poor-performing' funds. Whereas the long-term objective of the compulsory superannuation system is an adequate retirement income, market behaviour appears to be dominated by short-term imperatives.

*Entrenchment:* it is apparent that economies of scale dominate the financial services industry. And yet, many small industry funds have continued in business relying upon their historical links to union sponsors and industry employers. Mergers between funds, although evident in the declining numbers of industry funds, have been limited notwithstanding the formation of a few funds that have become very large indeed with national significance. While there are claims and counterclaims about the efficiency or otherwise of smaller funds relative to larger funds, it would seem that management entrenchment combined with board member entrenchment has dampened the rate of consolidation amongst industry funds and has protected 'captive' service providers from market competition. Furthermore, the widespread practice of cross-board membership with funds underwriting the salaries of union representatives suggests that consolidation will be slow unless government were to break the nexus of mutual advantage.

*Scope and scale of services:* while most funds are dominated by participants that remain with the default product and do not exercise choice in terms of investment strategy or investment products, these participants carry relatively small account balances. Given the ever-present imperatives of retaining and attracting participants, the nature and quality of offered services do not differentiate between participants and normally reference industry-wide standards rather than 'local' preferences.

Depending on the industry, the education attainment of the average participant and their earned incomes, some funds may carry a mix of participants such that a significant minority demand high-quality and costly services. Because of their relatively large account balances, these types of participants are typically very valuable to funds but are also the obvious targets for other institutions seeking to encourage switching between funds. In this respect, the interests and expectations of different types of fund participants are not always mutually consistent or appropriately served. More importantly, the majority of participants in super funds may have more in common (across funds) than they may have in common with their higher paid colleagues (in the same funds). Fund solidarity may be fleeting and irreconcilable.

*Innovation:* if the costs borne by the average participant in industry funds and retail providers are high relative to their account balances and long-term requirements as to an adequate retirement income, it is arguable that the retained earnings and profits of many funds are insufficient to sustain innovation in both the nature and scope of client services and investment management. So, for example, considering that the Australian financial market is very small relative to both the growth in superannuation assets and the total volume of those assets, the costs of effective investment in overseas traded securities and non-traded financial instruments remain a significant barrier to access to global financial markets.

In effect, 'home bias' is a response to the costs of global investment with long-term implications as regards investment returns and the ultimate pension earned by the average participant. If less important to the largest funds, it is surely a significant issue for the average fund and its participants (Huberman 2000).

## **Public Utilities**

By convention, public utilities are state-owned or private companies subject to regulation as regards their costs and standards of service when providing public goods. Prior to the wave of privatisation and deregulation that swept Anglo-American countries beginning in the 1970s, public utilities were found in telecommunications, gas, electricity, and water supply. Characteristically, these industries were dominated by monopoly providers with the power to block market entry. Deregulation was prompted by, and sustained by, a growing consensus in economics to the effect that market competition, or the threat of market competition (Baumol et al. 1982) is normally sufficient to reconcile the interests of firms and society in ways that "tend to increase welfare overall" (Armstrong et al. 1992, 11). As the Australian Government (2010) noted when responding to the Cooper Review, "the existing regulatory framework for the superannuation system is based" upon the 1997 Wallis Report which "argued that superannuation members could generally be treated as rational informed investors able to make their own decisions about superannuation."

This principle of economic theory has withered in the face of evidence to the contrary, and the realisation that, if left to themselves, employers tend not act in the best interests of their employees just as service providers may exploit participants' cognitive shortcomings and employers' ambivalence by shrouding the information required to make effective decisions in participants' long-term interests (Gabaix and Laibson 2006). Market failure has prompted a number of governments to consider alternatives including the creation of public utilities with responsibility for the investment and management of public and private pension assets. So, for example, Australia (Future Fund), Canada (CPPib), Ireland (NPRF), and New Zealand (NZ Super) have established so-called pension reserve funds similar in form and functions to sovereign wealth funds to collect and invest globally national social security assets and/or government-mandated and collected pension contributions. This institution eschews the workplace for a central, government-sponsored institution of the size and scope deemed consistent with the imperatives driving global financial markets (Clark and Monk 2011).

