towards a new pensions settlement

THE INTERNATIONAL EXPERIENCE, VOLUME II

EDITED BY
GREGG McCLYMONT
AND ANDY TARRANT

policy network

TOWARDS A NEW PENSIONS SETTLEMENT

About Policy Network

Policy Network is an international thinktank and research institute. Its network spans national borders across Europe and the wider world with the aim of promoting the best progressive thinking on the major social and economic challenges of the 21st century.

Our work is driven by a network of politicians, policymakers, business leaders, public service professionals, and academic researchers who work on long-term issues relating to public policy, political economy, social attitudes, governance and international affairs. This is complemented by the expertise and research excellence of Policy Network's international team.

A platform for research and ideas

- Promoting expert ideas and political analysis on the key economic, social and political challenges of our age.
- Disseminating research excellence and relevant knowledge to a wider public audience through interactive policy networks, including interdisciplinary and scholarly collaboration.
- Engaging and informing the public debate about the future of European and global progressive politics.

A network of leaders, policymakers and thinkers

- Building international policy communities comprising individuals and affiliate institutions.
- Providing meeting platforms where the politically active, and potential leaders of the future, can engage with each other across national borders and with the best thinkers who are sympathetic to their broad aims.
- Engaging in external collaboration with partners including higher education institutions, the private sector, thinktanks, charities, community organisations, and trade unions.
- Delivering an innovative events programme combining in-house seminars with large-scale public conferences designed to influence and contribute to key public debates.

www.policy-network.net

TOWARDS A NEW PENSIONS SETTLEMENT

The International Experience

Volume II

Edited by
Gregg McClymont and Andy Tarrant

policy network

ROWMAN & LITTLEFIELD
INTERNATIONAL

London • New York

Published by Rowman & Littlefield International Ltd
Unit A, Whitacre, 26-34 Stannary Street, London, SE11 4AB
www.rowmaninternational.com

Rowman & Littlefield International Ltd. is an affiliate of Rowman & Littlefield
4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706, USA
With additional offices in Boulder, New York, Toronto (Canada), and Plymouth (UK)
www.rowman.com

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: PB 978-1-78660-710-2
ISBN: eBook 978-1-78660-711-9

Library of Congress Cataloging-in-Publication Data

Library of Congress Control Number: 2017958878

♾™ The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48-1992.

Printed in the United States of America

CONTENTS

FOREWORD

Martin Gilbert

One of the biggest public policy challenges of this century is retirement. Specifically, in a world of ageing populations, how do governments ensure that savings grow large enough to enable citizens to retire in comfort and decency? This question is all the more urgent in the midst of a global shift from defined benefit to defined contribution pensions. As governments and employers reduce their exposure to risk by closing pension schemes underwritten by their guarantees, the onus is increasingly on individuals to make their own provision. The democratisation of risk is the result: greater rights for individuals, but greater responsibilities too in the managing of the risks which investment, inflation and longevity bring. Asset managers and pension schemes must also adapt to the growth of defined contribution – providing appropriate investment strategies and associated services which help individuals manage their risks and meet their retirement objectives. This interesting book illuminates the variety of provision existing among nations which are early adopters of defined contribution. Best and worst practice is always worth learning from and each chapter is written by an expert on his or her own countries' pension system. As the world gears up for the age of defined contribution pensions, this is a good place to start.

INTRODUCTION

Gregg McClymont and Andy Tarrant

Last year our book *Towards a New Pensions Settlement: The international experience* looked at countries hailed as recent trailblazers in workplace pension reform.[1] This volume, casts the net wider and asks whether the lessons drawn in volume one are supported by the experience of defined contribution pension schemes among some of their earliest adopters. The countries reviewed by national experts in this publication are: Chile, Denmark, Hong Kong, Ireland, Mexico, New Zealand, Singapore and the United States.

Key themes which emerged in our previous book resurface throughout volume two: costs and charges, transparency, scale provision, governance, and the particular challenges of decumulation. Regulatory weaknesses identified as problems in our first review are confirmed as flaws common in systems dominated by defined contribution provision. Two further issues are prominent in this volume. First, the setting of minimum contribution levels too low to generate reasonable retirement incomes. Second, the potentially negative impact of early access to pension savings. The wider importance of investment in delivering decent retirement savings and retirement incomes is examined in the concluding chapter.

COSTS, CHARGES, TRANSPARENCY

Costs and charges can occur at three levels: the administration layer, where contributions from savers are collected and income paid out; the fund layer, where the sums collected at the administration layer are invested and fees are charged by the fund manager; and by the fund layer, where the costs of undertaking investment with other intermediaries are deducted from the monies in the fund. Concern over high costs and charges are noted in the Chile, Hong Kong, Ireland, Mexico and United States chapters. Although the Hong Kong and New Zealand chapters do not focus on this, there is regulatory action in the former to lower charges which are high by international standards,[2] while in New Zealand a debate is emerging regarding the costs of active management.[3] In Chile, high administration costs are a major political issue capable of provoking public demonstrations.[4] In the US, notes our author, "average fees for small plans are about two per cent, with many plans paying more. Paying two per cent or more in fees makes investing prohibitively expensive and cuts balances at retirement nearly in half compared to a no-fee world."[5] Denmark sits at the other end of the spectrum: scheme total expenses ratios range from 0.1 per cent with ATP, the government-backed provider, to one per cent in total. Furthermore, these costs and charges are transparent.

The Need for Scale Provision

Size potentially makes a huge difference to the ability of a pension scheme to negotiate reasonable fees with administrators and fund managers. Administration of pension schemes is dominated by fixed costs, so fragmentation penalises members of small schemes. But size is also related to expertise: generally speaking, large schemes can attract more qualified professionals, especially on the investment side. Some of the regimes explored in this volume have been good at facilitating the rise of schemes with scale: Denmark, Mexico and Chile. Others have been poor at doing so: Hong Kong, Ireland and New Zealand. In the US there are mega schemes, but too few.

Governance

Scale is a necessary condition for good outcomes, but it is not a sufficient one. In Chile, Hong Kong and Mexico, economies of scale have facilitated provider monopolies, whether because of the design of the market or, as in Mexico's case, because consumers did not behave as rational utility-maximising *homo economicus*.[6] The implication of the Mexico chapter is that aligning provider incentives to the provision of quality products matters: this is perhaps best achieved via fiduciary duties. A move in this direction has recently taken place in the US where the Obama administration imposed a fiduciary duty on brokers who sell individual retirement accounts and encourage employees to switch from workplace pensions.[7] In Denmark and New Zealand, workplace schemes are required to have trustees in place. Denmark provides a good example of alignment of interests between provider and beneficiaries, since employee representatives typically have a majority of seats on provider boards.

AT RETIREMENT

A theme throughout the book (especially in the Chile, Hong Kong, Ireland, Mexico, New Zealand and US chapters) is that retirement-free markets do not spontaneously generate efficient mass-market products via supply and demand. This, of course, was a feature of volume one, where the Australian and United Kingdom markets were examined in detail. For providers there can be a temptation to facilitate the customers to default to higher-cost, in-house products. Equally, most savers are subject to behavioural biases which render demand a poor instrument for correcting such temptations on the part of providers. Chile and Denmark both have good retirement default systems. In the case of Chile, retiring members must purchase an income drawdown product or an annuity – the latter purchased via an automated national brokerage service to ensure value for money. But the income from the purchased annuity must be higher than the level of the Minimum Pension [income] Guarantee (MPG) set by government.[8] Otherwise, income drawdown is the default, set at the level of the MPG or above, and tailored to the expected longevity of the saver. The state underwrites the policy to this extent: if the money runs out, it guarantees the retiree an income equivalent to the MPG (distributed via the provider).

Low Levels of Contribution

The Chile, Hong Kong, Mexico, New Zealand and US chapters confirm that automatic enrolment at low contribution levels does not have a ratchet effect: additional voluntary contributions do not follow. The evidence suggests that state-mandated increases are required in such systems. Auto-escalation of contributions, such as practised in the US, could also play a potential role. However, the limits of this approach are not widely understood. First, auto-escalation demands additional resources directed at member education and communication exercises – thus it is large employers in the US which have pioneered Save More Tomorrow defaults. Second, and more fundamentally, in a system where members move their pot from employer to employer (and thus scheme to scheme) many times over a working life the frictional costs become significant. Transfers are not common in the US system. Third, in a world of stagnating wages the flaw in auto-escalation is obvious.[9] Denmark and Singapore are exceptions to the problem of too-low contributions: in the former, employers and trade unions have proven capable of exercising long-sighted and responsible governance for the collective good. In the latter, the state mandates individual and employer contributions, although the effect of higher contributions is diluted by the multiplicity of social welfare objectives (eg. health-care costs) with a claim on these savings.

USING RETIREMENT SAVINGS TO PURSUE MULTIPLE POLICY GOALS

It is axiomatic in public policy theory that a single instrument should not be used to pursue multiple policy goals.[10] Policymakers in most countries seek to ensure that pension saving is not diverted away from generating a pension. However, policymakers are sometimes tempted to ignore the axiom – offering consumers the opportunity both of spending retirement savings during their working lives and of retiring on these same savings. Singapore and the US provide examples of pension saving directed at multiple objectives. In Singapore, withdrawals are permitted, *inter alia*, for medical needs, home ownership, investment and the financing of higher education. In the US, moving employer is an additional opportunity for "cashing in", not least because the choice is binary – become a deferred member or cash out totally. In both countries, the consequences of early access are damaging.

New Zealand offers a variation on this theme. Access to Kiwisaver (the defined contribution second pillar) deposits for purchasing houses was circumscribed until after the 2008 financial crash when, in the context of a housing price boom, access was permitted to the whole savings pot for the purposes of buying a first home. The consequence has been a substantial increase in total withdrawals.[11] While it is too early to measure the impact on retirement outcomes, in the absence of an increase in housing supply the aggregate effect of such a policy should be rising house prices. Such an outcome would be the reverse of what was intended: rather than enabling younger generations to acquire assets, rising prices in this scenario transfer savings from young house buyers to older property owners. Whether or not this matters for retirement savings depends on the extent to which savings are in fact released in practice and transferred. The New Zealand case remains under-researched so far.

THE UK CONTEXT

The previous volume contained a chapter on the UK system. We argued that: "The UK chapter illuminates serious structural defects in the current UK occupational pension system. These defects are sufficiently serious that the new UK government will continue to be pressured in the direction of further reform to ensure privately provided workplace pensions are demonstrably value for money."[12] This conclusion so far seems plausible, even if Brexit is likely to absorb the vast majority of government energies for at least the next 18 months. Nonetheless, there has been progress on four fronts in the short period since we wrote our first analysis.

Transparency of Costs and Charges

It now seems that greater transparency of costs and charges will be delivered by the government. This will help inform an existing requirement in law that trustees of occupational schemes verify to members that they are achieving value for money and act to pursue it. The duty on contract-based schemes, via independent governance committees, is more ambiguous, as the legal duty of contract-based schemes, unlike trust-based schemes, is to maximise returns to shareholders. The vast majority of contract-based schemes are provided by vertically integrated companies combining pension administration and fund management.

Governance

The Pensions Regulator has indicated it will enforce good practice more rigorously among trustees of defined contribution schemes. There appears to be less emphasis on the contract side. The independent governance committees were to be subject to a forthcoming regulatory review,[13] but this has been shelved. The only sustained examination of the outputs of these committees found variation in quality, with improvements in the second year of annual reports.[14]

Regulation

We previously summarised the regulatory landscape as follows: a trust-based regulator, the Pensions Regulator, with ambition, but limited powers; and a contract-based regulator, the Financial Conduct Authority (FCA), with broad powers, but limited ambition. Since then, the Pensions Regulator has acquired substantive regulatory powers pertaining to trust-based multi-employer schemes under the Pension Schemes Act 2017 and it has signalled that it will exercise those powers. The degree to which it can intervene in relation to sub-scale, poorly governed and poorly managed single company schemes is far less clear, and this ought to be a focus in the future. Meanwhile, the FCA is accruing pension market expertise and it has conducted a wide-ranging asset management market study. The latter recommended, *inter alia,* that mechanisms to encourage consolidation among pension schemes in the UK were urgently needed to strengthen the buy side in the defined contribution institutional marketplace.

Retirement Income

We noted in volume one the tension between an accumulation phase characterised by defaults and a decumulation phase absent defaults. The government's response is to offer savers – the vast majority of whom refuse to take regulated financial advice – a non-mandatory short "guidance" interview to help them navigate a complex one-off purchase, the impact of which will last for the rest of their life. This outcome is hardly what savers say they want from a pension system, which is "pension provision that supports members' best interests without requiring active customer choice."[15] The case for having default products, which meet the needs of the majority of actual consumers in this new market is obvious on efficiency grounds. The FCA has indicated as much in its interim retirement market report. However, it remains to be seen whether the power of inertia is strong enough to overcome the lure of immediate access to large sums of money. Individuals on the whole struggle to take into account the way in which projections of their own longevity, inflation and rates of interest or investment returns reduce the value of this lump sum over time. As an economist would put it, "discounting the present value of future cash flows" is an approach too complex for many to adopt.

Since the government introduced greater pension freedoms, consumer behaviour has been characterised by the total withdrawal of funds from the retirement market.[16] This might be explained by the widespread existence of defined benefit pension incomes among those aged over 55. Turning a potentially small additional retirement income stream into a lump sum can make sense for individuals with defined benefit pensions. However, an in-depth, qualitative study of UK savers who only have defined contribution pensions dispels illusions of engaged consumers. The overwhelming behavioural response at retirement is inertia, which increases with the provision of more information.[17] Those that do make a 'positive' choice switch to cash or cash-like products (in other words, exit from the retirement income market). Even the rapidly growing numbers who have gone into investment drawdown have often done so simply to access their tax-free lump sum.[18] This is consistent with George Akerlof's 1970 paper, 'The Market for Lemons', whereby consumers exit dysfunctional markets because of the difficulty of distinguishing good from bad products. In our previous volume we applied this theory of market failure resulting from information asymmetries (in Akerlof's example, the market for second hand cars) to the private pensions market. Extending the analogy, the government appears currently to be going down the economically inefficient, and implausible, route of suggesting that every consumer should become a car mechanic.

Since our first volume a complicating factor has emerged in the form of the Lifetime ISA, a new product explicitly designed for the retirement market. From April 2017, the LISA competes with workplace pensions for the attention of those under 40. Its generous government top-up of £1 for every £4 saved up to a maximum of £4,000 per annum has obvious attractions, as does the accessibility (up to £450,000 can be withdrawn for a first property, and the entire amount withdrawn at any point subject to the loss of all accumulated tax relief). The FCA has insisted that LISAs should only be sold with a risk warning that in effect sets out their inappropriateness for most people as a vehicle for retirement savings. The LISA sets out to meet two different policies: increasing purchasing power for house purchases and increasing retirement saving. This makes the LISA a classic example of a policy tool being used for two competing and potentially contradictory objectives.

To sum up: for a whole host of behavioural finance reasons – inertia chief among them – the broad mass of the population has never engaged with the complexities of pension products. Surprisingly, UK policymakers, who have developed an advanced capability for the application of behavioural economics to policy making[19] and used it to design automatic enrolment for savings, have until recently declined to apply it to retirement products. Government, regulators and the industry face a huge challenge in building a retirement income market which consumers trust and which meets their needs.[20] However, the content of the FCA retirement outcomes interim study is potentially a turning point.

NOTES

1. *Towards a New Pensions Settlement: The international experience* (Rowman and Littlefield, 2016).
2. South China Moring Post (2016) *Hong Kong pensioners can now take out MPF savings by monthly instalments* http://www.scmp.com/business/money/investment-products/article/1903239/hong-kong-pensioners-can-now-take-out-mpf-savings Last accessed: 10/10/2017.
3. The Spinoff (2016) *A war has broken out in Kiwisaver – here's why the big banks and funds are freaking out* http://thespinoff.co.nz/society/07-12-2016/a-war-has-broken-out-in-kiwisaver-heres-why-the-big-banks-and-funds-are-freaking-out/ Last accessed: 10/10/2017 Readers outside the UK may also be interested in the market study, including research into the relative merits of active versus passive management conducted by the UK's FCA: Financial Conduct Authority (2017) *Asset management market study* https://www.fca.org.uk/publications/market-studies/asset-management-market-study Last accessed: 10/10/2017.
4. See Chile chapter.
5. See US chapter.

6. See Mexico chapter.

7. See US chapter. The Trump administration is, however, reviewing whether to maintain this rule. The Financial Times has noted US industry expectations that if brokers were required to act in the interest of their members then they would direct them more often to passive investing: Stephen Foley & Alistair Gray (2017) *Trump puts brake on 'client first' fiduciary rule protecting retirees* https://www.ft.com/content/efcdddf0-e186-11e6-8405-9e5580d6e5fb Last accessed: 10/10/2017.

8. Rocha, R. and Thorburn, C. Developing Annuities Markets. The experience of Chile, World Bank, 2007.

9. It is interesting that New Zealand, which is often innovative in public policy, is considering mandatory across-the-board increases but not auto-escalation.

10. The danger is of different goals requiring a contradictory operation of the single public policy instrument. Tinbergen, Jan. On the Theory of Economic Policy. North-Holland Pub. Co., 1952.

11. Susan St John, "New Zealand's Kiwisaver Lessons for Ireland" (September 2016). Presented to Insurance Ireland's summit "A universal pension for Ireland" Held in Dublin on 13 September 2016.

12. Op cit. p.1.

13. Financial Conduct Authority (2016) *Business Plan 2016/17* https://www.fca.org.uk/publication/corporate/business-plan-2016-17.pdf Last accessed: 10/10/2017.

14. Henry Tapper (2016) *The Transparency Symposium* https://henrytapper.com/2016/04/13/igcs-and-the-transparency-task-force/ Last accessed: 10/10/2017.

