A Just Retirement Future for Chilean Workers: Social Insurance or Private Savings?

Silvia Borzutzky [1] & Mark Hyde [2]

[1] (Main contact)
Teaching Professor of Political Science and International Relations, Heinz College, Carnegie Mellon University
Sb6n@andrew.cmu.edu

[2] Reader in Work and Pensions
Plymouth University
Mhyde@plymouth.ac.uk

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Abstract

This article addresses a recurring debate in social policy analysis, but with a contemporary twist. Which model of pension provision is most likely to augment the financial well-being of Chilean workers in retirement: social insurance or private savings? The analysis developed here evaluates both models against the requirements of justice and poverty reduction. The neoliberal rationale for pensions privatisation is typically articulated as a synthesis of deontological and consequentialist imperatives, emphasising the centrality of the individual's inalienable rights, but permitting a degree of intrusive paternalism to diminish the prevalence of economic disadvantage among retirees. Our analysis of empirical evidence regarding pension design and outcomes in Chile suggests that privatisation has failed to meet the objectives that are shaped by this normative repertoire and in fact it has contributed to keeping almost 20 percent of the retirees below the poverty level. While it represents a fundamental departure from the free market model of neoliberalism, we find that a well-designed social insurance arrangement that is universal in scope, and redistributive, would augment the freedom of Chilean workers and also reduce poverty.

Keywords

Chile; retirement provisions, pension justice; defined contribution provision; social insurance, poverty among elderly population

Introduction

The debate between exponents of public and private pensions is as old as social security itself, but the question remains. Which model is most likely to augment the financial well-being of Chilean workers in retirement, social insurance or private savings? The answer to this question has profound implications for the architecture of retirement systems and the well -being of future retirees, for these models differ fundamentally with regard to pension financing and the institutional locus of scheme administration.

Social insurance is typically delivered as a public monopoly and relies on "Pay-As-You-Go" (PAYG) financing—today's benefits are sustained by payroll taxes (or, increasingly, government debt), not by saving, and entitlements are determined politically. Exponents of this model claim a range of advantages such as inclusiveness, retirement income security, and benefit generosity, reflecting substantial state capacities for financial planning, and the political will to extend the scope of social solidarity (Ginn, 2004; Veghte, 2015). And yet it is clear that the system of social insurance that Chilean workers relied on up to and shortly after the military coup in 1973 was defective, creating enormous administrative inefficiencies, and arbitrary inequalities in the distribution of retirement income (Borzutzky, 2002, 2012). In direct contrast, defined contribution (DC) pensions are typically delivered by the private sector and rely on "funding" as a method of financing—workers must accumulate financial assets for their own retirement, and entitlements reflect each person's savings' effort.[1] Exponents of privatisation also claim a number of advantages for this model such as flexibility and improved benefits, reflecting the possibility of competition on the supply-side of the pensions market (Piñera, 1996; Shapiro, 2010). But the mandatory DC pension arrangement that replaced Chile's system of social insurance in 1981 is regarded by many scholars of social security as even more problematic (Borzutzky, 2012; Borzutzky & Hyde, 2015; Hyde & Borzutzky, 2015).

This article develops a distinctive set of arguments in favour of a "well-designed" social insurance arrangement. When considered against indicators such as population coverage, income replacement, or the income shares of the least-advantaged, the superior performance of social insurance over DC retirement provision is clear (OECD, 2013). The "basic point that pensions are meant to secure incomes in old age seems to have been forgotten" (Esping-Andersen, 2003, p. 3) in the world of DC retirement provision. But this begs the question, why should we assign importance to any particular set of indicators? Inevitably, the answer to this question suggests that the selection of evaluation benchmarks depends on the norms and values that are deployed to give meaning to "performance". To get closer to this, for the purposes of our focus on Chile, it is important to acknowledge that the neoliberal rationale for privatisation rests primarily on a particular conception of justice, one which asserts the *primacy of liberty* (Shapiro, 2010; Pennington, 2011). This emphasis behoves us, as critics of privatisation, to evaluate models of retirement provision against the normative repertoire of justice, as well as empirical evidence regarding costs and benefits. The alternative might be to focus on evidence of performance in a moral vacuum, to rely on some implicit normative framework, unstated yet shared by members of a reference group, or to assert the primacy of some other normative principle, such as social solidarity (Esping-Andersen, 1990; Rothstein & Uslanner, 2005). The article asserts the primacy of liberty, but our analysis ultimately endorses a pivotal role for the

[1] We should distinguish two approaches to funding. Defined Benefit (DB) schemes arrange contributions to guarantee a designated entitlement, conferring considerable security around retirement futures. But DC schemes determine entitlements on the basis of the assets that have been accumulated up to the point that workers cease their employment, and this generates considerable insecurity around retirement futures (Modigliani & Muralidhar, 2005).

state in shaping the retirement prospects of Chilean workers in order to reduce poverty and augment living standards among retirees.

This argument is developed here in two ways. First, we set out and evaluate the main elements of Chile's neoliberal retirement system during the period 1981 to 2007—what we describe as *neoliberalism triumphant*, reflecting the creation and consolidation of these institutional arrangements. It is widely acknowledged that this experiment in free market fundamentalism has failed to live up to its own promises, and has not realised its own vision of justice (Borzutzky & Hyde, 2015; Hyde & Borzutzky, 2015). Second, we evaluate two possible responses to pension failure in Chile—the reforms that are necessary to augment the retirement prospects of Chilean workers. The least disruptive to the status quo is informed by the tenets of neoliberalism, aims to retain the core legal and institutional arrangements that were created by the 1981 reform, but gives greater emphasis to reducing economic disadvantage among retirees. This, the "path of least resistance", has been exemplified during the period 2008 to 2015 by the pension reform agenda that was crafted by Michelle Bachelet's coalition government—what we describe as *neoliberalism recalibrated*, to reflect this marginal adjustment to the neoliberal mission (Borzutzky, 2012; Borzutzky & Hyde, 2015). While this will undoubtedly improve the retirement prospects of the least-advantaged, this approach rests on income transfer programmes that are fundamentally defective in design, and is unlikely to realise substantial outcomes that are compatible with the neoliberal emphasis on the primacy of liberty. While it represents a substantial departure from the free market model of neoliberalism, we find that a well-designed social insurance arrangement would augment freedom substantially. Although it shares a similar conception of liberty as self-realisation, this argument acknowledges the importance of a range of internal and external barriers to individual freedom, including differences in access to material resources and opportunities (Dworkin, 2000; Schokkaert & Van Parijs, 2003).