Here, the focus is upon the implications of the Cooper Review of the Australian superannuation system and its re-conception of superannuation as well as the operational framework that will govern that conception in the future. This is followed by consideration of the principles and structure of the UK government's solution to the workplace pension crisis: the National Employment Savings Trust (NEST) which is due to begin in 2012. At one level, the Cooper Review sought to rewrite the structure and governance of the Australian superannuation system with due regard to those elements that are likely to persist in the future. It is also arguable that the Cooper Review's recommendation for the establishment of a generic retirement savings product (MySuper) is analogous with NEST with significant implications for the evolution of workplace pensions in OECD countries. This suggests, however, that recent attempts to 'reform' the US 401(k) system are best understood as incremental amendments to a system whose design and governance is profoundly at odds with realising an adequate retirement income for the vast majority of Americans (Munnell and Sundén 2004).

## **MySuper**

The Australian federal government gave the Cooper Review the mandate to "examine and analyse" the structure and performance of the Australian superannuation system. It did so emphasising that two tests of its effectiveness are to be found in "the best interests of members" and realising the maximum retirement income for participants. At the core of the Cooper Review's recommendations is a fourfold characterisation of participants and their interests. Whereas, this characterisation might have emphasised participants' sectoral affiliations (e.g. health and hospital), their home (state) locations, the nature of their job tasks or functions (e.g. manual or office), and whether they are

workers or managers, the Cooper Review based its characterisation on participants' interest (or otherwise) in saving for retirement, their willingness to be involved in the choice environment, and the extent to which they might claim full responsibility for the "investment and administration of their superannuation arrangements" (Cooper 2010, 12). Obliquely, but never directly, interest and willingness to undertake responsibility are synonyms for participants' competence.

The fourfold characterisation of participants is a universal characterisation in that it includes virtually all citizens subject to compulsory participation and mandatory contributions. Recognising the recent development of the superannuation system as well as the legacy of past workplace pension arrangements, the Review noted that many people carry with them multiple pension entitlements and accounts. Without regard to who are vulnerable to the legacy problem, the Review recommended that steps be taken to ensure that members are not disconnected from their superannuation contributions and that consolidation of accounts is a priority for current providers. The Review placed a premium upon the efficiency of back-office functions through integrated electronic processing systems. Whether systems integration and processing are to remain with individual funds and coordinated through some clearinghouse or whether a private contractor might act as custodian for the entire system, or whether the Australian Tax Office might be the designated public utility, remains to be determined.

Most importantly, the Cooper Review recommended that the system should provide a "simple, cost-effective product with a single, diversified portfolio of investments for the majority of Australian workers". Suggesting that as much as 80% of Australian workers are either unable or unwilling to make effective decisions in the choice environment while recognising the consequences of management costs and short-termism for the accumulation of an adequate pension, the provision of a generic 'default' product was argued to be in the best interests of most participants. As such, MySuper would replace current funds' default products thereby discounting competition as the effective instrument for discriminating between providers. Instead of recommending establishing a standalone public utility to provide MySuper, the Cooper Review allowed for existing funds to offer a MySuper product that would meet government criteria for such a product as regulated by the Australian Prudential Regulation Authority (APRA). One implication of such an arrangement is that if super funds are to make a profit from such a product, they would rely upon economies of scale. Consolidation may be on the agenda.