15. IPPR (2013) *Defining ambitions: Shaping pension reform around public attitudes* https://www.ippr.org/publications/defining-ambitions-shaping-pension-reform-around-public-attitudes Last accessed: 10/10/2017.

16. Financial Conduct Authority (2016) *Retirement Outcomes Review* https://www.fca.org.uk/publication/market-studies/retirement%20outcomes%20review%20tor.pdf, p.21 Last accessed: 10/10/2017.

17. The People's Pension (2016) *New Choices, Big Decisions* https://bandce.co.uk/wp-content/uploads/2016/03/ssga-tpp-report-new-choices-big-decisions.pdf Last accessed: 10/10/2017.

18. Retirement Outcomes Review, Interim Report (FCA, 2017), 58.

19. Behavioural Insights Team (2014) https://www.gov.uk/government/organisations/behavioural-insights-team Last accessed: 10/10/2017.

20. The example of the annuity market is not encouraging: Financial Conduct Authority (2016) *Implementing information prompts in the*

annuity market https://www.fca.org.uk/publication/consultation/cp16-37.pdf Last accessed: 10/10/2017; see also Whitcombe L (2015) in moneywise http://www.moneywise.co.uk/news/2015-07-21/beware-the-10k-difference-income-drawdown-costs Last accessed: 10/10/2017.

THE UNITED STATES

Alicia H Munnell

A consensus is emerging in the United States that many people will not have enough money to maintain their standard of living once they stop working. The problem is that people need more retirement income than in the past because they are living longer, continuing to retire early, experiencing high and rapidly rising health care costs and facing low interest rates. At the same time, they will receive less from government and workplace retirement plans.[1]

Social security benefits relative to pre-retirement earnings will decline as the statutory retirement age moves from 65 to 67, premiums for retiree health insurance take a larger share of the benefit, and more people pay taxes on their benefits. While Social Security's progressive benefit formula provides low earners with higher benefits relative to earnings, these workers often claim early and receive actuarially reduced amounts. The situation could be much worse if the government fails to act before the Social Security trust fund runs out of money in the early 2030s, at which time benefits would have to be cut immediately by an additional 25 per cent.

In this environment, it is crucial that everyone saves on their own through a workplace retirement plan (the second pillar) and that these plans function efficiently. Unfortunately, the balances in defined contribution accounts – the dominant type of workplace plan – are modest, in large part because the government has not mandated the automatic provisions that would make these plans function effectively. More importantly, only half of the private sector workforce has any type of workplace plan at any given time, and the federal government has failed to enact legislation that would automatically enrol these uncovered workers into some type of saving arrangement. In the face of federal inaction, the states have stepped into the breach and are in the process of setting up retirement programmes that would require that employers without a retirement plan must automatically enrol their employees into an Individual Retirement Account. Of course, 50 different retirement plans across the country is not an ideal solution.

The third pillar, individual saving, is important only for those with very high incomes. Virtually all the retirement saving in the US occurs through workplace plans. The major exception is the house, where people build up home equity by paying down their mortgage. Home equity is the largest asset for middle-income families. At this point, though, most households do not access their home equity to cover consumption in retirement, either by downsizing or taking out a reverse mortgage.

OVERVIEW OF THE DEFINED CONTRIBUTION SYSTEM

Until the early 1980s, most workers lucky enough to be covered by a workplace retirement plan relied solely on a defined benefit plan, which – at retirement – provides a lifetime benefit based on earnings and years of service. Today, most rely solely on defined contribution plans, which are savings accounts that shift all risk to the individual. These plans have four serious problems: they are totally voluntary; extremely expensive for small employers; substantial money leaks out; and they cover only half the private sector workforce.

Taking each of these problems in turn: First, the voluntary nature of defined contribution plans. Because employees can decide whether or not to join their employer's plan and how much to contribute, only about 80 per cent of eligible participants join the plans and the median level of combined employer-employee contributions to these plans are only nine per cent of earnings.[2] Both these statistics could be improved by taking advantage of the findings from behavioural economics and making all plans adopt automatic provisions – with the ability for workers to opt out. Policymakers moved towards making defined contribution plans more automatic with the Pension Protection Act 2006, but that legislation only encouraged – rather than required – adoption of automatic provisions. As a result, less than 50 per cent of plans have automatic enrolment, and in many cases this feature is applied only to new entrants – not the entire workforce – so the impact is limited.[3] Moreover, only about one-third of those with automatic enrolment also have automatic escalation in the default deferral rate.[4] Without automatic escalation, inertia tends to lock people who have joined the plan by default into low contribution rates.[5] Balances could be increased by mandating automatic enrolment for the entire workforce, with deferral rates set at a meaningful initial level and with annual automatic escalation in the deferral rate – to a combined employer-employee contribution rate of 12–15 per cent.

Second, leakages. These leakages take two forms. First, roughly half the money coming into all workplace defined contribution plans is rolled over into IRAs. Second, roughly 1.5 per cent of assets leak out of the combined defined contribution and IRA system each year. The two phenomena have different implications.

While workplace plans serve as the gateway for retirement saving, roughly half of defined contribution balances get rolled over to IRAs, making them the largest single repository of retirement plan saving in the US.[6] This rollover activity is extraordinary, given that participants are typically passive in their interactions with their plans. Several factors are at play. One is that it is very difficult to roll over money from one workplace defined contribution plan to another. In addition, some households are attracted by a wider menu of investment options or the ability to consolidate their account holdings. Others, however, appear to be seduced by advertisements from financial services firms urging participants to move their funds out of their “old”, “tired” defined contribution plan into a new IRA. But the shift from defined contribution plans to IRAs moves the employee’s money to a less protective regulatory environment and potentially higher fees.[7]

The second type of leakage is more pernicious because the money is spent and not available to support retirement. Leakages can occur through three channels: in-service withdrawals (hardship withdrawals and withdrawals after age 59 and a half), “cash out” when changing jobs, and loans. Participants cashing out when they change jobs is by far the largest source of leakage, and, again, one of the major reasons for cashing out is the difficulty of rolling over balances within the defined contribution system. Our estimates are that roughly 1.5 per cent of assets are cashed out from plans and IRAs each year, reducing balances at retirement by about 25 per cent.[8] This estimate represents the overall impact for the whole population, averaged across both those who tap their savings before retirement and those who do not. So, for those who do take money out, the problem is more severe than indicated by these estimates.

The third problem identified at the outset is the high expenses associated with small plans. Economies of scale are very important in the defined contribution environment. In large plans (over $100m in assets) fees are generally below one per cent – the largest plans are usually below 0.50 per cent. In contrast, average fees for small plans are about two per cent, with many plans paying more.[9] Paying two per cent or more in fees makes investing prohibitively expensive and cuts balances at retirement nearly in half compared to the situation if there were no fees.

Fourth, coverage is not universal. At any moment in time, less than half of private sector workers participate in any type of retirement plan.[10] This statistic has been relatively constant since the 1970s. Of those not covered by a retirement plan, roughly 20 per cent work for an employer with a plan. Most of these workers are simply ineligible for their employer plan, but some of them chose not to participate. The remaining 80 per cent who lack coverage are employed by a firm without a plan and the bulk of these employees work for small employers (firms with less than 100 workers). This lack of coverage means that some workers end up at retirement with no source of income other than social security; and others cycle in and out of coverage, producing very small accumulations of retirement assets.

EFFORTS TO EXPAND COVERAGE

Policymakers have recognised the coverage gap and have proposed new products and approaches for getting coverage to uncovered workers. With very little progress at the federal level, however, the states have started to undertake their own initiatives.

Federal Initiatives for Expanding Coverage

Federal initiatives to expand coverage have taken two tacks. One is the introduction of specially designed retirement plans that could be adopted by small business. The fact that the coverage rate has not improved since the 1970s suggests these efforts have had little impact. More recently, the US Treasury has introduced a starter retirement savings account (*my*RA) for those without coverage with their current employer, which is free of investment risk and fees, but so far has seen little take-up. President Obama and Congress both presented proposals to make it easier to set up multiple employer defined contribution plans.[11] These plans would allow unrelated small employers to offload a portion of the administrative burdens and fiduciary responsibilities to a third party, which would substantially reduce the costs for small businesses. The second tack is comprehensive automatic enrolment proposals, the most prominent of which was President Obama's Auto-IRA for those without coverage with their current employer. Under the plan, employers with more than 10 employees and no pension coverage would be required to place three per cent of an employee's salary in an IRA. The proposal provided a tax credit to help small businesses with implementation costs. The employee could opt out of the plan. Unfortunately, no legislation has been enacted at the federal level to solve the coverage problem. Instead, the states have stepped into the breach.

State Initiatives

States have adopted a variety of approaches to expand coverage for their uncovered private sector workers.[12] Two states – Washington and New Jersey – have adopted a "marketplace approach," which provides employers with education on plan availability and makes pre-screened plans available through a central website. The absence of a mandate and the fact that small businesses have shown little interest in adopting retirement plans makes it unlikely that the marketplace approach will have much effect on coverage. Other states, such as Massachusetts, are toying with having both an Auto-IRA system and a state-run multiple employer defined contribution plan. The drawback to the multiple employer approach in the US framework is that the state cannot impose a mandate on employers to automatically enrol their workers in such a plan.[13]

The most prevalent and promising approach is the Auto-IRA model, similar to that proposed by President Obama. Under this model, the state imposes a mandate on employers without a retirement plan to automatically enrol their employees in an IRA. California, Connecticut, Illinois, Maryland and Oregon have all passed legislation, with plans to have their programmes up and running within the next two years. In all cases, the participants must bear all programme costs without help from the taxpayer.

In the early stage of the process, the states struggled with even basic questions about programme design. Research in Connecticut and California showed that most uncovered workers automatically enrolled in a programme would not opt out, and that opt-out rates did not vary much for contribution rates between three and six per cent.[14] Hitherto, the states have decided generally upon:

contribution rates of between three and six per cent; a "Roth" IRA where the employee puts in after-tax contributions, making withdrawals easier for a lower-income population that receives little value from tax deductibility; and administration by a third party with state oversight.

Surveys of employers suggested that they are lukewarm about the proposed programmes. They are sceptical of the state's ability to manage such a programme, citing its struggles with its own pension plans. Second, they resent the mandate. Finally, they worry about the administrative burden of enrolling employees and explaining the programme to them. However, despite these concerns, surveys suggest that employers will not encourage their workers to opt out.[15] Nonetheless, the election of President Trump casts a shadow over this whole area of reform.

A financial feasibility study for Oregon showed that state programmes should anticipate losses due to the start-up costs and annual deficits from operations in the early years.[16] The magnitude of the annual operating deficits depends crucially on: the record-keeper's cost per account and the money generated from participant fees on assets under management, which in turn depends on the contribution rate. The estimates for Oregon, assuming a $30 per account record-keeping cost, a six per cent contribution rate and a participant fee of 1.2 per cent, is that the break-even point will not occur for seven years. The states must decide how to finance these start-up costs and operating deficits. The two options are: hiring sellers willing to take on the risk with long contracts and having the state take out a loan to subsidise losses in the early years, which would be paid back from surpluses in later years.

Even if the states are successful in setting up a tier of retirement income for their citizens, this approach to implementing a retirement programme is clearly a second-best alternative. A national Auto-IRA plan would be a much more efficient way to close the coverage gap, offering substantial economies of scale and avoiding the laborious, time-consuming and expensive process of setting up 50 different state plans.

CONCLUSION

The US retirement system faces a large number of challenges and many people will enter retirement without adequate resources to maintain their standard of living. The situation, however, could be greatly improved with three pieces of federal legislation that would: restore solvency to the social security system; make automatic provisions in defined contribution plans mandatory; and automatically enrol uncovered workers in some type of retirement plan.

NOTES

1. Ellis, Charles D., Alicia H. Munnell, and Andrew D. Eschtruth. 2014. *Falling Short: The Coming Retirement Crisis and What to Do About It*. New York, NY: Oxford University Press.

2. Munnell, Alicia H. 2014. "401(k)/IRA Holdings in 2014: An Update from the SCF." *Issue in Brief* 14–15. Chestnut Hill, MA: Center for Retirement Research at Boston College. & Vanguard. 2016. "How America Saves 2016: Vanguard 2015 Defined Contribution Plan Data." Valley Forge, PA: Vanguard Institutional Investor Group.

3. Vanguard. 2016. "How America Saves 2016: Vanguard 2015 Defined Contribution Plan Data." Valley Forge, PA: Vanguard Institutional Investor Group.

4. Plan Sponsor Council of America. 2014. 57th Annual Survey of Profit-Sharing and 401(k) Plans. Chicago, IL: Plan Sponsor Council of America.

5. Vanguard. 2016. "How America Saves 2016: Vanguard 2015 Defined Contribution Plan Data." Valley Forge, PA: Vanguard Institutional Investor Group.

6. ICI (2016) estimates that 85 per cent of IRA assets are held in traditional IRAs. Of traditional IRAs, 86 per cent were opened with rollovers in 2013. For more information on the role of IRAs in retirement savings, see Holden and Schrass (2016). Investment Company Institute. 2016. "2016 Investment Company Fact Book." Washington, DC.

7. The US Department of Labor has recently moved to improve regulatory protections for IRAs; however, this effort is being challenged in the courts and could take a while to go into effect. For a discussion of the

regulatory environment for retirement savings, absent these reforms, see Borzi (2011). Borzi, Phyllis F. 2011. Testimony before the House Committee on Education and the Workforce, Subcommittee on Health, Employment, Labor, and Pensions. July 26, 2011.

8. Munnell, Alicia H. and Anthony Webb. 2015. "The Impact of Leakages from 401(k)s and IRAs." Working Paper 2015-2. Chestnut Hill, MA: Center for Retirement Research at Boston College.

9. Alfred, Ryan. 2015. "The One Chart that Explains 401(k) Fees." San Diego, CA: BrightScope.

10. The statistics on participation and coverage are from the US Census Bureau's *Current Population Survey*. U.S. Bureau of the Census. *Current Population Survey*, 1980–2015. Washington, DC.

11. Executive Office of the President. 2016. *The President's Budget for Fiscal Year 2017*. Washington, DC: Office of Management and Budget; U.S. Congress. 2013. SAFE Retirement Act of 2013. S. 1270, 113th Congress. Washington, DC; U.S. Congress. 2014a. Retirement Security Act of 2014. S.1970, 113th Congress. Washington, DC; U.S. Congress. 2014b. USA Retirement Funds Act. S.1979, 113th Congress. Washington, DC.

12. Georgetown University Center for Retirement Initiatives. 2016. State Activity Updates. Available at: http://cri.georgetown.edu/states/.

13. Munnell, Alicia H., Anek Belbase, and Geoffrey T. Sanzenbacher. 2016. "State Initiatives to Cover Uncovered Private Sector Workers." Issue in Brief 16-4. Chestnut Hill, MA: Center for Retirement Research at Boston College.

14. Belbase, Anek, Alicia H. Munnell, Nari Rhee, and Geoffrey T. Sanzenbacher. 2016. "State Savings Initiatives: Lessons from California and Connecticut." *Issue in Brief* 16-5. Chestnut Hill, MA: Center for Retirement Research at Boston College.

15. Belbase, Anek, Alicia H. Munnell, Nari Rhee, and Geoffrey T. Sanzenbacher. 2016. "State Savings Initiatives: Lessons from California and Connecticut." *Issue in Brief* 16-5. Chestnut Hill, MA: Center for Retirement Research at Boston College.

16. State of Oregon. 2016 (forthcoming). Reports on Market Analysis and Financial Feasibility for Oregon Retirement Savings Plan. Salem, OR.

CHILE

Rossana Castiglioni

During Chile's period of military rule between 1973 and 1990, the country experienced a structural pension reform that brought to an end the pay-as-you-go system. After November 1980, a series of decrees created a privatised pension model that, in many significant respects, remains in place today. This new pension model eliminated employer contributions and introduced a defined contribution scheme that passed investment risks from the state to individuals, requiring employees to save at least 10 per cent of their taxable income in personal accounts. Membership was mandatory for all employees entering social security after May 1981, but optional for self-employed workers.

Individual savings are administered by private-sector funds – Administrators of Pension Funds (AFP) – the operations of which are monitored by the state through the AFP supervisor. AFPs replaced the former retirement funds (except for those of the armed forces and the police). They charge workers a commission to administer their savings. Workers can choose freely the AFPs to which they entrust their savings and can change to another AFP at any time.

The system provides retirement, disability and survivor pensions. Retirement income needs are met by the accumulation of the employee's contributions across his or her working life plus the profit generated by the AFP's investment of these contributions. Disability and survivor pensions are also financed by compulsory insurance, with contributions representing about 3.5 per cent of taxable income, and by the funds the worker accumulated until disability or the spouse's death occurred. An earlier decree in 1975 established a non-contributory, means-tested pension for poor people over 65 years of age, for the physically disabled over 18, and, after 1987, for the mentally ill.

Beneficiaries can select from the following retirement options: an immediate annuity that will allow people to get lifetime payments; an immediate annuity with part of the funds deducted from the individual capitalisation account and the remaining funds disbursed periodically through planned withdrawals; a deferred annuity, so that the insured person can plan withdrawals from the individual capitalisation account and define a future date for an annuity; and a planned withdrawal based on the insured person's life expectancy, unless he or she dies, in which case savings may be inherited.

For 18 years after the transition to democracy in 1990, only incremental adjustments to the system were made. These changes sought to curb the deterioration of pension's real terms value; introduced new pensions for those with a partial disability; standardised procedures for obtaining pensions from the individual capitalisation system; introduced mechanisms to increase the AFPs' investment returns; sought to improve the functioning of the existing AFP system; and advanced some modifications in the realm of annuities.