Neoliberalism triumphant (1981-2007)

Under the aegis of a brutal military dictatorship led by Augusto Pinochet, Chile's long-standing social insurance arrangement, a multiple Common Fund system, was replaced by a neoliberal retirement system, comprised of two pillars. Most importantly, the *private pillar* was represented by a system of DC individual accounts for all new labor market entrants, and existing workers who elected to transfer to the private system (Borzutzky, 2002; Borzutzky, 2012). This new arrangement gave the responsibility for managing worker's accounts to state-licensed and highly regulated pension fund management companies, the *Administradoras de Fondos de Pensiones* (AFPs). While workers were required by law to contribute 10 percent of their monthly earnings to their own account, the employers were not required to make any contributions to the retirement system. Each worker was given a degree of choice around their AFP—the initial choice of AFP was unrestricted. In several important ways, the 1981 reform reinforced the principle of individual responsibility. Significantly, it eliminated employer contributions to pensions, making workers fully responsible for their own retirement income futures. The institutionalisation of consumer choice gave plan participants the opportunity to select their fund manager on the basis of relevant information, such as price or performance. This was supplemented by a means-tested public pillar, comprised of two elements—a Minimum Pension Guarantee (MPG) for those whose private savings proved to be insufficient to lift them above a state-designated pension line; and a social assistance programme, the Welfare Pension, for those not covered by the private pillar. As is typical of means-tested income transfers, both were informed by the principle of "less eligibility", to minimise perverse incentives. These arrangements were perpetuated by the Concertación governments that ruled Chile from 1989-2010 and the right-wing Piñera administration which governed from 2010-2014.

In all essentials, this juxtaposition of means-tested social assistance and compulsory self-provisioning corresponds to the "neoliberal model"[2] that has been articulated in the literature of social policy (Titmuss, 1974; Esping-Andersen, 1990; Korpi & Palme, 1998). Scholars of welfare restructuring maintain that its principal elements have given expression to the wider "neoliberal" counter-revolution that dismantled social democratic welfare states (Crouch, 2011; Harvey, 2005). Combined with the retrenchment of publicly administered welfare programmes, privatisation and deregulation were intended to shift power and financial resources away from organised labor and government institutions to corporate elites, particularly the financial services industry. Importantly for our analysis, it is clear that many neoliberal scholars of social security also accept that the provisions of the 1981 reform exemplified their own commitment to a particular form of justice, prioritising *laissez faire* and free markets, but permitting a degree of paternalistic intrusion to diminish the prevalence of economic disadvantage among retirees (Tanner, 2004; Shapiro, 2007).

Neoliberal justice?

Any attempt to appraise models of retirement provision against the requirements of their own objectives, rather than externally imposed evaluation criteria, requires an awareness and understanding of their underlying value premises. The neoliberal rationale for privatisation is comprised of distinctive but overlapping deontological and consequentialist ethical arguments.

For natural rights libertarians (Nozick, 1974; Machan, 2006), the requirement for liberty reflects the Enlightenment premise that human agents have potentiae that distinguish them from other species. The possibility of freedom—embedded in "action spaces"— gives people the opportunity to act in terms of their sovereign preferences, and to develop the capacities and aptitudes that are necessary for flourishing and happiness. Rather than "assuming that one size fits all", as pension policy often does, natural rights libertarians accept that there is considerable variation in individual preferences regarding the nature of the good life, including the trade-off between work and leisure, and people's time preferences. Liberty gives each person the responsibility for their own retirement. It also gives them the opportunity to develop the financial and planning skills that are necessary to make retirement a financial reality. Given that its authority ultimately rests on a monopoly of the use of force, can there be any legitimate role for the state in designing and regulating pension markets? For the academic mainstream of natural rights libertarianism (Nozick, 1974; Machan, 2006), the answer is negative, since liberty requires only the protection of two sets of inalienable rights: "self-ownership rights"—the right of individuals to exercise control over their physical and mental capacities; and "property rights"—the right to the external resources that are acquired by applying these capacities, provided that this involves voluntary exchange. Where it is compatible with justice, governmental action is restricted to the maintenance of a legal and coercive apparatus that reliably convicts and punishes those who violate individual rights.

A second strand of neoliberalism has developed the argument for liberty on consequentialist grounds (Friedman, 1989; Shapiro, 2010); for the propriety of any system of justice could be questionable if it did not routinely optimise welfare, including people's retirement prospects. Liberty must be given priority not because it is premised upon fundamental attributes of human nature, which may be questionable, but because it gives rise to the institutions that are necessary to maximise human welfare. For exponents of the "congruency thesis", liberty creates market conditions that augment

[2] We should of course note the differences in terminology that is used to refer to the neoliberal pension model: for example, the "residual" model (Titmuss, 1974); the "liberal" model (Esping-Andersen, 1990); the "basic security" model (Korpi & Palme, 1998); and the "Anglo-American" model (Minns, 2001).

consumer choice, competition and productive efficiency, diffusing the benefits of economic prosperity. Natural rights and consequentialist variants of classical liberalism, "while quite different in principle, frequently lead to the same conclusion" (Friedman, 1989, p. 178). The centrality of outcomes to this appraisal, however, means that freedom may be sacrificed if this yields greater utility, which means that rights violations must be evaluated on their merits rather than rejected *a priori* on natural rights grounds. Even so, liberty is typically regarded by consequentialists as being conducive to economic and social welfare.

Intellectually, the architects of the 1981 reform—the "Chicago boys"—were influenced by the normative repertoire of natural rights libertarianism. Although they exceed the sparse architecture of the minimal state, the provisions of Chile's private pillar of compulsory individual accounts rely substantially on *voluntary exchange*, cohere around the principle of *individual responsibility* for economic welfare in old age, and protect each person's accumulated financial assets through a system of legal *property rights*. At the same time, it is clear that the design of Chile's neoliberal retirement system was informed by the consequentialist school of Friedmanite utilitarianism. Its principal architect, Jose Piñera (1996), articulated a normative rationale for the private pillar in terms of the material benefits wrought by liberty—that is, the gains realised by plan participants including low-cost pension fund management, superior investment returns, and improved pension entitlements, as the AFPs take action to augment their market shares and power. In acknowledging the possibility of market failure, however, neoliberal exponents of privatisation have endorsed a parsimonious means-tested public pillar to eliminate retiree poverty, or at least to smooth off its roughest edges. This suggests that Chile's neoliberal retirement system should be evaluated not only in terms of its capacity to augment welfare through market efficiency, but also its demonstrable impact on retiree income inequalities and economic disadvantage. While giving priority to liberty, then, our evaluation addresses concerns that are typically favoured by egalitarians.

Formally stated, this consideration of neoliberal arguments around liberty highlights the importance of three sets of evaluation criteria.