Whereas the Cooper Review focused on the interests of the vast majority of participants, it also recognised that there are participants who by interest or commitment would wish to exercise their choice over the investment and management of their superannuation assets. While not acknowledged in the Report, it is apparent that these types of participants may be different from the 'average' participant by virtue of their age, gender, education and incomes (see more generally Clark et al. 2012), and may be more or less important in some industry funds and retail institutions. Although it is claimed that there are no cross-subsidies between participants according to their earned incomes and account balances, it is apparent that funds devote considerable resources to attracting and retaining high-value participants. For those funds that continue to offer member choice, the Review recommended that trustees use an appropriate level of due diligence to assess the costs and performance of offered investment options while enhancing disclosure and transparency as regards short-term and long-term performance. The Review sought to 'share' responsibility for effective decision-making between fund trustees and their participants.

The Review also acknowledged that there will remain a number of superannuation participants who claim full responsibility for "their superannuation arrangements." If 80% of participants are in the MySuper option, if 12 to 15% of participants are in the choice option, this would leave about 8% of participants who choose to operate a Self-Managed Super Fund (SMSF). If small in numbers, these

participants often have very large account balances and claim a significant share of total Australian superannuation assets. Given their willingness to devote attention to costs and performance, their willingness to engage professional managers and advisers, and their value to all kinds of financial institutions including the largest banks and insurance companies, their interests may be best met by enhanced regulation of financial advisers and investment institutions. This will also be a responsibility of APRA and other related financial regulatory bodies.

### **NEST**

If once envied for the robustness of the three pillars underpinning retirement income, by the end of the 1990s it was apparent that the UK was facing a pensions crisis. The modest basic state pension was deemed too 'modest', the coverage rate of private workplace pensions was declining, and individual or family savings rates were the lowest for decades. Facing competing demands from the public health sector and education, the Labour government was not in the position to significantly increase the value of Social Security. Over the following decade, defined benefit plans in the private sector closed, employers tended not to replace these plans with much more than incentive programs, and if they did money purchase retirement savings schemes were established with low contribution rates. The UK pensions "problem" was very different to the problem faced by the Australian government contemplating the prospect of large numbers of people retiring with inadequate workplace pension benefits. The first step towards a solution was the Pensions Commission (2005) which reported with a recommendation to establish a public utility.<sup>5</sup>

In canvassing the options, the Pensions Commission came to the problem with three advantages. First, unlike Australia and the US, the UK money purchase or DC industry was in its infancy. Second, there was an obvious recipe at hand for the public utility—a trust based institution, committed to the welfare of participants, and governed by fiduciary duty (a pension fund). By contrast, related government inquiries into the cost effectiveness of the retail financial services industry had identified systematic tendencies towards miss-selling financial products and exploitation of a compliant consumer market.<sup>6</sup> Third, notwithstanding doubts about the integrity of the retail financial services industry, the UK is host to the world's largest international financial centre with a complex array of products and providers. Assuming an expert and committed trustee board, the public utility will carry forward the government's solution to the pension savings crisis.

In effect, NEST is a single, government-sponsored pension institution which exists alongside existing DB and DC pension funds in the private and public sectors. It is highly likely that it will absorb many of the recently established workplace DC pension plans, just as it will become the obvious option for private employers when abandoning their DB pension plans. Notice, though, two distinctive elements in its establishment: first, and unlike Australia, the government avoided making participation in NEST or workplace pension plans mandatory. Drawing inspiration from behavioural theorists (Thaler and Sunstein 2008), the government will require employers to automatically enrol all employees into a workplace money purchase scheme at least as good (in terms of contribution rates) as NEST (if not NEST).<sup>7</sup> Employees will have the right to opt-out of any employer-sponsored

---

<sup>5</sup>/. Though sponsored by the Labour government, the recommendation drew support from the opposition parties and especially the front-bench of the Conservative Party. With the 2010 change in government, the Coalition stood-by NEST and embraced the insights of the behavioural revolution for policy formation (see UK Government 2010 on implications for health policy).

<sup>6</sup>/. [http://www.pensionsorter.co.uk/pensions\\_scandals.cfm](http://www.pensionsorter.co.uk/pensions_scandals.cfm)

<sup>7</sup>/. In the first instance, the total NEST contribution rate will be 8 per cent of gross salary, involving matching employer and employee contributions with a government tax enhancement. In combination with announced intentions to underwrite the real value of Basic State Pension, the government expects to see an overall

workplace pension savings scheme. Second, and unlike the US, the government's recipe for employer and employee contributions combined with tax enhancement is aimed at encouraging lower and average income workers to make provision for retirement (Hills 2006).