THE 2008 REFORMS AND AN INCREASED ROLE FOR THE STATE

The most important change after the initial establishment of the individual capitalisation system occurred in 2008 and was, in part, the result of an unintended consequence of the changes introduced in the 1980s. The 1980 law provided that the state would ensure a guaranteed minimum pension to all insured workers with 20 years of contributions, so that if a worker reaching retirement age could not attain the minimum pension level, the state would make up the difference. This measure proved to be problematic not only because salaries and the level of contributions are, on average, relatively low in Chile, but also because the informal labour market is large. For this reason, scholars, policymakers and activists alike were concerned that at least half of workers were going to be unable to reach the minimum pension level. Women have been particularly vulnerable and prone to finding themselves below the minimum pension level because they have a lower participation in the labour market and receive comparatively lower salaries than male workers, and also because they enter and exit the labour market more often than their male counterparts due to insecure, informal work, pregnancy and maternity.[1] Experts, policymakers and social actors started to discuss the need for reforms to address these issues. Eventually, pension reform reflected the realisation – by both the government and the opposition – that, in the near future, a significant segment of the labour force was not going to reach the level of savings required to retire and that the state would have to transfer these resources, thereby pushing the pension system increasingly into deficit.

As a result, pension reform was a key priority for President Michelle Bachelet's first administration between 2006 and 2010. During the presidential campaign, some key figures belonging to the left Concertación coalition advocated pension reform. This was crucial in convincing Bachelet during the presidential campaign that she had the necessary political support to advance pension reform. Immediately after taking office, the new president put together a non-partisan, technical advisory commission with the goal of exploring the pension system's weaknesses and proposing reforms to address them.

In July 2006, this commission delivered a report with 70 policy recommendations. Based on some of the suggestions of the commission, the government submitted a package of reforms to Congress in May 2007. After an intense period of negotiation, the final version of these reforms was approved in January 2008. Throughout this period a key component of the parliamentary debate, within both the Congressional Commission of Finance, Labour and Social Security and the lower and upper chambers of Congress, were the projections of the adverse fiscal effects of failing to reform the pension system. Moreover, the trade unions which participated in the pension reform debate were generally sympathetic to the proposed reforms as they included the introduction of a so-called “solidarity pillar” and an increased role for the state in the administration of workers’ savings. Since most of the proposed measures did not threaten the interests of market stakeholders, the reform advanced without delay. Together, these factors facilitated the adoption of pension reform and gave policymakers strong incentives to back changes to the status quo. The pension reforms were implemented by the government in March 2008.

Thus the most sweeping changes to Chile’s pension system since its introduction in 1981 introduced a “solidarity pillar” by which the 40 per cent of the poorest individuals who had never contributed to the system – a figure which rose to 60 per cent by 2012 – became entitled to an old age pension (for individuals aged 65 and older) or a disability pension (for disabled individuals older than 18 and younger than 65). Low-income individuals, except for those who are members of the military or the police pension schemes, are also entitled to a solidarity pension supplement. This is a top-up benefit, proportional to the contributions made.[2] Thus both the basic solidarity pillar and the solidarity pension supplement were designed to reach individuals in the lowest income quintiles.

Additionally, under the new system, all women older than 65 who retired after 1 July 2009 are entitled to receive a state bond representing 10 per cent of 18 monthly minimum wages, for each child they have raised. Other modifications include giving people the option of membership of an AFP if they are not currently in work but would like to keep making contributions (such as women on maternity leave), as well as allowing pension fund savings to be divided when divorce occurs, providing new incentives for voluntary individual and collective savings, and other minor changes.

Perhaps the only important measure that had generated strong debate but was not approved was the one that could have allowed private and public banks to operate in the AFP market. This measure could have permitted, in turn, the emergence of a state-owned AFP. The main concern with this measure was that people might have preferred a public AFP, thus subjecting private AFPs to unfair competition. In the end, this proposal was defeated, in part thanks to strong lobbying by AFPs.

The pension reforms improved the monetary value of non-contributory pensions by 40 to 50 per cent and increased the number of beneficiaries, as the basic solidarity pension now covers 60 per cent of the poorest citizens.[3]

CURRENT DEBATES ON PENSION REFORM

When Bachelet took office for a second term in 2014, debate recommenced over the need to produce further reform to the pension system. As during her first administration, the president established a presidential advisory commission to examine the system and offer policy recommendations. Several different measures have been under consideration. Among the most significant are reintroducing employer contributions, raising the retirement age, creating new incentives in order to increase voluntary savings, and instituting new regulations and limits to the commissions that AFPs can charge the insured.

Once again, another key component of the current pension reform is focused on allowing a state-owned AFP to exist and compete with private pension administrators. This has been seen as a potential mechanism for forcing the private AFPs to lower the fees and commissions which they charge. When the system was established in the early 1980s, it was thought competition would keep fees and commissions low. However, as Borzutzky and Hyde have noted, over the years

> the number of AFPs operating in the market declined substantially … resulting in significant pension fund management industry

> concentration, and this has circumscribed competition and efficiency … Pension fund administrators have retained between a quarter and a third of workers' contributions in the form of commissions, insurance, and other administrative fees since the inception of the system. … The AFPs administrative charges are 89% more expensive than banks or private stockbrokers charges … Chile has had the third highest level of charging for pension fund management among the mandatory DC pension schemes of Latin America.[4]

It is worth noting that, in the case of Chile, fiduciary duty is related to the administration of the pension fund, and it excludes administrative fees. Because the accumulation of collected fees belongs to the AFPs (not to the insured), these charges are separated from retirement income.

During the past few months, campaigning and protests against the AFP system have increased dramatically, creating further incentives for politicians to tackle further pension reforms. These reflect broader political challenges, such as decreasing levels of satisfaction with democracy and representative institutions, a questioning of the legitimacy of institutions created under the military government of Augusto Pinochet, a rejection of socioeconomic inequalities, and the perception that a rigid constitutional structure designed under military rule to preserve the status quo is illegitimate and inimical to reform. AFPs and the existing pension system are an important, albeit not the only, target of these recent waves of protests. Indeed, a new social movement named "No More AFPs" has been able to organise several massive demonstrations. In the light of this, further reform of the pension system in the near future now looks on the cards.

NOTES

1. For a detailed discussion of these issues see Arenas de Mesa, Alberto. 2010. *Historia de la Reforma Previsional Chilena: Una experiencia exitosa de política pública en democracia*. Santiago: OIT; Arza, Camila and

Florencia Chahbenderian. 2014. "Pensiones básicas en América Latina. Diseño, cobertura y beneficios comparados en Argentina, Brasil, Bolivia y Chile." Working paper no. 89, CIEPP, Buenos Aires; Ewing, Christina, and Stephen Key. 2011. "Post retrenchment Politics: Policy Feedback in Chile's Health and Pension Reforms." *Latin American Politics and Society* 53, 4:67–99; Pribble, Jennifer. 2013. *Welfare and Party Politics in Latin America*. New York and London: Cambridge University Press.

2. For more details regarding the formula used to calculate this benefit, see page 24 Bernstein, Solange. 2010. *The Chilean Pension System 2010*. Santiago: Superintendencia de Pensiones https://www.spensiones.cl/portal/informes/581/articles-8557_recurso_1.pdf last accessed: 10/10/2017.

3. On this issue see Huepe, Mariana, and Osvaldo Larrañaga. 2010. "El Sistema de Pensiones Solidarias." In *Las Nuevas Políticas de Protección Social en Chile*, edited by Osvaldo Larrañaga and Dante Contreras. Santiago: Uqbar Editores.

4. Borzutzky, Silvia and Mark Hyde. 2016. "Chile's private pension system at 35: impact and lessons." *Journal of International and Comparative Social Policy*, 32:1, 57–73.

MEXICO

Tapen Sinha

A Bismarckian-style defined benefit pay-as-you-go state pension system was introduced in Mexico in 1944 – two years after the publication of the Beveridge report. A growing funding gap, and a nudge from international bodies like the World Bank and the International Monetary Fund, encouraged Mexico to introduce an additional government-mandated defined contribution system (called AFORE) in 1997. This new defined contribution scheme was supposed to increase the coverage of the system, lead to greater income equality in retirement, usher in a new era of sustainability and make the system efficient. Unfortunately, the new defined contribution system has fallen short on all these fronts.

THE GAP BETWEEN THE HOPES AND REALITY OF THE AFORE PLAN

Expanding Coverage

By the end of 2015, 54.4 million people had been registered in the AFORE system. This amounts to 102 per cent of the economically active population in Mexico. On the face of it, this figure looks like a tremendous success. Unfortunately, this success is somewhat illusory. The number of affiliates who contribute at least 80 per cent of the time (with at least 80 per cent of their required contribution) is around 18 million. This means that only around one-third of workers are contributing at a good rate to the new system. How does this compare with the old pay-as-you-go system? The old system covered around 31 per cent of the economically active population.[1] Thus, the rise in coverage has been minimal. The new system did not lead to a rush to join AFORE.

Reducing Retirement Income Equality

The new system is not likely to deliver on this front. Comparisons are not easy to make. Since the system only started in 1997, nobody has yet retired having made the mandatory minimum contribution of 1,250 weeks. However, future projections show that higher-income individuals will actually get higher replacement rates under the new system (compared with the old system). In contrast, under reasonable assumptions, the new system will offer workers on an average salary (earning four times the minimum salary today) a replacement rate of just 25 per cent. Under the old system, the average worker would have received a replacement rate of 76 per cent.

Enhancing Sustainability

The sustainability of the new system is better than the old one. Under the old regime, the actuarial value of the contributions amounted to less than 20 per cent of the benefits received. Under the new system, on the surface, government contributions to the new system are less than 10 per cent of the total contribution (the individual contributes 6.5 per cent of base salary and the government contributes 5.5 per cent of the minimum wage). However, there is an explicit guarantee of a minimum pension under the AFORE system regardless of the level of contributions, so the government will continue to have an ongoing liability.

There is also an additional hidden liability. Current retirees from the pay-as-you-go system of the past are being paid from the current government budget. The amount of payment every year is roughly equivalent to the long-term government bonds that the AFORE system is buying. Thus, to pay for the people who retire under the AFORE system (starting from 2022), the government has to redeem these bonds. This will lead to additional costs that are being pushed into the future at present. It is useful to recall that Chile dealt with this problem early on by running government budget surpluses in much of the 1980s.[2] How much this implicit debt will cost depends on two key factors: the rate of economic growth in the future and the discount rate to calculate the present value of such a debt. It has been calculated that at a discount rate of three per cent per year and a future real GDP increase of 2.5 per cent, the debt is in the order of 100 per cent of 2010 GDP.[3]

MAJOR ISSUES WITH THE DESIGN OF THE AFORE SYSTEM

There are three major issues with the AFORE system as it stands: low benefits, high fees and annuity market problems.

Low Benefits

As stated previously, the contribution rate is 6.5 per cent of the worker's base wage with an additional contribution from the government at 5.5 per cent of the minimum wage. The average wage in 2016 is about four times more than the minimum wage. Therefore, for a worker earning at the level of the minimum wage, the total contribution amounts to 12 per cent of his or her wage. That would generate a respectable replacement rate of 75 per cent for women and 88 per cent for men assuming 40 years of work and a reasonable rate of return on investment.

However, less than 15 per cent of all those who have joined the scheme earn the minimum wage. With rising wages, the proportion of government contribution falls quickly and the replacement rate falls as well. At the top decile of the income scale, the replacement rate falls to 21 per cent of wages. In most countries in the world, the contribution rate in defined contribution schemes is at least 10 per cent of the worker's base salary (with the exception of Costa Rica). Thus the Mexican pension contribution is not adequate to generate at least 70 per cent of the replacement rate for most people as has been recommended by the OECD.

There is another pot to which Mexican private sector employees (at least those who work in the formal part of the labour force) contribute – the housing fund. Members contribute another five per cent of their base wage to the INFONAVIT. This fund is a separately administered government monopoly which less than 15 per cent of workers ever use for housing. The rate of return for this fund has been half of that of the AFORE. However, for political reasons it would be difficult, if not impossible, to make the housing fund an integral part of the retirement plan.

There is a scheme allowing for additional voluntary contributions to the system. For example, it is possible to make additional contributions to one's AFORE at many 24-hour stores (such as 7-Eleven). Unfortunately, the system is very opaque. It is difficult, for instance, to determine what the transaction costs are for such contributions. As a result, voluntary contributions have not exceeded 1.5 per cent of the total contribution.[4]

High Fees

AFORE management fees have been persistently high. So, how high is high? Today, the funds are only allowed to charge fees on the balance. Calculating the amount of fees as a percentage of the present value of benefits requires a series of assumptions about the rate of interest and the period of accumulation. It works out to between 17 and 23 per cent of the accumulated sum depending on the fund chosen.[5] In Mexico, many pension funds are controlled by financial groups that operate both pension and banking businesses. Evidence suggests that, for the same financial groups, the pension businesses consistently have higher return on equity and higher return on assets than the corresponding banking businesses over a period of 15 years. Presumed competition among pension funds has not managed to drive down the supra-normal profits.[6]

There is another way of examining the competition among AFORE by examining private (supplementary) pension funds operated by companies in Mexico. Nearly 1.4 million workers were covered by these supplementary pension plans at the end of 2015. About 60 per cent offer a one-to-one match for employee contribution to these funds. Most of these funds are managed by external fund managers. Over a period of a decade, the fees are half of what the AFOREs have charged during that period.[7] This comparison shows that there is room for improvement for lowering the fees charged by AFOREs.

But why are these profits not being driven down by people seeking out the AFORE with the lowest fee? Despite the efforts of the pension regulatory authority, members are often confused about the management fees. One clear manifestation can be found in switching patterns. CONSAR data shows that in 2015, nearly half of AFORE members moved from a fund with lower fees to a fund with higher fees. Where do funds spend their money? Nearly half of the fees are spent on advertising. Since joining an AFORE is not voluntary, the money is spent mostly on poaching affiliates from other AFOREs. Therefore, for the system as a whole, half of the fees are spent on a zero-sum game. One way to increase competition among AFOREs would be to give a temporary monopoly (say for two years) to the AFORE with the lowest management fees. This experiment has been tried in Chile, where it has reduced the fees for the lowest-charging fund to drive and nudge consumers towards it. But consumer switching has been sluggish; inertia appears strong.

Struggling Annuity Markets

There is a problem with annuity funds in Mexico. The private market for annuities in Mexico expanded rapidly from 1997–2001, only to shrink in the subsequent years. When the regulations for the new individual account system were implemented, the initial plan called for the buying of single premium annuities by widows and disabled workers. The *Instituto Mexicano del Seguro Social*, the government owned and run system, dominated the market because it was able to provide benefits more quickly than private companies. This change meant that almost all of those eligible opted for the IMSS option, which led to an exit of annuity companies from the market and a subsequent collapse of the private market.[8] At present, nobody is retiring under the AFORE system. That will change from 2022. If the fees for annuity conversions for widows and disabled workers are any guide, the cost of converting a lump sum for retirees into lifetime annuities will be in the neighbourhood of 15–20 per cent of the present value.

In summary, lack of competition in the accumulation and the decumulation phases appears to eat up at least 30 per cent of the total value of the fund accumulated by a member.

NOTES

1. Sinha, Tapen. Estimating future pension liability of the Mexican Government, Working Paper, Inter-American Development Bank, 2012.
2. Sinha, Tapen. Retrospective and Prospective Analysis of the Privatized Mandatory Pension System in Mexico, Society of Actuaries, 2003.
3. Sinha, Tapen. Estimating future pension liability of the Mexican Government, Working Paper, Inter-American Development Bank, 2012.
4. CONSAR. Retos y Mejores Prácticas Internacionales en la promoción del ahorro voluntario, 2016. Available at http://www.gob.mx/cms/uploads/attachment/file/132138/promo_ahorro_voluntario.pdf.
5. Aguila, Emma, Michael Hurd, and Susann Rohwedder. How Do Management Fees Affect Retirement Wealth under Mexico's Personal Retirement Accounts System? Journal Latin American Policy, 5(2), 331–350, 2014.
6. Kritzer, Barbara, Stephen Kay and Tapen Sinha. Next Generation of Individual Account Pension Reforms in Latin America. Social Security Bulletin, 71(1), 1–40, 2011.

7. Sinha, Tapen. 2010. ¿Cuánto Cuesta la Administración de Fondos? Presentation prepared for the Seminario de Pensiones, International Center for Pension Research at the ITAM, Mexico.

8. Pérez Villasana, Ana Verónica, and Tapen Sinha. 2008. "Death of an Annuity Market Foretold." Paper presented at the Actuarial Research Conference, Pittsburgh, PA (August 2007), http://www.soa.org/library/proceedings/arch/2008/arch-2008-iss1-sinha-villasana.pdf. & Sinha, Tapen. 2008. Annuities: Lessons from Pension Reform in Latin America. Presentation prepared for the Joint Colloquium of the IACA, PBSS and IAAHS Sections of the International Actuarial Association, Boston.

SINGAPORE

Mukul G Asher and Chang Yee Kwan

This chapter provides a review of Singapore's retirement income arrangements: the philosophy guiding it; the trade-offs made between adequacy, coverage of people and risks, and equity; and the resources devoted to pensions.

The prevailing philosophy and methods of financing people's retirements are under severe pressure from such internal factors as a rapidly ageing population, changing labour markets, the potential of disruptive technologies to alter existing economic patterns, and the public's heightened expectations. The external developments include changing global trade, investment, and labour and production networks. It now appears that, if the aim of pension policy is to provide a replacement rate consonant with Singapore's high-income society, a fundamental rethink by policymakers of current retirement income arrangements will be essential.

Retirement and old age financing in Singapore exhibit the following broad characteristics. First, there is a reliance on mandatory individual savings as the method to finance retirement. The manner in which this has been implemented has resulted in considerable misallocation of macroeconomic risks, causing unemployment, inflation, wage stagnation, and sharp prolonged declines in economic growth. There are also indications that the number of people facing long-term unemployment has witnessed a rising trend. These risks are better managed by society as a whole than by the individual, but the Singapore pension system places a disproportionate burden of risk on the individual. There is some recourse to public assistance and funds, but these are typically provided to mitigate immediate, rather conservatively defined, absolute poverty than for longer-term support.