- *Deontology*: The extent to which the private pillar facilitates aspects of individualism such as sovereignty, personal responsibility, and property rights—the concerns of natural rights libertarians (Piñera, 1996; Skoble, 2005).
- *Consequentialism 1*: The extent to which the private pillar facilitates outcomes that arise from market efficiency, such as low management charges, investment performance, and improved benefit entitlements—the concerns of neoliberal economists (Piñera, 1996; Rodríguez, 1999).
- *Consequentialism 2*: The extent to which the public pillar facilitates egalitarian concerns such as a diminution of retirement income inequality, and economic disadvantage—the co-opted concerns of social policy analysis (Piñera, 1996; Shapiro, 2010).

Diminutive coverage

The coverage requirements of the private pillar were designed primarily to give expression to the deontological emphasis of natural rights libertarianism on individualism (Piñera, 1996; Skoble, 2005). Its architects mandated wide population coverage to extend the opportunity to participate in an arrangement that would permit sovereign decision making around retirement, but protect the benefits of individual savings' effort through a system of legal property rights. Regrettably, the evidence suggests that Chile's neoliberal retirement system has performed sub-optimally against two measures of coverage. The first is the proportion of the working population that is affiliated to a designated pension scheme. As would be anticipated, coverage under Chile's private pension arrangement grew substantially during the early years, but peaked at around 60 percent towards the end of the period 1981-2007 (Acuña & Iglesias, 2001). Even if we include participants in the remaining but residual social insurance sector, total coverage in the retirement system (about 70 percent) was less than that achieved by the Common Fund before privatisation (about 86 percent). The main issue here has been the exclusion of the self-employed from the provisions of the 1981 reform. A second measure of coverage is the ratio of active contributors to pension scheme members. In Chile, this decreased substantially from around 74 percent in 1982 to 50 percent in 2000 (Acuña & Iglesias, 2001), reflecting non-compliance as well as the growing number of workers who leave their employment but remain affiliated to an AFP—such as women involved in the care of dependent children (see below). The end result of diminutive coverage is clear, for a substantial minority of Chile's working age population have been denied the opportunity to save for their retirement and, by extension, the benefits of liberty.

Excessive management charges?

The provisions of the 1981 reform with regard to management charges in the private pension pillar—involving a degree of regulation, but permitting the AFPs to exercise considerable discretion—were designed to address the consequentialist concern with market efficiency, for neoliberal scholars of economic affairs endorse liberty as a means of curtailing price inflation. The absence of substantial price controls eliminates excessive charging by inducing intense competition on the supply-side of the market, as pension fund managers take action to acquire new affiliates (Piñera, 1996; Rodríguez, 1999). This argument is given a degree of credibility by longitudinal data on pricing, which suggests that management charges have fallen considerably over the life of Chile's neoliberal retirement system. Yet the evidence of excessive charging in Chile is very substantial and, for many scholars of its private pension arrangement, uncontentious. Chile's pension fund managers have imposed charges of between 25 and 36 percent, which translates into between a quarter and a third of worker's retirement savings (Acuña and Iglesias, 2001).[3] This compares unfavourably with equivalent charges for DC pension fund management in some other national jurisdictions, such as Australia and Sweden, and management charges for other forms of financial services (Hyde & Borzutzky, 2016). Not surprisingly, the rate of profit in the pension fund management industry has been as high as 50 percent, far higher than firms in other sectors of the Chilean economy (Borzutzky, 2012). It is almost as if the military dictatorship gave the AFPs a license to print money and to control a large percent of Chile's Gross Domestic Product (GDP). In fact the amount of capital in the hands of the AFPs augmented from 58.1 to 63.7 percent of GDP between 2005 and 2010 (IMF 2011).

Sub-optimal returns?

The provisions of the 1981 reform with regard to investment performance in the private pillar were similarly intended to address the consequentialist concern with market efficiency (Piñera, 1996; Rodríguez, 1999). Although the pension fund managers were initially subject to extensive investment regulations, it is clear that they have been permitted to exercise considerable discretion with regard to asset allocation and portfolio management. Again, neoliberal exponents of privatisation endorse market deregulation, arguing that liberty incentivises intense competition among supply-side actors, maximising returns to affiliates (Piñera, 1996; Shapiro, 2010). This argument is given a degree of

[3] Given this concern with outcomes, we should also highlight the regressive impact of Chile's management charges. Low income plan participants have paid proportionately higher management charges (Borzutzky, 2012).

credibility by evidence of investment performance during the first 10 years, suggesting returns that were as high as 11 percent (Rodríguez, 1999). Yet there is substantial evidence to suggest that the investment performance of Chile's fund managers has been sub-optimal, falling short of the returns that would be necessary to justify their considerable income streams. In this respect, we should recall that the ostensible purpose of management charges is to render payment for the service of generating investment-driven increments to the value of retirement assets, which means that it is returns to plan participants that ultimately count. Much of the evidence around net returns—which are a function of investment returns and management charges—suggests that the performance of the AFPs during the first two decades of the private system was rather less impressive. When returns are estimated in this way, they are "more than halved from what has been reported by the AFPs and conservative pundits" (Leiva, 2006, p. 7). According to one authoritative study (Acuña and Iglesias, 2001), the AFPs generated an average net return of 5.1 percent during the first two decades; while Kay (2003) estimates average net returns of 0.3 percent for the period 1982 to 1986, and 2.1 for 1991 to 1995. Even during the "good times" of the first two decades then, there is evidence that might lead us to question the assertion that high management charges were grounded in superior investment returns. It is clear that investment performance has declined steadily over the life of Chile's neoliberal retirement system and that as a result the well-being of retirees has been endangered and the supplementary role of the state has been expanded (Hyde & Borzutzky, 2015).

Unsatisfactory benefit entitlements?

Reflecting their faith in the efficacy of market competition around pricing and performance, the architects of the 1981 reform anticipated substantial improvements in the financial circumstances of retirees following privatisation (Piñera, 1996; Rodríguez, 1999), but there is evidence to suggest that this expectation remains unfulfilled. On average, retirement benefits from the private pension arrangement have been approximately 12 percent higher than those enjoyed by retirees under the social insurance system that it replaced. But this improvement should not be interpreted as indicating satisfactory benefits for all, since research has highlighted the persistence of very substantial inequalities among plan participants (Leiva, 2006; Borzutzky, 2012). Approximately 25 percent of participants have been able to generate financial assets that are sufficient to realise a retirement income that is above the state-designated poverty threshold. A further 25 percent of plan participants have been unable to generate such assets, but paid sufficient contributions to qualify for the parsimonious MPG, the means-tested top-up. But around 50 percent of plan participants have failed to meet either condition, and have been condemned to acute poverty in old age. We might also note that disability pensions under Chile's private pension arrangement have been 23 percent less than those paid to retirees under the Common Fund system (Borzutzky, 2012). At best, the impact of privatisation with regard to the financial support it affords people in retirement has been mixed and has reinforced the large income inequities that exist among active workers.