If employers opt to participate in NEST, and if employees remain enrolled in the scheme through their employer, participants will be automatically enrolled into the NEST default product. There are unlikely to be other options, at present. In large part this is because NEST was conceived to be relevant for the retirement welfare of the average British worker thereby complementing rather than competing with existing private sector DB and DC pension plans that may favour higher benefits and entitlements. As such, the UK government will not require The Pensions Regulator (TPR) to regulate the provision of default products in the same manner that APRA will be required to oversee the value-for-money of Australian funds' MySuper offerings. Equally, assuming a relative homogeneous target population, it is expected that NEST will focus upon the cost-effective and long-term performance of the default product eschewing market competition amongst funds (as in the retail sector) for the recruitment and retention of participants on the basis of advertised costs and investment performance.

### **Implications and Conclusions**

Underpinning this paper is the recognition that many employers in the Anglo-American world at least and, increasingly, in continental Europe, no longer value workplace pensions as they might have done 25 years ago. In part, this is because the generalisation or diffusion of workplace pension entitlements and benefits has meant that their utility as task-specific or, indeed, work-function productivity incentive devices is no longer entirely obvious (Clark and Monk 2008). Furthermore, in a world in which job categories and production systems have been geographically and functionally segmented, historical commitments to older workers through labour retention pension compensation programs appear to be anachronistic holdovers from a bygone era. Of course, some companies, in some jurisdictions, will continue to offer lucrative workplace pensions (Burger et al. 2011). There remain employers that dominate certain markets and product niches that can reconcile their interests in short-term and long-term compensation with defined benefit and defined contribution pension schemes.

It is apparent, however, that many employers across the developed economies have recognised that they are unable, as a matter of financial strategy and commitment, to underwrite or in some sense guarantee workplace pension benefits. One consequence has been the shift towards defined contribution and money purchase workplace pensions (Dixon and Monk 2009). Another consequence has been the abrogation of workplace pensions in favour of short-term compensation and bonus systems. In the United States, for example, notwithstanding the enormous growth of DC coverage in the private sector over the past 25 years, an equally important trend has been the retreat of employers from providing any workplace pensions at all. This trend is also obvious in the UK. In this context, state-sponsored mandatory and voluntary workplace pension saving schemes are *both* a response to employer ambivalence and retreat from this type of compensation scheme *and* a re-conceptualisation of the relationship between employer and employee and the nation-state and its citizens. Whereas many countries have used pension reforms to systematically discount the value of future Social Security benefits, the same countries have been willing to fill the emerging 'gap' in workplace pension provision albeit without any promise about the future.

---

improvement in retirement saving and welfare (UK Government 2011). Note, however, it is widely believed that this level of retirement saving is still low relative to an 'adequate' pension. It is anticipated that a review of the new arrangements will take place in 2017 where the NEST contribution rate may be revised along with the introduction of automatic contribution escalators (along the lines suggested by Bernatzi and Thaler 2005).

As originally conceived, workplace pensions were a deal struck by unions and employers such that workers gained by virtue of their union affiliation and their loyalty to the employer. Being a union member, being the employee of a particular company, or of a company in a specific industry, were crucial affiliations that were, in effect, also 'tests' of entitlement for workplace pensions of a certain kind and value. In the Australian context, being employed by a company affiliated to a certain industry and represented by the relevant union (if not directly a union member) was the gateway to enrolment into the relevant industry pension fund. Whereas it is possible to maintain the convenient fiction that industry plans are, in some sense, more relevant to the workplace experience of industry employees, this claim for the loyalty of the plan participant has crumbled in the face of the growth of large, multi-industry and multi-employer 'industry' pension funds. It would seem that with the advent of MySuper and the development of so-called generic default products, the process of discounting workers' company and industry identities will be complete.