The second characteristic is the contribution of savings by members to the Central Provident Fund, a national provident fund which is a government agency under the Ministry of Manpower. The provision of pensions is one component of the CPF system, but little emphasis has typically been placed upon it.[1] Housing and healthcare financing are given much greater prominence. That pensions have a low priority is evident by reductions in contribution rates whenever Singapore has experienced slowdowns in economic activity, such as in 1988, 1999 and 2005.

The CPF system comprises many schemes introduced over the years to meet different objectives. The resulting complexity is considerable, making both managing and assessing the system as a whole quite difficult. This is exacerbated by the tendency of the CPF to regard even basic socioeconomic data (such as member cash balances, including on an aggregate basis) as privileged, rather than public, information. This has meant few independent research studies on the CPF system, a result of the government's desire to exercise control over discussion about the CPF system so that an alternative to its preferred narrative does not emerge.

A third feature is a pronounced aversion to introducing social insurance elements in Singapore's pension arrangements. This is exemplified by the continued assertion (without evidence) that such elements, such as a budget-financed social pension scheme, will be fiscally detrimental and reduce Singapore's competitiveness. This is in spite of clear empirical evidence that International Monetary Fund-compatible budgetary surpluses averaged around six per cent of GDP per year between 2006 and 2013. In 2016, Singapore's official GDP growth rate was 1.8 per cent. Growth in 2017 is expected to be in a similar range, with low growth rates likely to affect employment prospects. This is becoming evident as the number of active employers in the CPF system declined by 6.6 per cent between 2014 and September 2016. If low growth rates continue, this could accelerate.

The final characteristic is the rapid ageing of Singapore's population and its implications for the pension system. Singapore's development has been from a low middle-income country at independence in the mid-1960s to a youthful high-income country, and now to a high-income country experiencing rapid ageing. Singapore's total fertility rate has been below the replacement rate of 2.15 since 1975. It was only 1.24 in 2015 and policymakers do not foresee a significant increase. Singapore has pursued liberal immigration policies in recent decades, enabling its population – citizens plus permanent residents – to grow from 2.7 million in 1990 to 3.3 million in 2000, increasing to 3.9 million in 2015. (The remaining 1.6 million people are temporary cross-border workers and their dependents without pension entitlements.) The liberal immigration policy has been pursued in a manner so as to keep the ethnic balance among the three major population groups – Chinese, Malays and Indians – broadly steady. However, a backlash from 'local' Singaporeans over access to jobs, schools, universities and social amenities, makes the continuation of this positive approach to immigration questionable. The stakes are high given the low fertility rate noted above: zero net immigration alongside an unchanged fertility rate would see the population of 5.5 million halve in around 50 years.

Singapore has changed a lot in recent decades, but its pension system has not adapted. Significant changes in the philosophy, structure and administration of the pension system are necessary, not just marginal reforms which tinker around the edges.[2] After providing a brief assessment of the CPF system and its outcomes, the chapter suggests potential reforms to improve the adequacy and fairness of Singapore's pension system.

AN ASSESSMENT OF THE CENTRAL PROVIDENT FUND SYSTEM

The CPF system was established in 1955 and, since 1968, it has evolved from a retirement savings scheme to include financing for medical needs, home ownership, investment and other approved purposes such as financing higher education.[3] The scheme is open to Singapore citizens and permanent residents, with identical employer and employee contribution rates applying only if the latter has resided in the country for more than two years. For the initial two years, unless contractually specified or otherwise, contribution rates for permanent residents are on a reduced, graduating scale. Foreign workers, who make up nearly two-fifths of the labour force, are not covered.[4]

Contributions are mandatory for all salaried employees earning SGD750 per month up to a ceiling of SGD6,000. The rate structure is very complex, a reflection of the micromanaging inclinations of policymakers. As of 1 January 2016, private sector employees over 65 years of age contribute five per cent of their wages to the scheme, with rates of 7.5 per cent, 13 per cent and 20 per cent for those between 60 and 65, 55 to 60 and below 55 years respectively. The corresponding contribution rates are 7.5 per cent, nine per cent, 13 per cent and 17 per cent for employers. For the public sector, the employee contributions for the respective age groups are 3.75 per cent, 5.625 per cent, 9.75 per cent and 15 per cent against 5.625 per cent, 6.75 per cent, 9.75 per cent and 12.75 per cent for the employer.

Contributions are allocated into three accounts – the ordinary account, special account, and medicare – which pay centrally set interest rates fixed at a minimum (as of 1 January 2017) of 2.5 per cent per annum for the ordinary account, and 4 per cent for the others, with additional top-ups at the government's discretion. Members can choose to self-select their own investment funds rather than take the government-guaranteed return, but only a minority do so.

The ordinary account is slated for all approved uses including investment and financing of housing. The special account is targeted for use in longer-term investments as a means to increase members' balances for retirement. The medicare account is, as the name implies, intended for medical expenses and related insurance. Between 2011 and September 2016, net withdrawals averaged 51 per cent of contributions to the CPF.

The retirement account is established when a member reaches the age of 55 and the stipulated minimum sum, or the combined total available, is transferred from the ordinary and special accounts. Depending on CPF membership cohort, members are required to have a minimum balance of up to SGD166,000 at 55 and purchase a compulsory annuity – CPF Life. Member balances above the required minimum sum can be withdrawn as a lump sum at 55.

The CPF Life product is structured along commercial lines, with higher annuity prices for longer-living females than males, and it must be purchased from the accumulated savings of a member. The actuarial basis for the CPF Life requires greater independent analysis.

EQUITY AND ADEQUACY

The system comprises 3.74 million members, of which 1.97 million (52.6 per cent of the total labour force) were active contributors in 2016. Active members refer to those from whom there are current employment-related contributions. However, for contributions to CPF-related schemes such as medisave, contributors are classified as members of the CPF Scheme, but they do not constitute a part of the active membership. As of September 2016, member balances total led SGD322.1bn or approximately 80 per cent of GDP. The mean balance is SGD86,123 per member. Disaggregated data by active and inactive members, gender, age, and other characteristics are not made available by the CPF. Neither is data on the density of contributions nor the actual contributions divided by potential.

Nonetheless, it is possible to identify a number of issues with the design and operation of the system. First, labour market participation rates. In 2015, Singapore's labour force participation rate for elderly males and females in the age group of 65–69 years was 54.1 per cent and 15.7 per cent respectively. This falls to 15.7 per cent and 8.8 per cent respectively for those above 70 years of age. Average life expectancy at age 65 in 2015 was projected at 18.9 years for males and 22.1 years for females, with a likely large variance around the mean.

Second, income inequality. In any income tax-advantaged mandatory retirement savings scheme, wage and income inequalities in the accumulation phase will manifest themselves in the payout phase. The (wage) Gini coefficient in Singapore for working households is reported to be 0.46. The median individual salary in Singapore is reported as SGD3,248 per month for 2015, and a mean of SGD4,892,[5] suggesting high wage inequality. This is without considering capital income, which accrues unequally to higher income households and is tax-exempt, but is not included in the official figures. Inequality in Singapore is considerably higher, likely reaching Latin American levels, when capital income is added to the inequality measurement.

Some design features of the CPF system have further undermined adequacy. First, as noted previously, pre-retirement withdrawals are a problem and have reduced the effect of compounding interest to increase CPF accumulation.

Second, the government-mandated interest rate on CPF balances has meant a real return on CPF balances being lower than the growth in real wages. This reduces the replacement rate – the monthly pension income divided by pre-retirement income. Between 1987 and 2011, real wages increased by about five per cent annually, but real returns credited to CPF members were only 1.42 per cent, meaning that doubling of nominal balances will take approximately 50 years. In recent years, real rates of return have increased, largely due to low or negative inflation reported by official data. Between 2001 and 2015, real returns credited to CPF members averaged approximately 2.55 per cent per annum, requiring 28 years for the balances to double. The differing rates suggest differences in adequacy levels for different cohorts, an inevitable feature of the way the system is designed.

Third, large CPF balances are officially invested in non-marketable government securities, whose interest rate is aligned to the administered CPF rate. However, as indicated by Singapore's deputy prime minister and finance minister, CPF balances are invested by one of Singapore's sovereign wealth funds, GIC Private Limited, and other government funds.[6] It is not a legal requirement for its investment strategy and performance to be revealed to the public. GIC, however, publicly declared an annualised real rate of return of four per cent over a 20-year rolling period in July 2016.[7]

Thus, CPF members receive lower returns than GIC returns. The return may be regarded as an implicit tax on CPF wealth. This is both recurrent and large – one percentage point of implicit tax amounts to approximately SGD3bn given current balances. It is also regressive, as lower-income groups are likely to have a disproportionately higher share of wealth in the CPF system.

Fourth, in sharp contrast to the no-choice guaranteed return for the minimum CPF balances with the system, the CPF investment schemes arguably provide too much choice to members, resulting in misallocation of savings of participating members and low returns. Limiting choice and better vetting thus merits serious consideration.[8]

Fifth, the income tax exemption enjoyed by CPF contributions, investment income on these contributions and withdrawals in the payout phase actually offers few or no tax benefits to lower-income members. Only 37 per cent of Singapore's labour force pays income tax, a significant proportion of which are cross-border workers not covered by CPF.

Overall, it is clear that the current CPF system arrangements cannot meet the retirement financing needs of approximately two-thirds of its members. Data limitations preclude more precise estimates, but one significant indicator is that, in 2015, just over half of those reaching the age of 55, when the retirement account is set up, met the prescribed minimum sum, even when individual cash balances are combined with home ownership equity. It should be noted, moreover, that the minimum sum only aims to provide a basic subsistence level of income. If an annuity is purchased with the full minimum sum in cash, current projections are that the resulting annuity will be less than one-quarter of per capita income. This is very modest and will be even lower for those who meet their minimum sum requirements via a combination of both cash and home-ownership equity.

PROPOSALS FOR REFORM

The underlying philosophy and basic characteristics of Singapore's pension system have remained essentially unchanged since the country became a republic in 1965. Since then, however, Singapore has grown in wealth and is now rapidly ageing in terms of demographics.

Four broad reforms should, therefore, be considered.

First, there is a strong case for changing the current insurance schemes of CPF Life and medishield (for healthcare) from a form of commercial insurance to social insurance. This will permit social risk pooling and, in particular, benefit women who, generally, have both lower labour force participation and CPF balances, but also live longer. Thus, they require a larger pool of resources.

Second, Singapore's current pension system places too much risk on individuals. Moreover, there are no other programmes or schemes for the elderly poor to address relative poverty and mitigate inflation and survivors' risks. The introduction of the first pillar, budget-financed social pensions, which Singapore has adequately financed to provide fiscally, could improve adequacy and the fairness of Singapore's pension system. Introducing social pensions could also have benefits in helping to improve social cohesion.

Third, to address the issues of adequacy and equity outlined above, the current CPF system governance structure needs to be rethought to incorporate independent expertise, as is best practice in the private sector.

Finally, socioeconomic and other information about the pension system should be regarded as the property of the public, to be freely shared, discussed and analysed, rather than that of the state.

NOTES

1. There is no statutory pension fund for private sector employees, while pensions for public sector employees have largely been removed since 2013. There is, however, the Supplementary Retirement Scheme (SRS), a tax-advantaged retirement savings scheme open to even those not covered by the CPF system. In December 2015, SRS assets stood at almost SGD6 bn.
2. For example, once again allowing lump-sum withdrawals as announced in 2014 by the prime minister: https://sg.news.yahoo.com/controlled-withdrawal-of-cpf-savings-will-be-allowed-for-retirees--pm-lee-140556895.html and the recommendations of the CPF review board convened by the government: http://www.todayonline.com/singapore/cpf-advisory-panel-proposals Last accessed: 10/10/2017.
3. These are reported in detail in Asher, MG and A Nandy, "Singapore: Pension System Overview and Reform Directions," in Park, D. (ed), *Pension Systems and Old-Age Income Support in East and Southeast Asia*, 2011, Routledge, Oxon, UK. Available at: https://www.adb.org/sites/default/files/publication/29392/pension-systems-old-age-income-support.pdf Last accessed: 10/10/2017.
4. With the formation of the ASEAN Economic Community (AEC) envisaging more liberal trade, investment and labour flows, this omission may require revisiting at some stage.
5. Singapore Yearbook of Manpower Statistics, 2016. Available at: http://stats.mom.gov.sg/_layouts/MRSD.iMAS.ApplicationPages/SPDownLoadFile.aspx?DownloadURL=/iMAS_PdfLibrary/mrsd_2016YearBook.pdf Last accessed: 10/10/2017.
6. Tham Yuen-C (2014) CPF issue: GIC manages CPF monies along with other govt funds: DPM Tharman *Asia One* http://news.asiaone.com/news/singapore/cpf-issue-gic-manages-cpf-monies-along-other-govt-funds-dpm-tharman Last accessed: 10/10/2017.
7. Nicole Tan (2016) Dip in annualised real rate of return for GIC *Channel NewsAsia* http://www.channelnewsasia.com/news/singapore/dip-in-annualised-real/2991978.html Last accessed: 10/10/2017.
8. The government has indicated that the scheme is "not fit for purpose" and is inclined to change it: http://www.businesstimes.com.sg/government-economy/govt-to-tighten-cpf-investment-scheme-tharman Last accessed: 10/10/2017.

HONG KONG

Stuart Leckie

The oldest known pension system in Hong Kong was established for expatriate staff working for the Swire Group, dating back to 1919. Then, in common with other British territories, a UK-style defined benefit pension system was introduced for the civil service and uniformed services in Hong Kong. The retirement age was 55 and the funding was pay-as-you-go out of general revenue.

In 1954 the UK government issued a recommendation that British territories should consider some form of pension plan, retirement scheme or provident fund for the general population. Singapore and Malaya responded positively and this led to the establishment of the CPF and EPF respectively. Hong Kong replied that its priority was to feed, house and find employment for tens of thousands of refugees from mainland China, and with the average age of the population being 22 there was no interest whatsoever in pensions.

Between 1954 and 1989 different forms of social security and benefit systems were considered by the Hong Kong government on nine separate occasions. Gradually, some means-tested anti-poverty allowances were introduced, and then legislation was passed to provide termination indemnities to employees made redundant or retiring at age 60. In the meantime, Hong Kong companies were voluntarily establishing defined benefit or defined contribution schemes, but without any legislative framework in place. In fact, it was possible for a company to claim tax relief on its contributions then re-invest the contributions back into its own business. In 1987, when David Wilson was appointed governor of Hong Kong, his first major address stated that there would be new legislation to provide a framework for voluntary retirement schemes and that the government would propose a "community wide retirement protection system".

A LEGISLATIVE FRAMEWORK

The first commitment led to the introduction of the Occupational Retirement Schemes Ordinance (ORSO) in 1992. The ORSO legislation required voluntary plans to be established under trust. This caused a problem for insurance-based group retirement policies established as contracts, but the creative solution was to proclaim that such policies were "implied trusts". The other requirements of ORSO included formalised rules, actuarial valuations for defined benefit schemes, proper funding, annual benefits statements, annual audited accounts and registration with government.

ORSO is a good example of sensible legislation and proper governance. But although most voluntary ORSO schemes gave reasonable lump sum benefits, in total they covered only about 900,000 employees out of a total workforce of about 2.7 million. ORSO schemes still cover about 400,000 employees, out of a total population which is now 7.3 million.

In 1993, the government, by this time led by Chris Patten, proposed to introduce a very modest old age pension on a partially funded basis. But this plan found no favour with Hong Kong's financial institutions, which wanted to manage all the investments, nor from the Chinese authorities, which accused Patten of wanting to squander away Hong Kong's wealth.

INTRODUCTION OF A DEFINED CONTRIBUTION ARRANGEMENT

So the government capitulated and moved to introduce a Mandatory Provident Fund (MPF). Existing ORSO retirement schemes could in effect contract-out of MPF, but the mechanics of doing so were, unfortunately, rather convoluted. The principal features of the MPF introduced in December 2000 are: employers choose the provider; employees choose one or more of the providers' funds; mandatory contributions are five per cent of salary from both employee and employer, subject to maximum and minimum amounts; a tax-free lump sum benefit is paid at age 65 or on retirement at 60 or over; benefits are payable immediately in the event of death, terminal illness or permanent emigration; the employer's liability for termination indemnities can be offset by the employer's MPF balance; there is no provision whatsoever for payment of benefits as monthly income; and the whole risk surrounding investment, longevity and inflation after retirement is borne by the individual.

The MPF system embraces a number of elements: sponsor, trustee, administrator, fund manager and custodian. Only equities, bonds or cash can be held in any MPF fund and there are investment restrictions so that every fund requires at least 30 per cent exposure to the Hong Kong dollar. One of the weaknesses is that the trustee must be a separate legal entity from the fund manager, but they can both belong to the same financial group.

Over 20 providers initially launched MPF master trusts, but a number of acquisitions means there are now 15 providers. The five largest providers control over 70 per cent of the market with the others averaging less than three per cent market share each. Although the MPF system is very unpopular, there is a remarkably high participation rate of 97 per cent due to the concentrated nature of Hong Kong.

The MPF system is now 16 years old. The system is, of course, a pure pillar 2 defined contribution arrangement, but the weaknesses are manifest: lump sum benefit only; inadequate contributions for meaningful benefit; effectiveness of system weakened by employers' offset; too many fund choices (over 460); high fees relative to other countries; lack of understanding and appreciation by members; cumbersome mechanisms of consolidating balances from different providers; complex interface between ORSO and MPF; and the accumulation phase for the MPF is very highly regulated.