Intensified inequality?

To facilitate market efficiency in the private pillar, the architects of the 1981 reform addressed the question of extreme income inequality and economic disadvantage by instituting a means-tested public pension pillar (Shapiro, 2007, 2010), yet the evidence is clear. Turning to retirees as a whole, the introduction of a neoliberal retirement system has ultimately had the effect of intensifying income inequality. This was established empirically in two ways.[4] First we examined evidence of the income

[4] With reference to the OECD Income Distribution Database, http://dx.doi.org/10.1787/888932907794

shares of retirees in Chile relative to other OECD countries. In all national jurisdictions, retiree income was less than the population average, but Chile's distribution was quite distinctive. For 18 of the 27 countries surveyed, retiree income grew faster than the population average between 1995 and 2007, but fell in Chile and Sweden, which have introduced mandatory DC pensions. The causation of this trend is thrown into sharp relief when we consider the sources of retiree income in 2007. For countries with the least inequality, retiree income is derived overwhelmingly from publicly administered income transfer programmes; but for Chile, retirement income was derived predominantly from paid employment—only 40 percent of those aged 65 and over were in receipt of retirement income transfers. Second, we examined evidence of retiree poverty, defined as incomes below half of the national median income. In 2007, Chile had one of the highest levels of retiree poverty, as suggested by its rank of 27 out of 34 OECD countries. It is clear, then, that Chile's neoliberal retirement system has failed to satisfy the consequentialist requirement that reforms should impact in ways that diminish extremes of income inequality and economic disadvantage.

A growing fiscal burden?

One of the key advantages of privatisation, for neoliberal exponents of *laissez faire*, is its role in curtailing public expenditure and, ultimately, reducing the burden of taxation for workers (Piñera, 1996; Rodríguez, 1999). In reality, the privatisation of pensions in Chile has been heavily subsidised by the state, involving very substantial fiscal obligations. As well as financing the transition to the fully-funded private system, by preserving the value of entitlements accumulated under the Common Fund system, the state accepted the responsibility for meeting the costs of means-tested safety-nets, which have grown considerably. These fiscal liabilities have been equivalent to between 4 and 5 percent of Chilean GDP each year (Borzutzky, 2002, 2012).

Chile's retirement futures?

Reflecting these and other perverse impacts, it was clear by the end of the period 1981 to 2007 that Chile's neoliberal retirement system had failed to meet its own objectives, as articulated by its architects. This section turns to the question of appropriate pension reform. Going forward, which model of provision is most likely to generate a just retirement future for Chilean workers by realising outcomes that are compatible with the primacy of liberty? In addressing this, we evaluate two possibilities, one bringing marginal adjustments to the neoliberal retirement system, the second reforming it fundamentally.

Recalibrated neoliberalism (2008-2016)

One possibility is to maintain the institutional arrangements that were created by privatisation, but to reform them in ways that would address the failure of the neoliberal retirement system to realise its own objectives. This has essentially been the preferred approach of Chilean governments since 2006 when Michelle Bachelet was inaugurated as President (Borzutzky, 2012). The growing impetus for reform was reflected in the deliberations of *Comisión Marcel*, a government appointed body that endorsed a raft of reforms to both pillars (Comisión Marcel, 2006). In January 2008, the Chilean Congress approved some of its most important proposals, and gave effect to the reform of Chile's retirement system through Law 20255 (henceforth the 2008 reform).

Better retirement income safety-nets? Arguably the most substantial element of the 2008 reform was represented by substantive improvements to the public pillar retirement income safety-net. Replacing the parsimonious means-tested Welfare Pension, the *Pensión Básica Solidaria* (PBS) guarantees improved benefit entitlements for retirees who have never contributed to the private pension system. For participants in the private pillar without sufficient assets to generate a retirement income that is equivalent to a state-designated poverty threshold, the 2008 reform introduced the *Aporte Previsional Solidario* (APS), an improved means-tested supplement that replaced the MPG. Taken together, the PBS and APS are designated as the Solidarity Pillar. Recipients of the PBS and the APS are eligible for the new Basic Disability Pension. The evidence of the OECD's Income Distribution Database suggests that these improvements to the public pillar have had a modest impact in ameliorating retiree poverty in Chile (OECD, 2013).

Protection for intermittent workers?

A salient feature of fully-funded pensions is their consistency in reinforcing the link between labour force participation and benefit entitlements (Borzutzky, 2002; Ginn, 2004). While "actuarial justice" is an important concern for natural rights libertarians, the commodifying impetus of privatisation disadvantages workers who leave their employment to care for dependent children, for their absence from work results in the cessation of contributions. The architects of the 2008 reform addressed this by subsidising the contributions of workers in these circumstances—specifically, covering 18 months of contributions for each child, calculated on the basis of the state-designated minimum wage. Although these subsidies are not transferred directly to beneficiaries until they reach retirement, they generate interest immediately in the same way as the savings of other workers in the private system.

Expanded coverage?

As we have suggested, a salient defect of Chile's private pension system has been its diminutive coverage which has fluctuated closely around 60 percent of the working age population. The 2008 reform addressed coverage in two ways. Most prominently, it eliminated coverage exemptions for the self-employed, and sought to facilitate their inclusion by introducing an innovative mechanism of entrance to the private pension pillar. Affiliation for the self-employed is regulated by the state by means of a "bidding system" which gives Chile's pension fund managers the opportunity to compete for clusters (or "packets") of self-employed workers on the basis of pricing. Where an AFP is successful in securing a packet, it is not permitted to increase management charges for at least 18 months. In addition, the architects of the 2008 reform sought to increase the participation of young workers in the private element of the retirement system by subsidising the pensions of plan participants aged between 18 and 35 whose earnings are less than 1.5 times the state-designated minimum wage.

Increased voluntary saving?

Many work-related pension pillars, including Chile's private pension arrangement, are explicitly intended to address myopia by making retirement saving compulsory. In addition, the architects of the 2008 reform sought to incentivise voluntary savings effort by creating a system of self-directed pension contributions, the *Ahorro Previsional Voluntario* (APV), which is subsidised by the state. Unlike contributions in the mandatory private pillar, voluntary savings can be administered by a range of agencies including the AFPs, but also insurance companies, mutual funds, and banks.