For Langley (2008), the process of decentralising responsibility to the individual for their long-term financial well-being is entirely consistent with what he calls the 'democratisation of finance'. He associates this process with neoliberalism and the 'new economy' suggesting that defined contribution or money purchase schemes are an expression of the shift towards 'everyday investment' as opposed to the intermediation associated with, and institutions of, defined benefit pensions. Likewise, Preda's (2005) history of the "investor as a cultural figure" implies that the democratisation of finance during the late 20th century has reconceptualised workplace pension plan participants, replacing their notional identities as union members, workers, and plan beneficiaries with a disembodied financial 'identity' as the 'responsible agent' or 'retirement investor'. Much more can be made of this reconfiguration of identity and assigned responsibility particularly as the costs and consequences of the global financial crisis are revealed for the long-term welfare of the average retirement savings.

However, care must be taken in carrying forward this research programme. Behind both MySuper and NEST is a very different model of individual autonomy and responsibility than that associated with neoliberalism. Both institutions eschew individual choice and volition for institutional rules and regulations governing the nature and scope of individual choice and the level of autonomy that individuals might claim or for that matter exercise. At their core, both institutions suppose that the average person is not as competent as they should be in the face of the responsibilities and commitments that would otherwise be allocated to them in ways consistent with the neoliberal agenda. In fact, to become an 'investor subject' in a manner consistent with Preda's (2009) conceptualisation of finance capitalism would require considerable time and effort within the parameters set by the Cooper Review and the degrees of freedom that may be provided by APRA's rules and regulations governing the provision of MySuper default products. As for NEST, it was conceived in reaction to the very idea that the average person is, or ought to be, treated as an 'investor subject'.

In designing institutions and the scope of individual volition in these ways governments have, effectively, by-passed much of the retail investment industry including investment managers, insurance companies, and the like. While the investment industry has not been excluded from the next generation of pension fund capitalism, it will be mediated by society's representative agents standing in place of vulnerable individuals. By virtue of regulated competition (MySuper) and board constitution and expert membership (NEST), representative agents have taken over responsibility for workplace supplementary pension provision. What remains to be seen is whether these agents are any better at providing 'adequate' supplementary pensions than the decentred and localised institutions they replace. The problems of public utilities are well-known, notwithstanding the economies of scale associated with national size and scope. It is entirely possible that neither will be as innovative or as long-term oriented as supposed. Indeed, the acknowledged problems with public

utilities may conspire to so dampen investment performance that the value of such benefits is little more than their sponsors' long-term bond rates.

## Bibliography

Ainslie, G. (2001), *Breakdown of Will*, Cambridge: Cambridge University Press.

Akerlof, G. A. and Shiller, R. J. (2009), *Animal Spirits: How Psychology Drives the Economy, and Why it Matters for Global Capitalism*, Princeton: Princeton University Press.

Armstrong, M., Cowan, S. and Vickers, J. (1994), *Regulatory Reform: Economic Analysis and British Experience*, Cambridge MA: MIT Press.

Australian Government. (2010), *Stronger Super*. Canberra.

Australian Prudential Regulation Authority (APRA). (2004), *Statistics: Annual Superannuation Bulletin*. Sydney.

— (2007), *A Recent History of Superannuation in Australia*. Sydney.

— (2011), *Statistics: Annual Superannuation Bulletin*. Sydney.

Baron, J. (2008), *Thinking and Deciding*, 4th Edn, Cambridge: Cambridge University Press.

Baumol, W. J., Panzar, J. and Willig, R. D. (1982), *Contestable Markets and the Theory of Industry Structure*, New York: Harcourt Brace Jovanovich.

Benartzi, S. and Thaler, R. (2001), 'Näive diversification strategies in defined contribution savings plans', *American Economic Review*, 91: 71-99.