Recently the government issued a consultation document and there has been discussion about a universal pension to be provided to all citizens over 65 or 70, in contrast to further means-tested benefits. Life expectancy in Hong Kong is among the highest in the world, while the fertility rate is one of the lowest in the world. The proponents of a universal pension wish to provide citizens with a minimal pillar 1. The government is fundamentally opposed to this, and counters with figures emphasising Hong Kong's rapidly deteriorating demographics, stating that any old age pension is completely unaffordable. While this is an issue, the fact that the Gini coefficient as a measure of disparity of wealth is worsening in Hong Kong is largely because of semi-poverty among the elderly population. The cost of housing is very high in Hong Kong, while medical costs continue to escalate.

There are significant investment restrictions applying to all MPF funds. There is a list of approved stock exchanges, but this does not include the stock exchanges in mainland China. Balanced funds are the most popular type of fund selected, followed by equity funds and funds with some form of guarantee. An individual member is now able to switch his or her personal balance to any fund, but there is a great deal of inertia when people change jobs, leading to members having a plethora of balances in the whole MPF system.

There is remarkably little interest in Hong Kong regarding sustainable investments or green funds. The local attitude amongst asset owners is to restrict the mandate to sustainable investments only if the asset manager will promise better returns. So only one out of the MPF's funds is a green fund. Equally, organisations such as PRI have a long way to go before acceptance. The paramount aim of Hong Kong investment managers is simply to maximise the return on the fund. In relation to all forms of environmental, social and governance issues, unless there are specific requirements in trust deeds or equivalent documents, trustees or investment managers are not allowed to exclude investment opportunities on the basis of ESG concerns, personal ethical beliefs, or the views of any beneficiary or class of beneficiary alone.

The regulator, the MPF authority, micromanages the sector and is generally regarded as far too intrusive. For example, the pressure to reduce MPF fees runs counter to the governance expectation that providers, which are all owned by publicly listed parent companies, have a duty to maximise profits.

Since inception the long-term average return for the whole system is about 3.5 per cent per annum, which is similar to the comparable average consumer price index increase over the same period, but is behind the average rate of increase in earnings. The MPF authority will soon require every provider to offer a new style of "default investment strategy," which will be low cost, based on ETFs and moving from 60 per cent equity under age 50 to 80 per cent fixed income at age 65.

LOOKING AHEAD

Since 1997 Hong Kong has been a Special Administrative Region of the People's Republic of China. This status gives a great deal of freedom for Hong Kong to continue with its previous way of life as a British dependency for 50 years. However, mainland influence is gradually becoming more prevalent in Hong Kong and it should be assumed that, after 2047, Hong Kong will be effectively integrated into the mainland.

In light of this, it is worth briefly reviewing China's system of pension provision. The main Chinese system of state benefits applies to urban employees, not the rural population. The benefit design follows World Bank pillars 1 and 2. Employers pay about 20 per cent of salaries to pillar 1 while employees pay eight per cent of salaries to pillar 2, which is inappropriately funded in that in several provinces the members' accumulated contributions have been used for non-pillar 2 purposes.

China's demographics are of serious concern. By 2040, there will be over 400 million people over the age of 60 in China. Major reforms are urgently needed, for example, to the normal retirement age, which is far too low, at 60 for males, 55 for female office workers and 50 for female factory workers.

In many ways, Hong Kong is a highly sophisticated city as regards financial matters generally, although not as regards pensions. By way of a summary for Hong Kong, benefits under pillar 0 are payable to about 800,000 elderly persons; pillar 1 does not exist; the MPF is pillar 2; and ORSO is pillar 3; while pillar 4 is also problematic. How China and Hong Kong will hopefully honour accrued entitlements under a new and different environment will be a challenge.

NEW ZEALAND

Patrick Nolan

This chapter gives a broad overview of New Zealand's pension system. A striking feature of this system is its simplicity. But, as this chapter shows, while simple it is not free from challenges. New Zealand thus provides a useful example of the tensions which persist in policy design even when policy settings are relatively straightforward.

PUBLIC AND PRIVATE PILLARS

As the Geneva Association has noted, the "debate about sustainable pension systems is all about spreading the burden over several pillars".[1] The following briefly discusses two of these pillars in New Zealand: a state pension which targets basic needs and a system of voluntary individual savings that contributes additional income and diversifies risk.

A unique feature of New Zealand's system is New Zealand Superannuation. Established in 1977 this is a universal and non-contributory pension. It is available at 65 to people who have been resident for at least 10 years, including five years since turning 50. The married couple rate is the base rate. This provides an after-tax income of at least 65 per cent of net national ordinary-time earnings ("65 at 65"). It is indexed by the consumer price index, but is subject to a floor so it cannot fall below 65 per cent. All other rates (for example, single people living alone or sharing) are calculated as percentages of the married couple rate.

Until 2007, savings were subject to few tax breaks.[2] Perhaps reflecting this – along with an income effect from the universal NZS – contributions into vehicles like superannuation funds were low. Furthermore, many occupational pension schemes were closed to new entrants following reforms to state trading enterprises and public services in the 1980s and early 1990s. There was thus a relatively blank slate for the introduction of KiwiSaver, a system of automatic enrolment into defined contribution pensions in 2007. The implementation of KiwiSaver was also simplified by the fact that taxes are levied from the first dollar of income, so contributions can be deducted along with income tax before being transferred to individual accounts.

Individuals are automatically enrolled into KiwiSaver when they enter the workforce or change jobs. New members have a short period to opt out (two to eight weeks after enrolment) and it is possible to take contribution holidays. Accounts are managed by private providers (pots follow members) and scheme fees are monitored by the Financial Markets Authority. First-time buyers are generally able to withdraw funds for a house deposit and some members may be eligible for a home start grant. As a result of both automatic enrolment and the subsidised nature of the programme, take-up has been high with membership of around 74 per cent of those aged 18 to 65.[3]

Contributions are made by members (3 per cent, 4 per cent or 8 per cent) and their employers (3 per cent), and member contributions are partly matched by the government for working age members up to an annual limit ($521.43). Other initial subsidies, for employer contributions and a kick-start lump sum payment on enrolment, have now been removed. As of June 2012, close to 60 per cent of members were contributing at the minimum rate and so final

Table 1 Sources of pensioner incomes, relative pensioner incomes and pensioner poverty rates

	New Zealand	*United Kingdom*	*OECD*
Sources of pensioner incomes, % of total (mid-2000s)	Public transfers, 64.4 Work, 15.1 Capital, 20.5	Public transfers, 49.8 Work, 11.9 Capital, 38.3	Public transfers, 59.6 Work, 21.4 Capital, 19.1
Sources of pensioner incomes, % of total (late-2000s) (1)	Public transfers, 48.2 (45.5) Work, 21.7 (30.1) Capital, 30.2 (24.4)	Public transfers, 49.7 Work, 11.8 Capital, 38.5	Public transfers, 58.6 (58.7) Work, 23.9 (20.8) Capital, 17.6 (10.4)
Net replacement rates for full career workers	Low earner (50% average wage), 80.8 Average earner (average wage), 43.0	Low earner (50% average wage), 69.4 Average earner (average wage), 38.3	Low earner (50% average wage), 13.8 (min) to 109.7 (max) Average earner (average wage), 11.87 (min) to 109.7 (max)
% of pensioners below 50% median equivalised household disposable income (2012 or latest available)	All 65+, 8.2 66 to 75, 8.0 75+, 8.5	All 65+, 13.4 66 to 75, 10.9 75+, 16.6	All 65+, 12.4 66 to 75, 10.9 75+, 16.6
% of whole population below 50% median equivalised household disposable income (2012 or latest available)	9.9	10.5	11.3
Public expenditure on old age and survivors' benefits, % of GDP (2)	1990, 7.3 1995, 5.6 2000, 4.9 2005, 4.2 2011, 4.9	1990, 4.8 1995, 5.3 2000, 5.3 2005, 5.5 2011, 5.6	1990, 6.2 1995, 6.7 2000, 6.8 2005, 7.0 2011, 7.9

Sources: OECD (2013), Pensions at a Glance 2013: Retirement Incomes in OECD and G20 Countries, OECD, Paris; OECD (2015), Pensions at a Glance 2015: Retirement Incomes in OECD and G20 Countries, OECD, Paris.

Note: (1) For New Zealand and the OECD the data for 2012 or later are shown in brackets. These do not sum to 100% as incomes from occupational pensions are not shown. Later data were not available for the UK.

(2) The fall in expenditure in New Zealand after 1990 reflects the phase-in of an increase in the eligibility age of NZS from 60 to 65.

pot size, even when the scheme is more mature, will be unlikely to replace the income from NZS.[4]

THE ROLE OF CAPITAL

One objective of KiwiSaver was to broaden pensioners' sources of income. To illustrate, table1 shows OECD data on a range of measures for New Zealand and the United Kingdom. Before KiwiSaver, New Zealand had a relatively narrow base for funding pensioner incomes. In the mid-2000s, government transfers accounted for a much higher share of pensioner incomes in New Zealand (64.4 per cent) than in the UK (49.8 per cent). The importance of capital as a source of income was lower (20.5 per cent compared to 38.3 per cent). However, potentially reflecting the non-means-tested nature of NZS, work was a relatively high source of income (15.2 per cent, compared to 11.9 per cent in the UK). Since the introduction of KiwiSaver, capital has become a more important source of pensioners' incomes, and this is likely to increase as the scheme matures. Work also increased in importance in recent years, and so the overall reliance on public transfers is now below the level of the United Kingdom.

The impact of KiwiSaver on superannuation savings can also be illustrated with Reserve Bank of New Zealand data on household financial assets and liabilities. Between June 1999 and June 2007, (just prior to the introduction of KiwiSaver) net equity in superannuation schemes as a share of household disposable income grew from 46.8 per cent to 47.0 per cent. But by March 2016 this increased to 102.7 per cent. To put this into context, however, RBNZ data also shows that in March 2016 household net wealth of $1,137bn was made up of net financial wealth of $458bn and housing and land valued at $679bn. Thus, while net financial wealth was estimated at around 303 per cent of household disposable income, the value of housing and land was 449 per cent.

FISCAL COST AND INCOME SMOOTHING

As the Commission for Financial Literacy and Retirement Income noted, New Zealand "has an excellent retirement income framework which achieves good outcomes for the majority of people aged 65 and over". The country is thus in the position of not needing "overnight reform". Looking further forward, however, there are several issues worth considering.

The first is the cost of NZS, which is increasing quickly. Government spending in New Zealand is around one-third of GDP (29.7 per cent in 2016) and close to one-third of this spending, in turn, goes on social security and welfare (30.2 per cent of total Core Crown Expenses). The main driver of this welfare spending is NZS. Indeed, between 2011 and 2016, increased spending on NZS was equivalent to around 80 per cent of the total increase in Core Crown Expenses ($3,431bn of $4,283bn). The New Zealand Superannuation Fund was established to help smooth (partially prefund) the future cost of these pensions, but contributions are currently suspended. Before the September 2017 general election, the National party-led government proposed increasing the age of eligibility to 67 by 2040 (at the time of writing it was unclear whether this policy would survive the election).

Cost is often discussed in the context of fiscal sustainability, but there is also a relationship between cost and income replacement objectives. To illustrate this, NZS aims to ensure a basic ability to contribute and participate in society. It is thus relatively successful at addressing pensioner poverty,[5] but is less effective at replacing income from work (income smoothing) for pensioners who were higher earners in their working lives. As means-testing NZS is unlikely to receive political support, without a rise in the entitlement age the growing cost would increase pressure on the generosity of the NZS settings (indexation and payment levels), meaning that over time this programme could become more narrowly focused on poverty reduction.

In this environment, KiwiSaver and decumulation products for these funds and other wealth are important vehicles for achieving income-smoothing goals. But this highlights two other challenges: gaps in the accumulation of KiwiSaver savings among particular parts of the population and the self-employed, and gaps in the decumulation market.[6] The second challenge is discussed in more detail below.

GAPS IN THE DECUMULATION MARKET

Increasing longevity will reshape the world of retirement. Of the people who reached 65 in 2013, 44 per cent could expect to live to 90. Over time these odds will improve, so a person who retires at 65 in 2043 would have a 56 per cent chance of living to 90.[7] Perhaps Woody Allen was onto something when he joked on his 60th birthday that “practically a third of my life is over”. While these figures are based on many assumptions (such as an unchanging retirement age) they nonetheless highlight the chance that growing numbers of people can expect to spend longer in retirement. Retirees will need to think carefully about how assets they have built up during their working lives can be converted into incomes that will last until death.[8]

The University of Auckland’s Retirement Policy and Research Centre has shown how challenging this will be.[9] Retirees will not only have to consider how long they will live, but what impact inflation and movements in markets may have on their investments. They may need to consider how to convert investments into income streams (for example, through using drawdown strategies and annuities). It is also likely that people may need to consider releasing housing wealth to lift their incomes, which makes decisions around downsizing and the use of equity release critical. Releasing equity tied up in housing can lift living standards of families who are income-poor, but asset-rich, increase the time that they can comfortably live in their own homes and fund care. And, of course, more retirees may consider extending their working lives.

Focusing on annuities, the Commission for Financial Literacy and Retirement Income noted that as KiwiSaver balances grow the very small market for these products in New Zealand is likely to present challenges. There is currently only one annuity provider. However, as the commission went on to note, while the lack of annuity products is emerging as a potential problem it is "not one of crisis proportions. To some extent, these issues will resolve themselves as balances grow and a normal market response occurs." And, as Rashbrook shows, whether an annuity is the right product depends on individual characteristics such as longevity and preferences (such as a bequest motive).[10] Finally, the universal nature of NZS also means that for many people this programme largely fulfils the role of an annuity (providing a guaranteed income) and so the main gap is around helping retirees who previously received higher incomes replace their incomes from work.

NOTES

1. Liedtke, P. & K. Schanz, (2012). Editorial and executive summary, in Liedtke, P. & K. Schanz (eds.) (2012), *Addressing the challenge of global ageing – funding issues and insurance solutions*, The Geneva Association, Switzerland.
2. St John, S. (2007). KiwiSaver and the Tax Treatment of Retirement Saving in NZ. *New Zealand Economic Papers*, 41 (2), 2007 251–268. & Marriott, L. (2008). The Politics of Retirement Savings Taxation: A Trans-Tasman Comparison, PhD thesis, Victoria University of Wellington, Wellington.
3. Financial Markets Authority (2016). *KiwiSaver Annual Report: 1 July 2015 – 30 June 2016*, Wellington.
4. Commission for Financial Literacy and Retirement Income (2013). *Focussing on the future: Report to Government, 2013 Review of Retirement Income Policies*, Commission for Financial Literacy and Retirement Income, Wellington.

5. Perry, B. (2016). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2015*, Wellington, Ministry of Social Development.

6. Commission for Financial Literacy and Retirement Income (2013). *Focussing on the future: Report to Government, 2013 Review of Retirement Income Policies*, Commission for Financial Literacy and Retirement Income, Wellington.

7. Nolan, P. (2014). Reform of the UK's decumulation market – background note for decumulating retirement savings forum. Research Note, New Zealand Productivity Commission.

8. Commission for Financial Literacy and Retirement Income (2013). *Focussing on the future: Report to Government, 2013 Review of Retirement Income Policies*, Commission for Financial Literacy and Retirement Income, Wellington.

9. St John, S. (2009). The annuities market in New Zealand. Report prepared for the Ministry of Economic Development, Retirement Policy and Research Centre, University of Auckland. & St John, S. (2014). What has New Zealand's retirement policy framework to offer the international debate? *Policy Quarterly*, Volume 10, Number 3, Pages 29–34.

10. Rashbrooke, G. (2008). Income in retirement. *Policy Quarterly*, Volume 4, Number 1, Pages 26–35.

IRELAND

Shane Whelan

There is nothing unusual in the old age dependency ratio in Ireland as it evolves over the next century. However, there are significant differences in how Ireland's pension system is designed to meet the challenge of an ageing society. Ireland and New Zealand are the only OECD countries that do not have a mandatory earnings-related pillar. Ireland's state pension, like New Zealand's, is a flat-rate pension.

Ireland's pension system is simple in design. There is a state pension of about one-third of the average wage (currently €238.30 per week for the majority) with significant additions for dependents. This is a contributory pension, but the means-tested non-contributory pension is essentially worth the same amount. Pension provision above this minimum level is incentivised by the state through tax relief on contributions, tax relief on investment returns, and tax relief on some benefits (lump sum on death or retirement) with other benefits taxed as earned income.

The striking feature of the Irish pension system is that it has not changed over time: the system in 2017 is structurally identical to the one inherited with independence from the United Kingdom in 1921. Accordingly, one puzzle must be addressed in any study of the Irish system in an international context: how is it that the original system survived intact in Ireland, but required significant structural change in the UK and elsewhere? This puzzle is all the more baffling as the inadequacies that prompted change everywhere else are manifest and widely known in Ireland. As the OECD stated in a recent independent review of the Irish pension system:

> A definitive choice should be made today regarding the structure of private pensions and its interaction with the State pension, with a view to implementation in the future. Given the many years that pension reform has already been discussed in Ireland without some fundamental choices being made about the way ahead, the time is ripe now to take some fundamental decisions on the future of Irish pensions.[1]

The outline of this chapter is as follows. First, it reviews what changes there have been to the system from independence until today. Second, it gives a picture of how the system functions in 2017 in terms of coverage, security and adequacy. The following two sections contrast the high charges associated with personal pensions in Ireland to the value of the tax reliefs granted on pension saving above other savings, which are shown to be of the same order of magnitude. It concludes that the state's subsidy to private pension provision maintains a large pensions industry, which does not satisfy any reasonable cost-benefit analysis. The penultimate section attempts to explain why pension reform in Ireland, though much discussed, has not happened despite the obvious failings of the current structure. It notes the failure of the state to act independently of the pensions industry in setting policy and regulation. It argues that Ireland is a case study of government failure, "in which the insurance companies had won and the workers of the country had lost", as was observed more than half a century ago. It concludes that Ireland must adopt the first of William Beveridge's three guiding principles – vested interests must not frame the reform agenda – if Ireland is to modernise its pension system and achieve a better outcome for the considerable state subsidy to private provision.