The 2008 reform and justice

While the 2008 reform has undoubtedly improved the retirement prospects of particular groups of Chilean workers, it falls far short of the measures that are required to address pension failure in Chile satisfactorily. A cursory glance might suggest that the most apparent issue with this approach was its failure to address the intense concentration that is characteristic of Chile's pension fund management industry, which has been instrumental in facilitating excessive management charges, and sub-optimal investment performance (Hyde & Borzutzky, 2015). Although strongly endorsed by the *Comisión Marcel*, the Bachelet government failed to pursue measures to make the AFPs engage with their responsibilities in a more competitive way. Its proposals to liberalise market entry (by allowing banking institutions to act as pension fund managers in the private pillar), and to create a state-managed AFP, were strenuously resisted by existing industry incumbents, and those who represent their interests in conservative media outlets and in Congress. Consequently, the 2008 reform did little to address industrial concentration in the sector, eliminate monopoly pricing, or induce better investment performance. The failure to address these issues has resulted in considerable disenchantment with the retirement system, and the creation of a second government appointed body to explore the scope for reform in the future—*Comisión Asesora Presidencial sobre el Sistema de Pensiones, or Comisión Bravo* (Borzutzky & Hyde, 2015).

But we would go much further than this approach to reform, for it could be argued that the neoliberal model, juxtaposing DC pensions and means-tested safety-nets, is the least effective means by which the state can shape the distribution of resources and opportunities in the retirement system. We should start by acknowledging that DC pensions have several integral features that could be regarded as incompatible with liberty (Modigliani & Muralidhar, 2005).

- *Individualism*. DC pensions accentuate the financial responsibility of plan participants for their own retirement futures. DC individual accounts (of the kind adopted in Chile) make plan participants fully responsible for financing their disengagement from economic activity. Company-sponsored DC schemes typically rely on diminutive employer contributions, far less than required in a defined benefit scheme (EFAMA, 2008). Inevitably, this impairs the sovereignty of the least-advantaged, who lack meaningful capacities for long-term financial planning.
- *System risk*. Reflecting the absence of benefit guarantees, DC pension financing makes entitlements dependent on contingencies that plan participants cannot influence. Excessive management charges erode saving's effort by siphoning financial resources away from their accounts. Sub-optimal investment returns impair saving's effort by reducing the rate of accumulation. There is strong evidence to suggest that volatility in both can give rise to substantial variation in individual entitlements, even where there are similar contribution profiles (Modigliani & Muralidhar, 2005). This diminishes individual freedom by making benefit outcomes dependent upon luck, rather than self-directed savings' effort.
- *Decision risk*. DC pensions that permit a degree of plan participant discretion around savings' effort or asset allocation presume decision making capacities that plan participants typically lack. Behavioural economists have demonstrated, convincingly, that pension planning is suffused with irrationality, manifesting as myopia, vulnerability to peer or marketing pressure, and the deployment of irrelevant heuristics (Mitchell & Utkus, 2004). The "burden of choice" imposed by such schemes reduces each participant's freedom their own impaired rationality. Moreover, there are clear information asymmetries, lack of access to information and limited capacity to predict the behaviour of capital markets (Barr, 2006, 10)

In considering the impact of pension design on liberty, we should also acknowledge the possibility of negative attributes that, while not necessarily integral to mandatory DC retirement schemes, typify the sector.

- *Excessive concentration*. The pension fund management industry is highly concentrated in the majority of mandatory DC retirement schemes, reflecting the imposition of very stringent barriers to market entry. For most, it is clear that over 50 percent of assets under management are accounted for by the two largest pension fund managers (Impávido *et al*., 2010). Excessive concentration in the pension fund management industry impedes consumer sovereignty, a cornerstone of market freedom.
- *Excessive management charges*. The evidence highlights a growing discrepancy between management charges and expenses. Operating costs in Latin American countries, for example, have fallen substantially in recent years, but the decline in management fees has been far less pronounced, resulting "in a strong redistribution against [plan] participants and in favour of pension firms" (Impávido *et al*., 2010, p. 70). Management charges are not typically responsive to consumer choice in these national jurisdictions.
- *Poor investment performance*. Performance and "investment rules have ensured that almost all funds in a given country perform identically, and this pattern is reported across countries" (Srinivas & Yermo, 1997, p. 69). This convergence is a function of correlated trading, as reflected in evidence of almost identical asset allocations across fund managers. As a result, any substantive benefits that could have been delivered by competition among pension fund managers have been eliminated by regulation. Again, performance is not responsive to consumer preferences.

Consequently, we believe that the current system contributes to retiree poverty, gender discrimination and unequal distribution of income after retirement. Chile's CASEN, The National Socioeconomic Characterization Survey, conducted by the Ministry of Social Development with the aim of providing information regarding income distribution, distribution of social benefits, inequality and other socioeconomic indicators provides ample support to our arguments. In the case of Chile, 56.5 percent of the population over 65 receives a pension from the private system, 25.8 percent receives the Pension Básica Solidaria or PBS, and 17.7 percent receives neither a private nor a public pension. The average monthly pension for those in the bottom 20 percent of the income ladder amounts to about U.S. $200 for men and about U.S. $178 for women (calculated on the bases of an exchange rate of 600 Chilean pesos per dollar). Men in the top 20 percent receive an average pension of about U.S. $750 while women in the same income bracket receive an average pension of about U.S. $460. Moreover, 19.7 percent of the population over 60 finds itself below the poverty level (CASEN, 2013, Adultos Mayores section, slides 25-28). Thus, Chile's pension system is not only providing meagre pensions to the majority of the retirees, but also reinforcing the existing gender inequities and the already unequal distribution of income to be found across the society. Lastly, despite the promises made by the architects of the privatization scheme, the replacement rates remain well below the expectations of both experts and the population at large. According to the OECD 2013 report on pensions, the net replacement rate amounts 44.1 percent of the net earnings (OECD 2013).

The neoliberal retirement system—mandatory DC pensions—private pillar is characterised by a design that circumscribes individual freedom. At the same time, for some, the means-tested public pillar is considered defective when evaluated in terms of liberty. Although they involve a degree of vertical income redistribution, means-tested income transfers are criticized because according to some they suffer from a range of integral flaws, which reduce their effectiveness as a needs-focussed strategy. Perhaps the most prominent is stigma, which Reisman (1977) defines as a "loss of self-respect and personal dignity, a sense of guilt, of shame, of personal fault and failure" (p. 41). Alcock (1985) regards stigma as the inevitable consequence of means-testing, "since if benefits are targeted on the least advantaged, "there will always be the fear that those who do not need them are somehow managing to get them" (p. 31). This gives rise to a second salient problem, non-take-up, because "ignorance, fear and, in some cases, pride mean that many who are entitled to benefits do not claim them" (p. 31). Moreover, in targeting transfers on the least advantaged, social assistance typically fails to command popular support, suggesting that benefits are likely to be parsimonious and therefore, insufficient to lift people out of poverty. Relative to other forms of statutory social protection, social assistance and other means-tested transfer fail to optimise the financial capacities of the least-advantaged and by extension, their liberty.