— — (2005), 'Save more tomorrow: using behavioral economics to increase employee savings', *Journal of Political Economy*, 112: 164-87.

Boyer, R. (2000), 'Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis', *Economy and Society*, 29: 111-45.

Burger, C. (2011), 'The role of social partners in transforming the German pension system' (submitted).

Burger, C., Clark, G. L., Franzen, D., Heldmann, J. and Karch, H. (2011), 'Betriebliche altersvorsorge in Deutschland – ergebnisse einer expertenumfrage', *Betriebliche Altersversorgung* Issue 1: 64-72.

Chandler, A. D. (1977), *The Visible Hand: Managerial Revolution in American Business*, Cambridge MA: Harvard University Press.

Choi, J. J., Laibson, D., Madrian, B. C. and Metrick, A. (2002), 'Defined contribution pensions: plan rules, participant decisions, and the path of least resistance', in J. M. Poterba (ed.), *Tax Policy and the Economy*, Vol. 16 (pp. 67-113). Cambridge MA: MIT Press.

Clark, G. L. (1993), *Pensions and Corporate Restructuring in American Industry: A Crisis of Regulation*, Baltimore: Johns Hopkins University Press.

- (2000), *Pension Fund Capitalism*, Oxford: Oxford University Press.
- (2003), *European Pensions & Global Finance*, Oxford: Oxford University Press.
- (2006), 'The UK occupational pension system in crisis', in Pemberton, H., Thane, P. and Whiteside, N. (eds.), *Britain's Pensions Crisis: History and Policy* (pp. 145-68). London: Oxford University Press for the British Academy.
- (2010), 'Human nature, the environment, and behaviour: explaining the scope and geographical scale of financial decision-making', *Geografiska Annaler: B, Human Geography*, 92(2): 159-73.
- and Monk, A. (2007), 'The 'crisis' in defined benefit corporate pension liabilities', *Pensions: An International Journal*, 12(1): 43-54 and 12(2): 68-81.
- — (2008), 'Conceptualizing the defined benefit pension promise', *Benefits Quarterly*, 24(1): 7-18.
- — (2011), 'Pension reserve funds: best-practice form and functions', *Rotman International Journal of Pension Management* (forthcoming)
- and Urwin, R. (2011), 'DC pension fund best-practice design and governance', *Benefits Quarterly* (forthcoming)
- and Wójcik, D. (2007), *The Geography of Finance: Corporate Governance in the Global Marketplace*, Oxford: Oxford University Press.
- , Strauss, K., and Knox-Hayes, J. (2012), *Saving for Retirement: Intention, Context, and Behaviour*, Oxford: Oxford University Press (in press).
- Coates, N. (2004), 'Still 'Saving the Nation' twelve years on?' *Australian Journal of Political Economy* 53: 81-99.
- Cooper, J. (2011), 'Super for members: a new paradigm for Australia's retirement income system', *Rotman International Journal of Pension Management* 3(2): 8-15.
- Cooper Review. (2010), *The Super System Review*, Canberra: Australian Government.
- Dixon, A. D. (2011), 'Variegated capitalism and the geography of finance: towards a common agenda', *Progress in Human Geography* 35: 193-210.
- and Monk, A. H. B. (2009), 'The power of finance: accounting harmonization's effect on pension provision', *Journal of Economic Geography* 9: 619-39.
- Editors. (2004), 'Superannuation policy: commentary on an interview with Paul Keating, former Prime Minister', *Australian Journal of Political Economy* 53: 9-26.
- Esping-Andersen, G. (1999), *Social Foundations of Postindustrial Economies*, Oxford: Oxford University Press.
- Ezra, D., Collie, B., and Smith, M. X. (2009), *The Retirement Plan Solution: The Reinvention of Defined Contribution*, New York: J Wiley.

Gabaix, X. and Laibson, D. (2006), 'Shrouded attributes, consumer myopia, and information suppression in competitive markets', *Quarterly Journal of Economics*, 113: 505-40.