THE DEVELOPMENT OF THE IRISH PENSION SYSTEM

The UK's Old Age Pension Act 1908 granted non-contributory pensions to those over 70 years of age with limited means. Ireland was then one of the poorer regions in the UK and the effect of this act was to provide a near-universal pension of a generous amount, as the original five shillings pension was equivalent to half the wage of an unskilled labourer in Ireland.[2] The incentivising of private occupational pension provision through tax reliefs was established by the UK's Finance Act 1921,[3] which carried through to Ireland following its independence in 1922.[4]

The fiscally conservative government of the new Irish Free State tried to reduce the burden of pensions in its early years, a move that was politically unpopular and quickly reversed. In fact, until the Social Welfare Act 1960, there was to be only "incrementalist growth" in the system largely directed to overcoming the administrative difficulties in determining eligibility in a society when "systematic keeping of records of age and income are non-existent or ill-organised".[5] The social welfare act 1960 introduced a contributory pension for all in paid employment excluding public servants, the self-employed (included a couple of decades later), and those earning above a threshold (included later), thus essentially giving the right to a pension irrespective of means. Like other pay-as-you-go social security systems, the contributions bear little relationship to the value of the pension entitlement. Further legislation in the early 1970s reduced the retirement age from 70 years to 66 or 65 in most cases. In more recent years, the retirement age has been increased: from 2028, it will rise to 68 years of age.

Private provision designed to top up the flat rate state pension comes mainly in the form of occupational pension schemes - the defined benefit scheme and more lately the defined contribution scheme. In addition, there has been some self-provision via individual retirement accounts of various descriptions. However, these top-up arrangements never covered much more than 50 per cent of the working population (including the public sector). Moreover, this coverage has declined over the last decade to less than 50 per cent of workers.

There was no change to the incentives for private pension provision although, of course, as income tax rates increased with time, the burden of the state's subsidy (or 'taxation expenditure') grew. A modest level of regulation was introduced in private pension provision by the Pension Act 1990 and its subsequent amendments.

There have been many reports by those charged with advising the government on such matters, some even getting to the stage of green or white papers. For instance, in the 1970s, the debate in Ireland included consideration of transforming the state pension to an earnings-related system, in line with developments in the UK and elsewhere. A green paper was issued on the topic, but the white paper, though drafted, was never published.[6] When the UK was once again reforming its pension system, the Irish minister for social and family affairs requested the statutory advisory Pensions Board to conduct a full review of the Irish pension system. This produced the 2005 National Pensions Review and, at the further request of the minister, a supplemental report on a mandatory pension system based on individual accounts, Special Savings for Retirement (2006). These reports, augmented by survey studies of the operation of the existing system,[7] led to the 2007 Green Paper on Pensions. There was a formal and broad consultation process following publication of this green paper which came to nothing. Most recently the minister for social protection commissioned an independent review of the Irish pension system by the OECD.[8]

Before we attempt to answer why so much talk about pension reform since Ireland's independence has not translated into action, let us briefly review the current functioning of the system.

THE CURRENT IRISH PENSION SYSTEM

Ireland's state pension is one of the least unaffordable systems in the world. This is simply because the size of the Irish state pension is lower than the average pension in most other countries. This has been true in the past and remains true if expenditures are projected over the next 50 years. Indeed, if all public expenditures on pensions in Ireland are considered – covering the contributory state pension, the non-contributory state pension and all public service pensions – then the picture is equally serene. Table 2, extracted from a recent OECD survey of pension systems across the world, shows that that projected annual expenditure peaks in Ireland in about 2045 at 10.2 per cent of GDP and that peak is lower than the current average expenditure on public pensions in the EU.

There is scope to simplify the state pension system even further, in the direction of a universal pension. Perhaps there should be a more proportionate link between contributions made or credited and the eventual pension entitlement. However, these are minor adjustments. The key conclusion is that the Irish state pension is sustainable.

The state pension is the workhorse of the Irish pension system. The Central Statistics Office in Ireland shows that income for those over 65 years of age in 2011 comprised 63 per cent from state the pension and some other social transfers, 16 per cent from wages, 16 per cent from occupational pensions, 2 per cent from personal pensions and 3 per cent from investments.[9] In terms of relative poverty measures, the overall outcome, according to the OECD, is that “the economic situation of pensioners in Ireland is comparatively good, both with respect to other age groups in the population and internationally”.[10]

The private system to top up the state pension functions less well. The CSO undertakes periodic reviews of private pension coverage. The latest review shows that 47 per cent of workers have a private pension, down by 7 per cent since the financial crisis.[11] The main reasons cited by workers without a pension arrangement – now the majority in Ireland – is that they cannot afford it (39 per cent) or have not got around to it yet (22 per cent).

Those that do have a private pension have one largely because of their employer: of those with a private pension some 73 per cent have an occupational pension only, 18 per cent a personal retirement

Table 2 Projections of Public Expenditure on Pensions, 2010–2060

	2010–2015	*2020*	*2025*	*2030*	*2035*	*2040*	*2045*	*2050*	*2055*	*2060*
Ireland	7.4	8.0	8.7	9.1	9.6	10.0	10.2	10.0	9.3	8.4
OECD	9.0							10.1		11.3
EU28	11.3	11.2	11.4	11.6	11.7	11.7	11.6	11.4	11.3	11.2

Source: Abstract from Table 9.5 of OECD (2015).

account only and nine per cent have both. The defined contribution arrangement has overtaken the traditional defined benefit scheme, covering 54 per cent of workers with an occupational pension. Coverage is patchy by industry, with those in the public sector and the financial sector having very high coverage and some industries such as tourism, agriculture and the motor trade having low coverage.

Perhaps a better way to map the occupational pension landscape in Ireland is to divide the total number of active members of occupational schemes – 750,000 workers according to the Pensions Authority[12] – into the 45 per cent in public service schemes, 17 per cent with private sector defined benefit schemes and 38 per cent in private sector defined contribution schemes. This distinction is important in any consideration of the eventual adequacy of pensions provided. Public sector schemes provide good income replacement ratios from retirement and the benefits are secure. This part of the system functions well. The issue here has been the cost of providing such a quantum of benefits. There have been recent changes to improve its affordability such as integrating it with the state pension (for new entrants since 1995); increasing effective retirement ages (for new entrants since 2004); a pension levy of an average of 7 per cent of earnings so members contribute more (for all since 2009); and a new Single Public Service Pension Scheme for all new entrants from 2014 based on career average earnings and a retirement age linked to that of the state pension. This last initiative is estimated to reduce pension costs by 35 per cent for new entrants from 2014.[13]

There is little security for members of defined schemes outside the public sector. There is a funding standard in place, but a breach of the standard merely requires a plan to be submitted to reach the standard – and another plan if the previous plan fails. Accordingly, members have as yet little protection of their benefits: pension deficits are not a debt on the employer, there is no pension protection fund, and solvent employers are allowed to have closed schemes in deficit and walk away from their moral obligations (and have done so).[14] These schemes are winding up or freezing benefits at an alarming rate – in the three years to the end of 2015 active members in such continuing schemes have dropped from 183,260 to 125,955, a fall of 31 per cent.[15] The figures for 2016 are due shortly and are expected to show an acceleration in this trend. Even actuarial consultants advising such schemes are closing their own staff schemes.

There has been an uptick in the membership of defined contribution schemes (up 13 per cent over the same period to 263,261 members at the end of 2015). However, such schemes typically have a lower level of contributions compared with defined benefit plans so will provide a lower income replacement ratio when pensions eventually become payable.

The market for personal pensions, as opposed to occupational pensions, while sizeable in terms of the number of policies is relatively small in average size. The Pensions Authority estimates that the 250,000 Personal Retirement Savings Accounts have a total of €5bn in assets, giving an average of just €21,000 per account.[16] There are other personal pension arrangements available in Ireland, but there is no register of their number.[17]

The overall picture in private pension provision is of falling coverage and falling adequacy in that coverage. Outside of the public sector, there is a marked trend towards provision via individual retirement accounts, whether in group defined contribution arrangements or personal pension plans. These arrangements not only transfer longevity and investment risk to the individual, they also incur significantly higher administration and other costs as economies of scale are lost.

PENSION CHARGES IN IRELAND

Few would argue with the main findings of the OECD in their review of the Irish system that "private pension coverage, both occupational and personal pensions, is uneven and needs to be increased urgently" and that "Irish legislation regarding the protection of defined-benefit plan members is weak". They also highlight that "pension charges by the Irish pension industry … are expensive for small occupational schemes and personal pension schemes".[18] In fact, for individual or small group arrangements the cumulative impact of charges at the point of retirement is to reduce the fund size by about 25 per cent, assuming no change or alteration to the policy over the entire saving period.[19] Around this typical cost there are some policy types that charge twice as much – a particular source of concern as charges are not transparent (ibid, table 8.24).

The accumulated fund must be converted at retirement into an annuity or an "approved retirement fund" from which disinvestments can be made. The annuity option has the lower charges, with commission typically two per cent[20] and total charges of the order of 10 per cent.[21] These extra charges in the decumulation phase are in addition to those in the accumulation phase.

The 2012 Report on Pension Charges in Ireland highlights the level of charges, their lack of transparency and their variability within the market and makes an attempt to gauge their impact expressed as a reduction in the eventual pension. To do so it made the assumption that a pension saving policy once effected would persist unaltered until retirement. It recognised that this is not altogether a realistic assumption:

> The high level of re-brokering in the marketplace raises some concerns, in particular, data was not available to provide assurances that re-brokering benefits the scheme member or individual policy holder. This is an area which merits further research.[22]

Many passages of the report note the relatively short average length of current in-force individual pension policies, with the majority seemingly initiated in the last five years. If pension policies are changed, then the reduction of pension due to the impact of charges is greater.

"TAX EXPENDITURE" BY THE STATE TO ENCOURAGE PRIVATE PENSION PROVISION

The Irish state, like many others, encourages private pension provision by granting tax relief on contributions, investment returns and the lump sum at retirement or early death, and then levies tax on pension draw down as earned income. The tax relief is at the individual's full marginal tax rate. This system is known as the "Exempt-Exempt-Partial-Taxed" system as opposed to the "Taxed-Taxed-Exempt" system that applies to other savings. Hence, the state gives upfront tax relief over the entire accumulation phase, with some measure of payback with pension drawdown in several decades' time. This subsidy to encourage pension provision is often referred to as "tax expenditure". The question naturally arises as to what this favourable tax treatment or subsidy costs the state, who benefits from it, and to what extent.

In order to answer these questions, it is necessary to estimate the "net effective tax relief" granted to pension savings. By this we mean the effective subsidy granted by the state on each €1 invested in a private pension as compared to other savings. This effective subsidy is found by discounting the expected future tax receipts on pensions when in payment and comparing it with tax revenues forgone on each €1 invested (by way of tax relief on contributions, investment returns and the lump sum payment).

A comprehensive international study of such tax expenditures (or state subsidies to private pensions) has been done by the OECD.[23] The study shows that Ireland's net effective tax relief is reasonably generous at 28.6 per cent of each pension contribution and the overall cost to the state is the highest of the countries studied.[24] In fact, the 28.6 per cent effective rate is just an average and the net effective tax relief is greater for higher earners in Ireland. This is material because, as Collins and Hughes have suggested, "nearly three quarters of pension tax expenditure is concentrated on contributors who are in the top two deciles of the Irish income distribution".[25]

So, according to these figures, the state subsidy to private pensions is concentrated on higher earners, is highly valuable and is a significant cost to the state. In fact, for higher earners, the cost of the state subsidy is of a similar magnitude to the charges levied by the industry on personal pensions and small group defined contribution schemes. The state is contracting out pension provision to the private sector and essentially meeting most of their charges: charges by private providers for individual or small group schemes reduce the pension by about 30 per cent and the subsidy by the state to the retirement account is of the same order. By comparison the administration costs associated with the state pension are of the order of 3 per cent of the pension.

The state has not been effective in regulating private provision. It simply does not satisfy any cost-benefit analysis for it to subsidise the sale and administration of individual retirement accounts to this extent. And with the accelerating demise of the defined benefit scheme and its economies of scale, private pension provision in Ireland is being transformed into higher-cost defined contribution arrangements.

THE WEAKNESS OF THE STATE

The pension system Ireland inherited when it left the UK was far from flawless. So why is it that the basic structure of the pension system has remained unchanged for almost 100 years? We need to understand the forces at work maintaining the current system.

The answer is that pension reform in Ireland has been frustrated – and will always be frustrated – as long as policymakers infringe Beveridge's first principle:

> *"THREE GUIDING PRINCIPLES OF RECOMMENDATIONS*
>
> 6. In proceeding from this first comprehensive survey of social insurance to the next task—of making recommendations—three guiding principles may be laid down at the outset.
> 7. The first principle is that any proposals for the future, while they should use to the full the experience gathered in the past, should not be restricted by consideration of sectional interests established in the obtaining of that experience …"[26]

Pension reform in Ireland has been challenged by the state's failure to distance itself from the industry. A case in point is the white paper, Social Security, published in 1949 (known as the "Norton Bill" as it was sponsored by William Norton, the minister in charge of the newly formed Department of Social Welfare and the leader of the Labour party). This bill was "the first major review of welfare legislation in independent Ireland"[27] and advocated a Beveridge-style extension of social insurance in Ireland, including the introduction of a contributory state pension with a retirement age of 60 for women and 65 for men. If enacted this would have anticipated all the major reforms to the state pension that, in the event, took the next 50 years. The pension reform aspect was dropped when eventually enacted by another government in 1952, a move that Norton considered as "revealing the countervailing power of insurance companies. In fact, he saw the situation as one in which the insurance companies had won and the workers of the country had lost".[28]

The state has often lacked the expertise and/or resources to proceed independently on pension policy matters. WA Honohan was the secretary to the Department of Social Welfare for two decades until his retirement in 1973. He was an actuary and an influential thinker on economic and social reform, especially on pensions. After his retirement, there was a dearth of knowledge of pensions in the department, temporarily made good by retaining him as an adviser in the preparation of the green paper on earnings-related pensions published in 1976. However, the department, unable to hire an actuary or other expert on pensions due to their rigid pay structure, increasingly sought information and advice from the pensions industry, which duly obliged.[29]

It is a story of how the weakness of the state led to the industry's increasing influence on policy. The industry drafted the legislation which prescribes its own regulation (Pension Act 1990) and which set up the statutory regulator, the board of which had majority representation from within the industry (First Schedule, Section 8 of the Act). A senior public servant was later to reflect: "We kind of sleepwalked into it. We got them [the industry] to set up the Pensions Board. Gave them responsibility for it".[30]

The Pension Act 1990 also provided the industry with statutory authority to provide ongoing advice on pension matters to the Minister for Social Protection, whether invited or not (Part II, 10(1) (b) of the Act). This privileged position in all aspects of pension policy continued until March 2014 – a generation, ending only after a formal review recommended a separate body to undertake such an advisory role to "obviate any perception of 'regulatory capture' by the industry".[31]

Ireland's particularly weak protection of pension rights reflects this historic state failure.[32] High and non-transparent charges in pension products have never been accompanied by a pension mis-selling or churning scandal. Equally unsurprising has been the absence of any significant change to a pension policy that relies solely on tax-incentivised top-ups into privately managed schemes or accounts, despite the high tax expenditures and falling percentage of workers covered by such schemes since the 1980s. In short, the state has failed to close the gap between a "pension elite" – who enjoy good defined benefit or private pensions – and the rest, a gap which has existed since independence.

CONCLUSION

If Ireland is to modernise its pension system and achieve a better outcome for the considerable state subsidy to private provision then, quite clearly, the state must do a much better job of weighing the public interest against the interests of the industry.

The OECD outlined in 2014 the issues faced and possible future paths. Since the Irish system is so simple and the state pension so comparatively modest, there are many ways it could be developed. It is feasible, the OECD argues, for Ireland to introduce an earnings-related state pension or, alternatively, a universal flat-rate pension for the entire population. It recommends a compulsory approach to additional pension saving as being less costly and more effective than automatic enrolment. It recommends that better protection of pension rights and encourages annuitization. Overall it shows that, if minded, Ireland can have a more inclusive, cost-efficient and secure system than the present one.

The fear must be that, if the state fails to accrue expertise and resources in the service of improving the nation's pensions settlement, inertia will triumph, with no structural reform of Ireland's system. Public expectations, managed by the industry over decades, are low and, once again, they might be met.

ACKNOWLEDGEMENTS

I thank Brendan Keenan, Professor Gerry Hughes and Gregg McClymont for suggested improvements to an earlier draft of this chapter.

NOTES

1. OECD (2014) *OECD Reviews of Pensions Systems: Ireland*, OECD Publishing p105.
2. Whelan, S. (2007) *Valuing Ireland's Pension System*. Quarterly Economic Commentary, Economic & Social Research Institute, Summer, 55–80.
3. Lee, E. M. (1986) *An Introduction to Pension Schemes*. Institute & Faculty of Actuaries reference – p15.
4. Honohan, W A (1960) *Providing for old age through private channels*. Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XX, Part III, 1959/1960, 178–198 reference – p109.
5. Carney, Claire (1985) *A Case Study in Social Policy – The Non-Contributory Old Age Pension*. Administration, Vol 33, No. 4, pp. 483–529 reference – 515.
6. McCashin, A. (2004) *Social Security in Ireland*. Gill & Macmillan, Dublin reference – p42.
7. Hughes, G & Watson, D (2005) *Pensioners' Incomes and Replacement Rates in 2000*. Policy Research Series 54, The Economic and Social Research Institute, Dublin.

8. OECD (2014) *OECD Reviews of Pensions Systems: Ireland*, OECD Publishing.

9. CSO (2013) *Survey of Income and Living Conditions: Thematic Report on the Elderly, 2004, 2009, 2010 (revised), and 2011.* Central Statistics Office. http://www.cso.ie/en/media/csoie/releasespublications/documents/silc/2011/elderly040910and11.pdf reference – Table 2.