To the extent that these problems are present in the case of Chile's 2008 reform because they reflect the legislators' failure to replace Chile's defective neoliberal retirement system with a satisfactory alternative.

Replacing the status quo?

This brings us to our second and preferred pension reform possibility, the replacement of Chile's two defective pillars with a statutory income transfer programme, such as a social insurance scheme. As argued elsewhere (Hyde & Dixon, 2009), the neoliberal model is premised on a distinctive *moralised conception of freedom* which asserts that liberty is diminished only where individuals are coerced by other human agents, and argues the case for a minimal state to protect people against such intrusion. Inevitably, this fails to acknowledge the force of a range of contingencies that may impact adversely on individual capacities to frame and act in accordance with sovereign preferences; some internal, such as impaired rationality; others external, including limitations on access to material resources, information and opportunities—for "doing anything requires the use of external objects" (Van Parijs, 1995, p. 21). Even if it could be relied on to optimise protection against physical coercion, the neoliberal state cannot legitimately take action to protect people against the possibility of incapacitating economic dis-welfares such as the exploitation, financial insecurity, and intensified income deprivation that have resulted from the provisions of the 1981 reform. At best, a neoliberal retirement system is permitted to redistribute to the least-advantaged through a parsimonious safety-net.

But this rejection of the Chilean approach to privatisation should not be interpreted as representing an endorsement of the Common Fund system that it replaced, which was defective in its own ways. In spite of the higher coverage achieved by the Common Fund, its architecture and impact were deeply problematic. It was administratively chaotic, reflecting the proliferation of funds responsible for administering worker's savings. And it was fundamentally inegalitarian, favouring a minority of workers in higher status occupations, while disadvantaging the vast majority whose benefits were typically insufficient to meet their needs. In short, the social insurance provisions of the Common Fund were suffused with "irritating discriminations", the "fruit of a legislature which was concerned with the interests of certain groups and not with the interests of the community as a whole" (President Frei, 1965, 21st May).

There were several attempts to reform the Common Fund system that were ultimately frustrated by powerful interest groups, and their representatives in the Chilean Congress. Most importantly, in view of our emphasis on the importance of liberty, was President Eduardo Frei's plan to reform Chilean social insurance (1964-1970) by creating a "national social security system which provided integral coverage and similar benefits and obligations to all […] workers" (Borzutzky, 2002, p. 112). Although Frei was essentially a conservative Christian Democrat, this ambition was premised in substantial measure on a commitment to individual liberty, conceptualised in egalitarian terms as the liberation of the least-advantaged from "political, social, and economic bondage" (Borzutzky, 2002, p. 75). Our own approach to the reform of Chile's retirement system echoes that of President Frei, but without the conservative associations. Instead, we looked to North America for an appropriate normative rationale for reform.

The recent work of egalitarian liberals (Dworkin, 2000, 2011) has articulated a liberty-based justification for public involvement in eliminating involuntary inequalities, reflecting the juxtaposition of two moral sentiments—although "each person has a special responsibility for the success of her own life, the political community is obliged to treat its members with equal concern and respect" (White, 2007, p. 79). If justice is to be served, the institutional arrangements that are responsible for distributing resources and opportunities must coalesce around two distinctive priorities. Resource allocation should be "ambition-sensitive" by respecting the consequences of economic activity that arise from "option luck"—the sovereign preferences and actions of each individual. But it must also be "endowment-insensitive" by eliminating the consequences of economic activity that arise from "brute luck"—internal and external contingencies that agents cannot control, which circumscribe the individual's sovereignty. Although it seems to give priority to liberty, the minimal state of neoliberalism cannot ensure outcomes that reflect people's choices—rather than their unchosen circumstances—because it is not involved substantially in allocating resources and opportunities. When considered in this way, justice requires state action to redistribute resources away from the beneficiaries of good brute luck to the victims of bad brute luck, as reflected for example in the provision of substantial human services and income transfer programmes that comprise modern welfare states.

Dworkin's emphasis on the importance of insurance to the realisation of distributive justice has a special relevance to our focus here on appropriate pension design in Chile. Endowment-insensitive resource allocation requires the "socialisation of insurance", manifesting as tax-financed income-transfers to insulate people against the possibility of adverse outcomes arising from circumstances that they cannot control. A well-designed social insurance programme could sustain the liberty of Chilean workers in significant ways.

- *Universal coverage*. Far from endorsing paternalism, egalitarian liberals assert that all agents "must be free to allocate their (equal) endowments over the life-cycle" (Schokkaert & Van Parijs, 2003, p. 247). But some may be prevented from doing so by adverse impacts arising from the natural lottery of talents and abilities, such as the impaired rationality that diminishes people's capacities for financial decision making. In conferring universal entitlements, a well-designed social insurance programme would insulate Chilean workers against the possibility of sub-optimal retirement planning.
- *PAYG financing*. Unlike DC pensions, which are funded, social insurance schemes are financed through inter-generational transfers—that is, today's benefits are financed by payroll taxes, rather than savings. Where there is scope for flexibility in the adjustment of contribution and benefit rates, the state has the capacity to compensate particular generations for the bad brute luck of "unexpected shocks" arising from contingencies beyond people's control. Funded pensions are fundamentally incapable of inter-generational risk-sharing, which makes it possible "for the less lucky generations, when retired, to get a larger income from the younger (fortunate) generations than the one they could have derived from their own savings. It is also possible, when the

unpredictable shock hits the younger generation, for the latter to lower its transfers to the retired" (Schokkaert & Van Parijs, 2003, p. 249).

- *Compulsory redistribution*. Social insurance can also be designed in ways that involve substantial vertical income redistribution within generations—for example, by instituting progressive benefit formulae, giving the least-advantaged freedom from the economic barriers that would otherwise expose them to the risk of acute poverty in retirement. DC pensions are fundamentally incapable of intra-generational risk sharing, while means-tested safety-nets redistribute sub-optimally.

Classical liberal exponents of Chile's private pension system will of course object that PAYG financed retirement schemes are financially unsustainable, and create perverse distributive outcomes, reflecting the capacity of retirees to lobby government, or vote, for preferential treatment. This can be illustrated with reference to recent arguments around the evolution of social insurance schemes, which highlight a "typical, virtually universal, lifecycle" (Shapiro, 2010). The early stage of social insurance is characterised by high benefits for retirees—"much higher than they would have received had they invested their contributions in the market" (Shapiro, 2007, p. 156)—and low payroll taxes; while social insurance during the later or mature stage is marked by the juxtaposition of lower benefits and higher payroll taxes, reflecting the escalating costs of wider population coverage and demographic ageing. The salient concern for this discussion is the possibility of policy decisions around contributions and benefits that reflect economic or political expedience, rather than a principled orientation towards distributive justice. This is why we emphasise a *well-designed* social insurance scheme for Chile, rather than a return to the Common Fund system that the 1981 reform replaced. Political rent-seeking—where groups of voters or interest groups act to generate preferential treatment—could be eliminated from the retirement system by the imposition of an appropriate inter-generational risk-sharing convention such as the "Musgrave rule", which requires an invariant ratio of worker to retiree income (Musgrave, 1986).