— —, Moloche, G. and Weinberg, S. (2006), 'Costly information acquisition: experimental analysis of a boundedly rational model', *American Economic Review*, 96: 1043-68.

Gallery, G., Gallery, N. and Brown, K. (2004), 'Superannuation choice: the pivotal role of the default option', *Australian Journal of Political Economy* 53: 44-66.

Ghilarducci, T. (2008), *When I'm Sixty-Four: The Plot Against Pensions and the Plan to Save Them*, Princeton: Princeton University Press.

Ginn, J. (2003), *Gender, Pensions and the Lifecourse: How Pensions Need to Adapt to Changing Family Forms*, Bristol: The Polity Press.

Grossman, G. M. and Helpman, E. (2005), 'Outsourcing in a global economy', *Review of Economic Studies* 72: 135-59.

— and Rossi-Hansberg, E. (2006), 'Trading tasks: a simple theory of offshoring', Working Paper 12721. Cambridge MA: NBER.

Hamnett, C. (2011), 'The reshaping of the British welfare system and its implications for geography and geographers', *Progress in Human Geography* 35: 147-52.

Hills, J. (2006), 'From Beveridge to Turner: demography, distribution and the future of pensions in the UK', Discussion Paper 110. London: Centre for Analysis of Social Exclusion, London School of Economics.

— (2010), *An Anatomy of Economic Inequality the UK*, London: HM Government Equalities Office.

Huberman, G. (2000), 'Home bias in equity markets: international and intranational evidence', in Hess, G. D. and van Wincoop, E. (eds.), *Intranational Macroeconomics* (pp. 76-91). Cambridge: Cambridge University Press.

— and Jiang, W. (2006), 'Offering versus choice in 401(k) plans: equity exposure and numbers of funds', *Journal of Finance*, 61: 763-801.

Iyengar, S. S., Jiang, W. and Huberman, G. (2004), 'How much choice is too much: determinants of individual contributions in 401K retirement plans', in Mitchell, O.S. and Utkus, S. P. (eds.), *Pension Design and Structure: New Lessons from Behavioral Finance* (pp. 83-97). Oxford: Oxford University Press.

Jensen, M. J. (1993), 'The modern industrial revolution, exit, and the failure of internal control systems', *Journal of Finance* 48: 831-80.

Kahneman, D., Schwartz, A., Thaler, R. and Tversky, A. (1997), 'The effect of myopia and loss aversion on risk taking: an experimental test', *Quarterly Journal of Economics*, 112: 647-61.

— and Tversky, A. (1979), 'Prospect theory: an analysis of decision under risk', *Econometrica*, 47: 263-91.

Konzelmann, S. (2005), 'Varieties of capitalism: production and market relations in the USA and Japan', *British Journal of Industrial Relations*, 43: 593-603.

Krueger, J. I. and Funder, D. C. (2004), 'Towards a balanced social psychology: causes, consequences, and cures for the problem-seeking approach to social behavior and cognition', *Behavioral and Brain Sciences*, 27: 313-28.

Langley, P. (2008), *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*, Oxford: Oxford University Press.

Lusardi, A. and Mitchell, O. S. (2007), 'Baby boomer retirement security: the roles of planning, financial literacy, and housing wealth', *Journal of Monetary Economics*, 54(1): 205-24.

— — (2008), 'Planning and financial literacy: how do women fare?', *American Economic Review*, 98(2): 413-17.

Macedo, S. (1989), *Liberal Virtues*, Oxford: Oxford University Press.

May, J., Wills, J., Datta, K., Evans, Y., Herbert, J. and McIlwaine, C. (2007), 'Keeping London working: global cities, the British state and London's new migrant division of labour', *Transactions of the Institute of British Geographers*, NS32(2): 151-67.

McDowell, L., Batnitzky, A., and Dyer, S. (2008), 'Internationalization and the spaces of temporary labour: the global assembly of a local workforce', *British Journal of Industrial Relations*, 46: 750-70.