10. OECD (2014) *OECD Reviews of Pensions Systems: Ireland*, OECD Publishing – reference p11.

11. CSO (2013) *Survey of Income and Living Conditions: Thematic Report on the Elderly, 2004, 2009, 2010 (revised), and 2011.* Central Statistics Office. http://www.cso.ie/en/media/csoie/releasespublications/documents/silc/2011/elderly040910and11.pdf Last accessed: 10/10/2017.

12. Pensions Authority, The (2016) Regulatory Activity and 2015 Statistics at a Glance. http://www.pensionsauthority.ie/en/About_Us/Annual_reports/Regulatory_activity_and_2015_statistics_at_a_glance.pdf Last accessed: 10/10/2017.

13. OECD (2014) *OECD Reviews of Pensions Systems: Ireland*, OECD Publishing – reference p42.

14. Whelan, S. & Moloney, M. (2009) Pension Insecurity in Ireland. Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XXXVIII, *(2008/2009),* 75–104.

15. Figures from annual reports of the Pensions Board.

16. Pensions Authority, The (2016) Regulatory Activity and 2015 Statistics at a Glance. http://www.pensionsauthority.ie/en/About_Us/Annual_reports/Regulatory_activity_and_2015_statistics_at_a_glance.pdf Last accessed: 10/10/2017.

17. Department of Social Protection (2012) *Report on Pension Charges in Ireland 2012* reference – p25.

18. OECD (2014) *OECD Reviews of Pensions Systems: Ireland*, OECD Publishing reference – p11.

19. Department of Social Protection (2012) *Report on Pension Charges in Ireland 2012* reference – p6.

20. Department of Social Protection (2012) *Report on Pension Charges in Ireland 2012* reference – chapter 11.

21. Indecon & Life Strategies (2007) Review of the Irish Annuities Market. Report for the Partnership Pensions Review Group. http://www.taoiseach.gov.ie/eng/Publications/Publications_Archive/Publications_2007/Annuity_Report_9_Oct_071.pdf reference – p86.

22. Department of Social Protection (2012) *Report on Pension Charges in Ireland 2012* reference – p212.

23. Yoo, Kwang-Yeol & de Serres, Alain (2005) *Tax Treatment of Private Pension Savings in OECD Countries*. OECD Economic Studies No. 39, 2004/2.

24. See Figure 1 on p. 91, Figure 3 on p. 94 and Table 3 on p.100.

25. Collins, Micheál & Hughes, Gerry (2017) *Supporting pension contributions through the tax system: outcomes, costs and examining reform.* Working paper reference – pp. 16–17.

26. Beveridge, William (1942) *Social Insurance and Allied Services.* HMSO London. Available at http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/19_07_05_beveridge.pdf (https://www.welfare.ie/en/pressoffice/pdf/Report-of-the-Critical-Review-23-April-2013.pdf) Last accessed: 10/10/2017 reference – p6.

27. Kelly, Adrian (1995) *Social Security in Independent Ireland, 1922–52*. PhD Thesis, Department of Modern History, St Patrick's College, Maynooth reference – p15.

28. McCashin, A. (2004) *Social Security in Ireland*. Gill & Macmillan, Dublin reference p 51. Maher (2016) tells the history of developments in pension policy from this time (see especially pp. 143–235), enlivened with frank interviews from key players.

29. Maher (2016) tells the history of developments in pension policy from this time (see especially pp. 143–235), enlivened with frank interviews from key players.

30. Cited in Maher, Michelle (2016) *The Politics of Pensions in Ireland*. Unpublished Thesis for the Degree of Doctor of Philosophy, Sociology Department, Faculty of Social Science, Maynooth University, Ireland reference – p175.

31. Government of Ireland (2013) *The Public Service Reform Plan Critical Review: Integration of the Regulatory Function of the Pensions Board with the Central Bank and Amalgamation of the Pensions Ombudsman with the Financial services Ombudsman.* https://www.welfare.ie/en/pressoffice/pdf/Report-of-the-Critical-Review-23-April-2013.pdf Last accessed: 10/10/2017 reference – p47.

32. Whelan, S. & Moloney, M. (2009) Pension Insecurity in Ireland. Journal of the Statistical and Social Inquiry Society of Ireland, Vol. XXXVIII, *(2008/2009),* 75–104.

DENMARK

Jørgen Goul Anderson

The Danish pension system is composed of three pillars: a state pension (with several minor schemes); semi-mandatory occupational pensions, referred to as labour market pensions; and personal pension savings.

The state schemes provide an unusually high minimum and solid protection against poverty. However, as labour market pensions mature, they will challenge the people's pension as the backbone of the system. The fully funded pensions provide the state with large income tax revenues from future pension payments which will also provide substantial relief to the state for future increases in pension expenditures. Alongside positive demographic prospects, this makes the Danish system economically sustainable. It was deemed the best pension system 2012–2016 by the Melbourne Mercer Global Pension Index.[1] Nonetheless, some social and political challenges remain.

HOW THE DANISH MULTI-PILLAR SYSTEM CAME INTO BEING

After Germany, Denmark was the second country in the world to introduce old age support, in 1891, but took a different course with tax-financed support for all citizens. Support was means-tested, but the People's Pension Reform of 1956 extended entitlements to all citizens. In 1964 this was changed to a fully flat-rate system (although with a tiny means-tested supplement).

The 1964 reform was the last comprehensive Danish pension reform and the system developed without any master plan. Unlike Sweden and Norway, Denmark did not add an earnings-related tier, but chose to improve flat-rate pensions. Occupational pensions were introduced via the collective agreement system, not by legislation.

The first significant growth in collective schemes took place among professionals in the public sector, spreading down the hierarchical lines in the 1960s and 1970s. The introduction of private supplements – individual or collective – is a logical implication of flat-rate pensions, since they provide insufficient income replacement for the middle classes. However, a main driver was the state's interest in higher savings: consumption was chronically too high, and, from 1960 to 1990, Denmark suffered from permanent current account deficits and increasing foreign debt.

Initially, the encouragement of savings was also the government's motive for announcing in 1984 that it would welcome an extension of occupational pensions to the entire labour market. This was well received by the trade unions, and, after tripartite consultations, labour market pensions were included in nearly all collective agreements from 1991 to 1993. Initially, contributions were low, but the social partners set a target of 9 per cent, later 12 per cent, which was reached by 2009. For the "old" schemes, contributions are typically 15–18 per cent.

Even though collective agreements do not cover 100 per cent of those in work, it became the norm for nearly the entire labour market that an employment contract includes a pension scheme. Usually, the employer contributes two-thirds and the employee one-third. Even though labour market pensions are in practice semi-mandatory, it is formally a private system. Pensions are fully funded, and savings are secured in pension funds. Only a few company-based schemes have survived, and most civil servants' schemes are being terminated.

STATE PENSIONS: MORE TARGETED

As occupational pensions were phased in, the state pension system became more targeted, partly because of new, means-tested schemes, partly because of the targeting of the people's pension. In particular, the 1994 tax reform changed the balance between the universal basic amount and the means-tested supplement. For a single pensioner, the supplement is larger (DKK 78.612 in 2017 – or €10.550) than the basic amount (DKK 73.920 – €9.925). As labour market pensions mature, many will lose much, or all, of their pension supplement.

Moreover, a number of means-tested improvements have been added (see table 3):

- A very generous housing benefit scheme for pensioners, often paying one-half of the rent, was introduced in 1978. Maximum support is DKK 45.480 (€6.100). This scheme is essential for protecting pensioners against poverty. It is means-tested, but the slope is not very steep: in 2016, only income above DKK 808.800 (€108.500) is counted as part of the calculation (10 per cent of the exceeding amount is added to the income, 20 per cent of fortunes exceeding the double of that amount). The benefit is calculated according to a complex formula that allows many middle-class pensioners to receive a modest amount.
- Support for heating bills, introduced in 1981, is technically an "individual supplement" where the slope for means-testing is very steep, i.e. only pensioners with very low incomes are entitled.
- Supplementary pension benefits, introduced in 2003, provide a maximum of DKK 16.900 (€2.270). Again, the means-testing slope is steep; one-quarter of pensioners are entitled, and far fewer receive the maximum.
- Pensioners may also obtain means-tested individual supplements for extraordinary (in particular, health-related) expenses.

Finally, the state system includes a small, fully funded scheme: ATP. Contributions are decided in collective negotiations. Although

Table 3 Components of the Danish pension system

<table>
<tr><th></th><th colspan="2">First pillar</th><th>Second pillar</th><th>Third pillar</th></tr>
<tr><td></td><td colspan="2">State pensions and special arrangements for pensioners</td><td>Occupational pensions</td><td>Personal pensions</td></tr>
<tr><td>Third tier (top-ups)</td><td colspan="2"></td><td></td><td>Rent pension (lifetime)
Age pension (at once)
Rate pension (10 years)</td></tr>
<tr><td>Second tier (income maintenance)</td><td colspan="2"></td><td>Labour market pensions (Civil servants' pensions) (Company pensions)</td><td></td></tr>
<tr><td rowspan="6">First tier (basic security)</td><td colspan="2">ATP:State LM Pension (funded)</td><td rowspan="6"></td><td rowspan="6"></td></tr>
<tr><td rowspan="2">People's pension</td><td>Basic amount</td></tr>
<tr><td>Pension supplement*</td></tr>
<tr><td colspan="2">Supplementary pensions benefits*</td></tr>
<tr><td colspan="2">Preferential housing benefits*</td></tr>
<tr><td colspan="2">Individual supplements (heating, health, personal)*</td></tr>
</table>

Bold: Universal flat-rate benefit (tested against income from wages, but only above a high level).
Italic: Means-tested benefits (*).

The remaining pensions are financed by contributions and fully funded.

some unions prefer a lower contribution rate, generally contributions and payments are uniform, depending only on full-time employment (28 hours or more) and contribution time.

Altogether, the state pension system is becoming ever more targeted as labour market pensions mature. It should be added that pensions (unlike housing benefits or individual supplements) are subject to ordinary income tax (the standard rate is 37 per cent and there is a 52 per cent rate for those on very high incomes, with a tax-free minimum of DKK 45.000 – €6.050, 2017).

DEFINED CONTRIBUTION LABOUR MARKET PENSIONS

A dominant trend in current pension reforms worldwide is a shift from defined benefit towards defined contribution. This is also the case in Denmark. Labour market pensions are a pure case of defined contribution: pensions depend on contributions, returns on invested capital, and age of retirement. Retirement age becomes a free choice – for those who have a choice. People can choose either an early retirement with a low annual pension or a late retirement with a high annual pension. People are entitled to access their private pensions five years before the formal retirement age, but they have an economic incentive to continue working, sometimes beyond the formal pension age, in order to obtain an appropriate pension income.

Finally, fully funded pensions imply automatic adjustments to reflect changes in life expectancy. If pension fund members live longer, annual pensions are automatically reduced and people must work longer to obtain the same pension as earlier generations. All these characteristics also apply to personal private pensions.

There are three main types:

- rent pensions that provide a life-long pension;
- rate pensions that are paid over an agreed period of a minimum of 10 years;
- age pensions that can be paid out at any time from five years before retirement age.

Contributions to rent pensions and rate pensions are tax-deductible, and pension payments are taxed. To limit tax arbitrage, where people deduct contributions with a higher percentage than their tax rate as pensioners, there is a ceiling to annual contributions to rate pensions. A ceiling also applies to age pensions. Here, savings are not deductible and withdrawals are not taxed. The incentive is that annual returns on the capital are only taxed at 15.3 per cent.

MACROECONOMIC IMPACT

As mentioned, the initial motive for the government to encourage labour market pensions was to reduce the current account deficit. In this respect, labour market pensions – alongside other initiatives – have been a success. Since 1990, there has been a permanent surplus and a large foreign debt has turned into a positive net international investment position of 45–50 per cent of GDP by 2016. Accordingly, net revenues from investments abroad ensure a much higher growth in Gross National Income than in Gross National Product.

It is also worth noting that huge levels of capital have been accumulated. Adding together pensions in private insurance companies, banks and labour market pension funds (some of which are organised as private pension insurance companies), the total amount by the end of 2015 was DKK 4.083bn or 201 per cent of GDP.[2]

TAX SUBSIDIES AND DEFERRED TAXES

As over-consumption ceased to be a problem, large tax subsidies for pension savings were scaled back. Except for age pensions, contributions are tax-deductible, but in return pension payments are subject to ordinary income taxation. Furthermore, returns on investments are taxed by 15.3 per cent. This still involves a small subsidy, but in addition, people typically lose means-tested benefits when their pension income increases.

Due to the tax system, Denmark's total pension pot contains a very substantial amount of deferred taxes which should, in principle, be counted as an asset of the state.[3] At any rate, future tax revenues from pensions help finance higher old-age expenditures.

RETIREMENT REFORMS, FUNDED PENSIONS AND SUSTAINABILITY

Alongside the changes above, the state has also sought to reduce the costs of an ageing population by raising the pension age. In the 2006 welfare reforms, it was decided to index the retirement age with life expectancy at 60, fixing the average life expectancy after pension age at the 14.5 years it stood at in 1995. In 2011, it was decided to start implementing the reform five years earlier than originally planned. Moreover, the voluntary early retirement scheme was reduced from five to three years and made so economically unattractive that it has effectively been phased out. The pension age will be gradually raised from 65 to 67 years in 2019–2022, to 68 years in 2030, to 69 in 2035 and to 70 in 2040, provided that life expectancy rises by five years. However, between 1995 and 2014, life expectancy at 60 had already increased by 3.9 years.

These reforms are extremely radical. The earliest retirement age increases from 60 years for those born in 1953 to 70 years for those born in 1970. But the challenge of paying for an ageing society has basically been resolved by the following package of measures:

- Higher pension age. The old age dependency ratio (65+ years/15–64 years old) was 28.5 in 2015. By 2050 it is estimated to be 39.4 (EU average is 49.4). However, if we take account of the higher pension age in 2050 and calculate old age dependency as 70 years+/15–69 years old, the ratio in 2050 is 31.2, i.e. close to its 2015 level.[4]
- A 15.3 per cent taxation rate of current revenues applied to all pension savings.
- Income taxes on pension payments.
- A lower means-tested pension from the state.

According to calculations on mainstream economic models, this is roughly sufficient to finance increasing age-related expenditures for pensions, healthcare, and social care, based on the current level of services provided. The sustainability problem is thus largely solved.

EQUALITY AND POVERTY PROTECTION

From a social perspective, the Danish system works well. The minimum is unusually high – for a single pensioner, it is equivalent to a person receiving maximum unemployment benefits.[5] Provided that people rent their apartment, poverty, based on a 50 or 60 per cent criterion, is not possible. Moreover, inequality among pensioners is not expected to increase. However, one exception remains. Pensioners who have been living in Denmark for less than 40 years only receive a proportion of the people's pension. Still, they enjoy universal access to the other schemes and may be compensated a little via individual supplements.

THE TRAPS IN THE SYSTEM

In its unique combination of state and occupational pensions, the Danish pension system is excellent in providing adequate and sustainable pensions. The system is robust in relation to ageing. Cutbacks or higher taxes are unnecessary. Pensions are adequate for most citizens and the minimum protection provided is unusually high.

Yet, some problems remain. First, there is gender discrimination, especially for middle-class women (low-income women benefit from high minimums). Unless agreed upon in collective negotiations, women do not earn pension points while on maternity leave. Moreover, in a gender-divided labour market, pension funds are also gender-divided. In pension funds with a large majority of women, average life expectancy is higher, and annual pensions correspondingly lower. Gender wage gaps are not only carried on into pensions; the gap is aggravated. To complete the picture, employment-related pensions are not divided between spouses in cases of divorce, unless this is explicitly agreed.

Second, there is a tax trap. As pension income is subject to income taxation, and as the state pension system (pensions and other benefits), is means-tested, marginal tax rates inevitably become high. As a rough estimate, marginal tax on pension savings is typically around 55 per cent. For those with incomes exceeding the limit for means-tested entitlements, the figure is lower. For low-wage groups which are entitled to several means-tested benefits as pensioners, marginal tax rates are higher and, occasionally, much higher.

Third, there is a complexity trap. The system is so complicated that few people understand it. This might be considered a blessing: the system works well, but legitimacy presumes that people misjudge their incentives. However, even politicians rarely understand the system – and some of the problems are side-effects of the introduction of policies where decision-makers did not really know what they were doing.

Fourth, there is a health trap for the lower classes. The higher pension age is an obvious solution when life expectancy increases and health tends to improve even more. The problem is that there is high and increasing social inequality in health and life expectancy. Previously, early retirement schemes ensured a tolerable number of years of retirement, including for the working classes. The one size-fits-all-approach adopted since 2011 means that the working classes face a short retirement and, before that, problems of maintaining employment (or access to benefits) when their health deteriorates.

Finally, there is a poverty trap. Pensioners used to fulfil all criteria of "deservingness" – need, identity, reciprocity and responsibility.[6] However, the visibility of pensioners with huge pension savings could erode these "deservingness" perceptions with regard to the need dimension. Indeed, economic experts have for a decade recommended the abolition of special programmes such as the housing benefit scheme for pensioners, arguing that pensioners are no longer "weak". This would, however, increase poverty, since there is no conceivable way to compensate the lower half of the pensioners for this – and, if there were, it would aggravate the tax trap even further.

In short, while economic challenges to the pension system have largely been resolved, this has come at the cost of aggravating some social problems, with political threats replacing economic ones.

NOTES

1. Melbourne Mercer (2016) Melbourne Mercer Global Pension Index https://www.uk.mercer.com/our-thinking/mercer-melbourne-global-pension-index.html Last accessed: 10/10/2017.

2. Forikring & Pension (2016) *Pensionsformuen fordelt pa de institutionelle investorer* http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/formuer/Sider/Pensionsformue_investor.aspx# Last accessed: 10/10/2017 and Danmarks Statistik (2017) *Seneste NYT I Danmarks Statistikbank* www.statistikbanken.dk table NAN1 Last accessed: 10/10/2017.