But justice for egalitarian liberals doesn't consist only in eliminating the adverse effects of bad brute luck by supplanting markets with statutory income transfer programmes. Ambition-sensitive resource allocation requires the "individualisation of insurance", to generate opportunities for people to exercise their capacity for sovereign decision making, where they are able to do so. This means that people should be permitted to make additional arrangements for their own retirement—by, for example, saving in a voluntary retirement scheme, trading in financial securities, or investing in property—giving them the scope to exercise sovereignty around the allocation of their own assets across the life-course. Inevitably, such choice will generate income inequalities during retirement. But egalitarian liberals regard income inequalities as problematic only where people's sovereignty is impaired, or where they are given unfair advantages. They have "no objection to someone being advantaged if this was achieved through voluntary means rather than being the result of good brute luck" (Shapiro, 2007, p. 23). If private provision is to be permitted at all it should be supplementary to a well-designed social insurance pillar, not the main pillar upon which Chilean workers are expected to rely in order to make provision for their retirement.

At first glance then, this juxtaposition of statutory social insurance and self-provisioning seems to satisfy the requirements of egalitarian liberal justice—namely, that the distribution of resources and opportunities should give expression to each individual's capacity for sovereign decision making, rather than the brute luck of unchosen circumstances. In doing this, it addresses the concerns of those who insist that an adequate approach to pension reform in Chile should give priority to liberty, but without the perverse distributive outcomes that seem to arise from "free" markets.

Conclusion

This article has evaluated Chile's neoliberal model of retirement provision in terms of the objectives articulated by its architects. Some could object that this is a futile exercise, since the neoliberal model is premised on a conception of human nature that is inherently flawed, emphasising the "abstract individual", devoid of meaningful associations, and motivated only by immediate pecuniary self-interest. Understandably, it has been argued that human agents are incapable of such action, constrained as they are by affective bonds, mutual obligations, and structures of disadvantage (Armstrong, 2003). And yet this characterisation fails to do justice to neoliberal political philosophy, which endorses Enlightenment notions of self-realisation and autonomy. In this respect, neoliberalism is similar to other public philosophies that give priority to liberty, or at least regard freedom with some importance. The essential difference between neoliberalism and other approaches, such as Northern European social democracy, is one of means. How is individual freedom best protected? Neoliberals insist that state action beyond the provisions necessary to prevent coercion is unacceptable, and self-realisation requires voluntary exchange; but for social democrats, governmental action to provide human services or income transfer programmes is vital to liberty, enabling people to subsist and associate outside of exploitative relations of capitalist economic development (Esping-Andersen, 1990, Rothstein & Uslaner, 2005). In deploying the ends of neoliberalism as evaluation criteria, this article has focussed primarily on the means of realising liberty, not its substance.[5] We find that this means, as represented by the neoliberal retirement system, is a defective response to the question of financial welfare in old age, failing to confer rights and sovereignty on all Chilean workers, yet creating economic insecurity, disadvantage and increased poverty among the retiree.

The social democratic mainstream of social policy analysis (Esping-Andersen, 1990; Korpi & Palme, 1998; Rothstein & Uslaner, 2005) maintains that the neoliberal model is defective because it diminishes opportunities for solidaristic association. While we would not disagree with this argument, it has been well rehearsed in the literature of pensions, and our analysis is concerned with liberty. We maintain instead that pension failure in Chile reflects a range of barriers to self-realisation and autonomy including impaired rationality, and inequalities in the distribution of information, resources and opportunities. Fundamentally, the neoliberal model is defective because it focusses only on one set of barriers, as represented by coercive intrusion by other human agents. Its means of facilitating liberty with regard to retirement planning and old age—the two pillar retirement system juxtaposing compulsory self-provisioning and means-tested social security—fails to take account of the wider range of barriers that diminish liberty. What is required, going forward, is an approach to pension reform that is able to address the contingencies that shape individual capacities for self-realisation and autonomy. Paradoxically, a just retirement future for Chilean workers, defined in terms of the primacy of liberty, is most likely to be realised through a substantial measure of state intervention, compelling people to act in particular ways, and equalising the distribution of individual capacities exercise freedom.

[5] It is sometimes argued in the literature that neoliberals and collectivist exponents of welfare states endorse different types of liberty, suggesting that there is variation in its substance. Yet a closer inspection would suggest that any such distinction is spurious, for liberty always involves a three-place relationship between an agent, the actions she wishes to perform, and the obstacles that might circumscribe such action. The distinction between negative and positive liberty is "dangerously misleading" because "they are not two different notions at all but only incomplete references to the same underlying conception of freedom" (Goodin, 1982, p. 152). What may vary, of course, is the means by which freedom is protected or facilitated.

References

Acuña, R. & Iglesias, A. (2001) *Chile's Pension Reform after 20 Years*, Social Protection Discussion Paper series, No 0129, Washington, DC:, The World Bank

Alcock, P. (1985) "Socialist security: Where we should be going and why", *Critical Social Policy*, 5, 1, 217-233.

Armstrong, C. (2003) "Opportunity, responsibility and the market: interrogating liberal equality", *Economy & Society*, 32, 3, 410-427.

Barr, N. & Diamond P. (2006) "The Economics of Pensions" London School of Economics, LSE Research on line, eprints.lse.ac.uk/.../ec

Borzutzky, S. (2002) *Vital Connections: Politics, Social Security, and Inequality in Chile*, Notre Dame, IN: University of Notre Dame Press.

Borzutzky, S. (2012) "Pension market failure in Chile: Foundations, analysis and policy reforms", *Journal of Comparative Social Welfare*, 28, 2, pp. 103-112.

Borzutzky, S., & Hyde, M. (2015) "Chile's Social Welfare System: The Socio-economic Impact of Pension Privatisation and Health Reform", in Aspalter, C. (ed.), *Ashgate research companion on welfare state systems*, Aldershot: Ashgate

Comisión Marcel (2006) *Report Comisión Marcel*, Santiago, Chile http://www.bcn.cl/search?Subject:list=COMISION%20MARCEL

Crouch, C. (2011) *The Strange Non-Death of Neoliberalism*, Cambridge: Polity Press.

Dworkin, R. (2000) *Sovereign virtue: The theory and practice of equality*, Cambridge, MA: Harvard University Press.