— — — (2009), 'Precarious work and economic migration: emerging immigrant divisions of labour in Greater London's service sector', *International Journal of Urban and Regional Research*, 33(1): 3-25.

Mitchell, O. S. and Utkus, S. P. (2004a), 'Lessons from Behavioral Finance for Pension Plan Design', in Mitchell, O. S. and Utkus, S. P. (eds.), *Pension Design and Structure: New Lessons from Behavioural Finance* (pp. 3-42). Oxford: Oxford University Press.

Monk, A. H. B. (2008), 'The knot of contracts: the corporate geography of legacy costs', *Economic Geography*, 84: 211-36.

Munnell, A. H. (2006), 'Employer-Sponsored Plans: The Shift from Defined Benefit to Defined Contribution', in Clark, G. L., Munnell A. H. and Orszag J. M. (eds.), *The Oxford Handbook of Pensions and Retirement Income* (pp. 359-80). Oxford: Oxford University Press.

— and Sundén, A. (2004), *Coming Up Short: The Challenge of 401(k) Plans*, Washington DC: Brookings Foundation.

O'Donoghue, T. and Rabin, M. (1999), 'Doing it now or later', *American Economic Review*, 89: 103-24.

Organisation for Economic Cooperation and Development (OECD). (1997), 'Ageing in OECD Countries: A Critical Policy Challenge', Paris.

— (2007), 'Closing the Pensions Gap: The Role of Private Pensions', Policy Brief (September), Paris.

Pemberton, H., Thane, P. and Whiteside, N. (eds.) (2006), *Britain's Pensions Crisis: History and Policy*, Oxford: Oxford University Press.

Pensions Commission. (2005), *A New Pension Settlement for the Twenty-First Century: The Second Report of the Pensions Commission*, London: The Stationery Office.

Preda, A. (2005), 'The investor as a cultural figure of global capitalism', in K. Knorr Cetina and A. Preda (eds.), *The Sociology of Financial Markets* (pp. 141-62). Oxford: Oxford University Press.

— (2009), *Information, Knowledge and Economic Life*, Oxford: Oxford University Press.

Roberts, J. (2004), *The Modern Firm: Organisational Design for Performance and Growth*, Oxford: Oxford University Press.

Samuelson, W. and Zeckhauser, R. (1988), 'Status quo bias in decision making', *Journal of Risk and Uncertainty*, 1: 7-59.

Sass, S. (1997), *The Promise of Private Pensions: The First Hundred Years*, Cambridge MA: Harvard University Press.

Schick, F. (1997), *Making Choices: A Recasting Decision Theory*, Cambridge: Cambridge University Press.

Sharpe, W. F. (2007), *Investors and Markets: Portfolio Choices, Asset Prices, and Investment Advice*, Princeton: Princeton University Press.

Shiller, R. (2008), *The Subprime Solution: How Today's Global Financial Crisis Happened and What to Do About It*, Princeton: Princeton University Press.

Teece, D. (2000), *Managing Intellectual Capital*, Oxford: Oxford University Press.

Thaler, R. and Sunstein, C. (2008), *Nudge: Improving Decisions About Health, Wealth and Happiness*, New Haven: Yale University Press.

UK Government. (2003), *Simplicity, Security, and Choice: Working and Saving for retirement. Action on Occupational Pensions*, London: Department for Work and Pensions.

— (2010), 'Applying behavioural insight to health,' London: Cabinet Office.

— (2011), *A State Pension for the 21<sup>st</sup> Century*, London: Department for Work and Pensions.

US Department of Labor. (2010), *Private Pension Plan Bulletin Historical Tables and Graphs*. Washington DC.

Whiteside, N. (2003), 'Historical perspectives and the politics of pension reform', in Clark, G. L. and Whiteside, N. (eds.), *Pension Security in the 21st Century: Redrawing the Public-Private Debate* (pp. 21-43). Oxford: Oxford University Press.