3. Implicitly, the state 'owns' nearly 40 per cent of the pension assets; however, some DKK 125bn was paid in taxes when the government in 2013–2015 enabled people to switch former (taxable) capital pensions to age pensions. Still, this leaves state assets of 70–75 per cent of GDP to co-finance future old age expenditures.

4. www.statistikbanken.dk, FRDK116, 20 December 2016.

5. Goul, Andersen and Hatland (2014) 'Meeting the Demographic Challenges' in P.Kettunen, S Kuhnle, and R Yuan (eds) *Reshaping Welfare Institutions in China and the Nordic Countries* NordWel Studies in Historical Welfare State Research 7, Helsinki: NordWel 257–88.

6. Van Oorschot W (2000) *Who should get what, and why? On deservingness criteria and the conditionality of solidarity among the public* Policy & Politics Vol 28(1) 33–48.

CONCLUSION

Gregg McClymont and Andy Tarrant

The pension systems discussed in this book are characterised by trade-offs: between adequacy of incomes; coverage of the population; and cost to the public and private sectors. The motivation of those in the vanguard of moving to defined contribution-orientated systems – Chile, Mexico, Singapore and the US – was a desire to reduce or avoid the long-term costs to the state and employers of pension guarantees. Hong Kong, New Zealand, Denmark and Ireland subsequently came to similar conclusions. Defined benefit is a declining, marginal, or non-existent form of pension provision in these eight nations.

Each system combines state, employer and private savings – broadly speaking, the three pillars which the World Bank famously described as the foundation of a decent pension system. But the strength of the pillars varies by country. Chile's defined contribution system involves no employer contribution; a major weakness. Hong Kong has no state pension pillar as such, although there is a means-tested supplement available to the elderly. At the other end of the spectrum, the high-quality Danish and New Zealand systems are built on a generous, universal state pension. Ireland's state pension is relatively generous too, but its workplace provision weaker. The Singapore system is perhaps the exception to the three-pillar rule. It has no first pillar at all and relies primarily on its state mandatory provident fund.

Differences in system design reflect the way in which a nation's politics, economics and culture shape pensions provision. This matters for policymakers. The shift towards defined contribution is a global trend but the best parts of one system cannot simply be replicated by another. Best practice can be learned from, imitated even, but policymakers should be wary of adopting wholesale successful approaches from elsewhere in the world without considering how the old pension system will interact with the new. Pension systems have their own ecology. Each is more than the sum of its parts.

Thus the 'Scandinavian' political economy of Denmark, defined by high levels of social cohesion, trust and income tax, provides fertile ground for a successful pension system built on high contribution rates, a large role for government provision, and a long-term perspective (see, for example, the recent decision to increase age eligibility), agreed between the representatives of workers, employers and the state. (The pension systems of Sweden, examined in volume one, and Norway are also successful, for similar reasons.)[1] In New Zealand, the political economy is more 'Anglo-Saxon', featuring lower taxes and less government, but its society is characterised by similarly high levels of national cohesion. It is possible that smaller countries are more easily able to build up trust between and among citizens and that this is reflected in healthy pension institutions. On the other hand, Hong Kong, the smallest nation of all under examination, has weaker pensions provision.

Coverage is an issue in the defined contribution pillars of Mexico, Chile and the US. This matters even more than it might otherwise because their state pension entitlements are less generous. In Latin America the large informal economy is a huge challenge to defined contribution coverage. In the US, and other developed economies, the growth of self-employment makes comprehensive coverage more difficult. However, in the US the biggest barrier to coverage by far is the unwillingness of employers to offer pensions in the voluntary second pillar. For the tens of millions of Americans who work in firms with fewer than 100 employees, a pension plan is a rarity. Singapore is also interesting, with coverage reduced by the absence of pension rights among the high number of immigrant workers.

Costs and charges are an issue almost across the board, with the singular exception of Denmark, where returns have been high and costs typically moderate across its sector-wide defined contribution schemes. In the US, 'leakage' from workplace defined contribution, whether to more expensive retail arrangements, or simply withdrawn and spent, is a huge problem, reducing US retirement incomes by up to 25 per cent. Furthermore, those small US workplaces with plans pay high fees. On the other hand, large US employers drive hard bargains with providers, even if the 3.8 basis points total expenses ratio of Thrift Savings Plan (TSP) reflects both its exceptional size (at $500bn AUM the largest defined contribution scheme in the world) and its passive-only stocks and bonds investment strategy (lacking exposure to any alternative asset classes, private markets, emerging markets or non-US small cap equities).

The Irish defined contribution market lacks effective competition. Providers are few in number and costs appear on the high side. The second pillar in Chile and Mexico is characterised by high administration costs, with competition tending towards the monopolistic because of consumers' failure to shop around based on price and substantive quality. In Chile, notably, administrative costs are excluded from providers' fiduciary duty. In Mexico, the tendency of retail investors to expensively 'churn' their pensions, in response to short periods of under-performance or over-performance, is a major problem; a behavioural bias exacerbated by the huge marketing budgets devoted by providers to encouraging transfers.

Over-churning is also a feature of provident funds in Singapore and Hong Kong, although the former only allows retail 'self-select' options for those with larger pension pots. In Hong Kong, where every individual provident fund member is able to choose his or her own investments, fees have been high relative to investment returns and investment quality. Funds do not offer access to alternative asset classes beyond equities and fixed income, nor is there an attempt to reduce risk for those approaching retirement or exposure to ESG-focused strategies. Hong Kong is therefore proposing to introduce a new default strategy for defined contribution members featuring 'life cycling'. Fees will be capped at 0.75 per cent. On the mainland, the Asset Management Association of China is currently looking at introducing something similar: default target-date funds and target-risk funds in its voluntary second pillar. Singapore is also consulting on the future of the provident fund's small retail element.

Adequacy also looms large in defined contribution debates.[2] In Chile, the absence of an employer contribution is increasingly seen as a critical flaw keeping contributions too low. In Mexico projections of the replacement of salary rate offered by the defined contribution pillar are meagre: 25 per cent for average earners is not enough given an attenuated first pillar. In Hong Kong, the absence of state pensions places a huge burden on a fragmented defined contribution system. The US does have first pillar pensions paid for via social security contributions and from the social security trust fund. But the latter is projected to be exhausted by 2034. This scenario brings into starker focus the need for higher across-the-board workplace defined contribution replacement rates. Singapore has much higher contributions, but housing and healthcare costs are liable for payment from within an individual's Central Provident Fund account. Mexico also has a separate housing fund, which is a call on contributions which might otherwise go into pensions. As already noted, generous first pillar pensions in New Zealand, Ireland and Denmark boost overall adequacy.

Every system, except Denmark's, faces sustainability challenges. Demographics are problematic (less so for Mexico and Chile) and the policy tools available to manage old age dependency ratios are well known: higher fertility rates, increasing immigration, expanded labour market participation among older workers, higher productivity and the raising of entitlement ages. Hong Kong and Singapore are projected to become among the fastest-ageing societies in the world.

A wider problem is investment returns. Return expectations have fallen in the post-financial crisis world of quantitative easing, and, perhaps, secular stagnation. Some see a perfect storm brewing. Mohammad El-Erian warns of desperate pension fund managers going up the risk curve in the search for yield. A recent survey of institutional investors found 75 per cent agreeing that investors “might be taking on too much risk in pursuit of yield”, with 67 per cent citing a low-yield environment as the biggest risk management issue.[3] El-Erian’s fear of pension scheme members “increasingly being exposed to the threat of losses that cannot be recoupled quickly” seems plausible.[4]

Yet there are reasons to take a more positive view. Volatility is not risk, or should not be so, for long-term investors like pension schemes. Volatility matters both for older workers for whom regular contributions and time are limited and for retirees drawing an income from investments who face the sequence-of-returns risk of crystallising losses. Otherwise, notes a long-term observer of the institutional pensions scene, “the dominant risk [for savers] is the absence of sustainable long-term return compounding – that is, possessing cash flows (such as dividend payments) that are not sustainable beyond the short term.”[5]

QE has almost certainly distorted the price of money by pushing down interest rates, thereby invalidating traditional measures of value. Put another way, equities are over-priced. But the larger point remains. Unilaterally reducing risk-taking and lowering expected returns to the risk-free rate is surely not necessary for long-term, sophisticated pension fund investors.[6] Such schemes which possess secure cash flows from contributions, are focused on the long-term compounding of assets, have the ability to analyse information acutely, and which avoid over-trading have a genuine advantage over others in the market.

From this perspective, the active-passive debate is a distraction. Pension schemes balance the two approaches depending on risk budget, investing environment, and long-term objectives. To generate market-beating returns when they need to do so, pension schemes take active exposures in emerging, small cap, fixed income, property and private markets. Equally, a passive investment approach will be adopted in markets (often large-cap developed) and at times (de-risking) when appropriate.

Accepting this framework, the challenge for second pillar pension funds is to scale up. Size is a necessary condition for success, to the extent that it makes the accruing of expertise more feasible. Expertise, in turn, offers schemes the possibility of bringing down the costs of intermediation whether by driving harder bargains with external managers, or taking investment functions in-house. In private markets, which are currently receiving a giant wave of pension fund money, this is particularly notable. Harnessing the illiquidity premium is increasingly an objective of pension schemes, but private markets are complex and increasingly costly to access. Funds large enough and expert enough to invest directly, and/or to ensure that their external mandates are appropriately priced with scale discounts, can expect better returns over the long term. To quote Ashby Monk: "They aren't managing their assets just to minimise fees; they are minimising fees to maximise returns."[7]

The 'Canadian model' currently leads the field in these respects. Originating with Ontario teachers' pension plan, and subsequently adopted by the Canada Pension Plan Investment Board, the Canadian approach emphasises the importance of governance as the *sine qua non* of successfully scaling up in assets and expertise. A clear sense of purpose, the absence of political interference, and remuneration structures flexible enough to attract talent in-house are the prerequisites of Canadian-style good governance. In terms of investment approach, large allocations to private markets characterise the Canadian mega schemes.

To a greater or lesser extent this model of governance and investment style has gone global. It informs the approach of ATP (the government-backed national pillar two scheme in Denmark), New Zealand's Superannuation Fund (an SWF-style buffer fund, the objective of which is to defray the long-term costs of an ageing population), as well as second pillar schemes in Australia, the Netherlands, and Sweden's national buffer funds.[8] Pressure is growing on the biggest fund in the world – Norway's Government Pension Fund Global – to follow suit. Run from inside the Finance Ministry, with parliament asserting its right to set strategy, the fund lacks autonomy from day-to-day politics. It also, perhaps, needs to upgrade its investment expertise. While its close neighbour ATP, for example, invests on a risk factor basis across hedging (utilising derivatives) and growth portfolios (with a heavy exposure to private markets), Norway's Government Pension Fund Global invests in a much more traditional portfolio of equities and bonds. It is, however, a world leader in ESG-focused investing.

To end where we started: our review of eight defined contribution-focused systems illuminates the diversity of provision which exists across the world. Strengths and weaknesses vary, but second pillar systems which demonstrate scale provision are more likely to have long-term successful investment strategies, lower costs and charges, better transparency, and high-quality independent governance. As the industry's house journal *Investment and Pensions Europe* noted recently of the UK: "The true issue is one of scale. Large and well-resourced institutional investors are the ones best placed to serve their beneficiaries' interests by eradicating the market inefficiencies highlighted by the FCA [regulator's market study]."[9]

NOTES

1. Remarkably, in Sweden, for example, pension legislation cannot be passed by government without the agreement of a cross-party parliamentary group established in the wake of the 1994 reforms which created the notional defined contribution system.

2. The UK's pensions minister has already placed this on the agenda for the UK's 2017 review http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2016-12-12/HCWS339/. Research by the Pension and Lifetime Savings Association has modelled the sub-optimal outcomes likely for many if savings levels are not increased: http://www.plsa.co.uk/PolicyandResearch/DC/Retirement-Income-Adequacy.aspx.

3. Pension & Investments (2017) *Institutional investors taking on more risk to meet returns* http://www.pionline.com/article/20170314/ONLINE/170319979/institutional-investors-taking-on-more-risk-to-meet-returns-8212-natixis-survey?newsletter=daily&issue=20170314 Last accessed: 10/10/2017.

4. Pension & Investments *Titanic analogy too simplistic* http://www.pionline.com/article/20161003/PRINT/310039999/titanic-analogy-too-simplistic Last accessed: 10/10/2017.

5. Ibid.

6. This is not to say all funds' target returns are sensible. The US public sector schemes in particular appear to sometimes adopt unrealistic returns in an attempt to close often-yawning deficits.

7. Ashby Monk, "Why I go to Australia. A lot" http://www.institutionalinvestor.com/blogarticle/3719260/why-i-go-to-australia-a-lot/investors-pensions.html#/.WYmGK3yovMB Last accessed: 10/10/2017.

8. As featured in volume one.

9. *Pensions and Investments Europe*, January 2017, 3.

NOTES ON CONTRIBUTORS

Jørgen Goul Anderson is a professor at the CCWS - Centre for Comparative Welfare Studies Department of Political Science Aalborg University. Jørgen was the research director of CCWS 1995–2009 and 2015–2017. Jørgen is now the research director of Centre for Regional Dynamics and Disparities Research 2017.

Mukul G Asher is a professorial fellow, National University of Singapore; and distinguished fellow, Syama Prasad Mookerjee Foundation, New Delhi.

Rossana Castiglioni is an associate professor at the School of Political Science of Universidad Diego Portales (Chile). Director of the Millennium Nucleus on The Challenges to Representation (NS130008).

Martin Gilbert is chief executive of Standard Life Aberdeen plc. Martin Gilbert, along with Keith Skeoch, became co-chief executive of Standard Life Aberdeen plc, the leading global investment company formed as a result of the merger between Aberdeen Asset Management PLC and Standard Life plc in August 2017. Both have responsibility for overseeing £670 billion of assets under administration. Martin was a co-founder and the chief executive of Aberdeen Asset Management, which was established in 1983. Under Martin's leadership, Aberdeen became one of the world's leading independent asset managers through a combination of organic growth and strategic acquisitions. Martin was appointed chairman of the Prudential Regulation Authority's Practitioner Panel in December 2013. He sits on the Board of Directors of the Institute of International Finance. He is also a member of the International Advisory Panel of the Monetary Authority of Singapore and the International Advisory Board of British American Business. Martin is also the deputy chairman of SKY PLC and a non-executive director of Glencore plc. In 2008, Martin was named European personality of the year at the Funds Europe Awards. In 2009, he was awarded the honorary degree of doctor of laws by the University of Aberdeen for services to business and entrepreneurship. In 2011, he was named Scotland PLC CEO of the Year at the Business Insider/PwC Scotland PLC Awards. Martin is adjunct professor of Finance at Imperial College Business School and in 2014, he was awarded a Doctorate of Letters from Heriot-Watt University. Martin, who was born in Malaysia, was educated in Aberdeen and has an MA in Accountancy and an LLB. After university, he joined Deloitte where he qualified as a chartered accountant. In 1982, he joined the investment department of local law firm Brander & Cruikshank, which went on to become Aberdeen Asset Management.

Chang Yee Kwan is an assistant professor, Xiamen University Malaysia, and non-resident fellow, National Chengchi University.

Stuart Leckie, OBE, is an independent actuary based in Hong Kong. He has been chairman of Watson Wyatt (now Willis Towers Watson) in Asia Pacific and also chairman of Fidelity Investments in Asia Pacific. He founded the Hong Kong Retirement Schemes Association and has undertaken many projects concerning pensions reform in the People's Republic of China.

Gregg McClymont is the head of retirement at Aberdeen Standard Investments and is a specialist in global pension systems. Gregg was a UK member of parliament (2010–2015) and shadow minister of State for Pensions 2011–2015. Previously, Gregg was an academic historian, educated and trained at the Universities of Glasgow, Pennsylvania, and Oxford. He was a fellow of St Hugh's College, Oxford until entering Parliament; Gregg is now a visiting fellow at Nuffield College, Oxford. Gregg was chosen as one of Financial News' top 40 asset managers under the age of 40 in 2015. Gregg is also chair of Pensions Quality Mark Ltd (PQM), an independent non-statutory standards agency for UK defined contribution pension schemes.

Alicia H Munnell is the Peter F. Drucker professor of management sciences at Boston College's Carroll School of Management. She also serves as the director of the Center for Retirement Research at Boston College. Before joining Boston College in 1997, Alicia Munnell was a member of the President's Council of Economic Advisers (1995–1997) and assistant secretary of the Treasury for economic policy (1993–1995). Previously, she spent 20 years at the Federal Reserve Bank of Boston (1973–1993), where she became senior vice president and director of research in 1984.

Patrick Nolan is principal advisor to the Economics and Research Team at the New Zealand Productivity Commission. Previously he was chief economist at the UK think tank, Reform; economist at the NZ Treasury; and economic advisor to a front-bench minister in the Labour government.

Tapen Sinha is founder and director, International Center for Pension Research, ITAM, Mexico and research associate at the Center for Risk and Insurance Studies (CRIS), School of Business, University of Nottingham.

Andy Tarrant is head of Policy and Government Relations at the People's Pension. Previously he was senior parliamentary advisor to the shadow Europe and to the shadow pension minister; head of government and regulatory affairs for BT Plc's Global Services Division; director of regulatory affairs at the European Competitive Telecommunications Association; senior competition lawyer at BT Plc; and, head of the International Section at OFTEL. He qualified as a solicitor into the Competition Law department at Herbert Smith Solicitors.

Shane Whelan is an actuary, an associate professor in the School of Mathematics & Statistics at University College Dublin, and a member of the Ireland's Pensions Council advising the minister of social protection. He has been active in the actuarial profession, serving on the Council of the profession in both Ireland and the UK and was managing editor of the British Actuarial Journal.