Dworkin, R. (2011) *Justice for Hedgehogs*, The Belknap Press of Harvard University Press.

EFAMA, European Fund and Asset Management Association (2008) *Defined-contribution pension schemes: Risks and advantages for occupational retirement provision*, Brussels: European Fund and Asset Management Association.

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.

Esping-Andersen, G. (2003) "A Trans-Atlantic Perspective on Latin American Privatisation Policy", in Shatten Coelho, V. (ed.), *A Reforma de Previdência Social na America Latína*, Rio de Janeiro: Fundação Getulio Vargas.

Fazio, H. & Riesco, M. (1997) "The Chilean Pension Fund Associations", *New Left Review*, May/June, pp. 90-100.

Frei, E. (1965) *Primer Mensaje Presidencial*, 21st May. http://historiapolitica.bcn.cl/mensajes_presidenciales

Friedman, D. (1989) *The Machinery of Freedom: Guide to Radical Capitalism*, La Salle, Illinois: Open Court Publishing.

Friedman, M. (1962) *Capitalism and Freedom*, Chicago, IL: University of Chicago Press

Ginn, J. (2004) "Actuarial fairness or social justice? A gender perspective on redistribution in pension systems", a paper presented to the *CeRP Fifth Annual Conference*, Turin, June 25.

Goodin, R.E. (1982) "Freedom and the Welfare State: Theoretical Foundations", *Journal of Social Policy*, 11, 2, 149-176.

International Monetary Fund (2011) Chile: Financial System Stability and Assessment, Country Report 11/261, p. 46 https://www.imf.org/external/pubs/ft/scr/2011/cr11261.pdf

Harvey, D. (2005) *A Brief History of Neoliberalism*, Oxford: Oxford University Press.

Hyde, M. & Borzutzky, S. (2015) "Chile's 'Neoliberal' Retirement System? Concentration, competition, and economic predation in 'private' pensions", *Poverty & Public Policy*, 7, 2, 123-157

Hyde, M. & Borzutzky, S. (2016) *Rent-Seeking in Private Pensions: Concentration, pricing, and performance*, London: Palgrave, forthcoming.

Hyde, M., & Dixon, J. (2009) "A just retirement pension system: Beyond neoliberalism", *Poverty & Public Policy*, 1, 1–25.

Impávido, G., Lasagabaster, E. & García-Huitron, M. (2010) *New Policies for Mandatory Defined Contribution Pensions: Industrial Organisation Models and Investment Products*, Washington, DC: The World Bank.

Kay, S.J. (2003) "State Capacity and Pensions", Paper presented at the *LASA XXIV International Congress*, Dallas, March 27-29.

Korpi, W. and Palme, J. (1998) "The paradox of redistribution and strategies of equality: Welfare State institutions, inequality, and poverty in the western countries", *American Sociological Review*, 63, 5, 661-687.

Leiva, F. (2006) Chile's Privatised Social Security System: behind the Free Market Hype, A Scam, *Connections*, May/June, pp. 1-13.

Machan, T.R. (2006) *Libertarianism Defended*, New York: Ashgate.

Ministerio del Desarrollo, Chile, Resultados Encuesta CASEN 2013, http://www.ministeriodesarrollosocial.gob.cl/resultados-encuesta-casen-2013/

Minns, R. (2001) *The Cold War in Welfare: Stock Markets Versus Pensions*, London: Pluto Press.

Mitchell, O.S. and Utkus, S.P. (2004) *Pension Design and Structure: New Lessons from Behavioral Finance*, Oxford: Oxford University Press.

Modigliani, F. and Muralidhar, A. (2005) *Rethinking Pension Reform*, Cambridge: Cambridge University Press

Musgrave, R.A. (1986) *Public Finance in a Democratic Society: Collected papers of Richard A Musgrave*, Brighton: Wheatsheaf Books.

Nozick, R. (1974) *Anarchy, State and Utopia*, New York: Basic Books.

OECD, Organisation for Economic Cooperation and Development (2013) *Pensions at a Glance: OECD and G20 Indicators*, Luxembourg: Organisation for Economic Cooperation and Development. https://www.google.com/?gws_rd=ssl#q=organisation+for+economic+cooperation+and+development+%28oecd%29+2013+pensions+at+glance

Olsaretti, S. (2004) *Liberty, Desert and the Market: A Philosophical Study*, Cambridge: Cambridge University Press

Pennington, M. (2011) *Robust Political Economy: Classical Liberalism and the Future of Public Policy*, Cheltenham: Edward Elgar

Petras, J.F. & Leiva, F.I. with Veltmeyer, H. (1994) *Democracy and Poverty in Chile: The Limits to Electoral Politics*, Boulder, CL: Westview Press.

Piñera, J. (1996) *Empowering Workers: The Radical Reform of Pensions in Chil*e, Washington, DC: Cato Institute.

Reisman, D. (1977) *Richard Titmuss: Welfare and Society*, Basingstoke: Macmillan.

Rodríguez, L.J. (1999) *Chile's private Pension System at 18: Its Current State and Future Challenges*, Washington, DC: The Cato Institute.

Rothstein, B. & Uslanner, E.M. (2005) "All for All Equality, Corruption, and Social Trust", *World Politics*, 58, 1, 41-72.

Schokkaert, E., & Van Parijs, P. (2003) "Social ustice and the reform of Europe's pension systems", *Journal of European Social Policy*, 13, 3, 245–79

Shapiro, D. (2007) *Is the Welfare State Justified?*, Cambridge: Cambridge University Press.

Shapiro, D. (2010) "The Moral Case for Social Security Privatisation", in Hyde, M. and Dixon, J. (eds.), *Comparing How Various Nations Administer Retirement Income: Essays on Social Security, Privatisation, and Inter-Generational Covenants*, Lewiston, NY: Edwin Mellen Press.

Srinivas, P.S. & Yermo, J. (1997), "Do Investment Regulations Compromise Pension Fund Performance? Evidence from Latin America", *Revista De Analisís Económico*, 14, 1, 67-120.

Tanner, M.D. (ed.) (2004) *Social Security and Its Discontents*, Washington, DC: The Cato Institute.

Titmuss, R.M. (1974) *Social Policy*, London: George, Allen and Unwin.

Van Parijs, P. (1995) *Real Freedom for All: What (if anything) can Justify Capitalism?*, Oxford: Oxford University Press

Veghte, B.W. (2015) "Social Inequality, Retirement Security, and the Future of Social Security", *Poverty & Public Policy*, 7, 2, 97-121.

White, S. (2007) *Equality*, Cambridge: Polity Press

Wolff, J. (1991) *Robert Nozick: Property, Justice and the Minimal State*, Cambridge: Polity Press.