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How might the UK  
pensions landscape  
evolve to support  
more flexible  
retirements?



*How might the UK pensions landscape evolve to support more flexible retirements?*, is the latest report in the PPI Transitions to Retirement series. This report is sponsored by The Investment Association and The People's Pension.

The PPI Transitions to Retirement series explores how people access pension savings. The series as a whole is sponsored by Age UK, Fidelity, Partnership, State Street Global Advisors, The Investment Association, The Pensions Advisory Service (TPAS), The Pensions Regulator (TPR) and The People's Pension.

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## Executive summary

*How might the UK pensions landscape evolve to support more flexible retirements?*, is part of the PPI's Transitions to Retirement series exploring how people access pension savings.

This report builds on the findings of previous reports and, using evidence from four countries, Australia, Ireland, New Zealand and the United States (US), considers how the UK pension and retirement income system might evolve in the context of changes in the retirement landscape. In particular, this report considers the impact of the new flexibilities introduced from April 2015.

**Different pension systems include different components, such as the state pension, means-tested benefits and health or social care costs, as well as differences in the tax treatment of pensions. Direct comparisons with other countries in terms of how individuals would rationally withdraw their Defined Contribution (DC) pensions are imprecise but suggest some possibilities for the UK**

- The low level of the UK State Pension suggests that, relative to other countries, individuals will typically require another source of income in retirement.
- The absence of healthcare costs in later life in the UK may remove one of the barriers to conversion of pension savings to a regular income during retirement.
- Compared to Australia and New Zealand and, in some cases, the US, withdrawals from UK DC pensions are subject to tax. In broad terms, tiered tax rates in the UK mean that it is likely to be advantageous for many individuals to withdraw their pensions gradually over a number of years in order to avoid incurring a higher marginal rate of tax.

**The behaviour of DC savers overseas can provide some insight around the direction of travel in the UK**

- Annuities are available in the US and Australia, but are not popular. Barriers to annuity purchase include levels of pre-annuitised wealth, regulatory frameworks and bequest motives. Lack of availability of annuities may also perpetuate their lack of popularity. There are also behavioural factors, such as loss aversion.
- Drawdown products are popular in the countries under consideration; in Ireland it has been noted that where individuals have the option of using drawdown products rather than purchasing an annuity they do so. However, the Irish system remains focused on preventing people from running out of money. As individuals have to receive guaranteed income of €12,700 from other sources in order to use drawdown products rather than annuities, annuities in Ireland are now aimed at individuals with smaller retirement funds.
- Use of drawdown products without any longevity insurance can lead to individuals drawing down their resources too slowly or too quickly, in

Australia, 25% of people aged 55 deplete their balances by the age of 70.<sup>1</sup> These individuals were more likely to have lower levels of private saving and to have experienced the onset of a disability, suggesting that they may exhaust their savings partly because their costs are higher than average and their savings are lower.<sup>2</sup>

- 'Rules of thumb' such as the 4% rule around the rate of withdrawal have evolved in the US.<sup>3</sup> However, it appears that, many retirees do not stick to a particular level of withdrawal per year, instead they monitor their portfolio and change their withdrawals in line with changes to the market and their needs.<sup>4</sup>
- The use of pension pots to repay debt has been observed in other countries. It has been reported that, of the 50% of individuals who opt for a lump sum in Australia, 32% use it to pay off housing costs, to purchase a home or to make home improvements and 12% used it to pay off other debts.<sup>5</sup> The relatively high rates of personal debt in the UK suggest that using DC savings to pay off personal debt may be popular; however, individuals should be aware of how these withdrawals will be taxed.

**However, the UK regulatory landscape is evolving. Compared to Australia, in particular, the UK appears to be moving in the opposite direction.**

- Prior to April 2015, the decumulation phase was strictly regulated relative to the US and Australia, with the majority of DC savers effectively required to purchase an annuity. However, the absence of minimum withdrawals and rules around governance of and defaults during the decumulation phase from April 2015 means that the position has reversed so that the decumulation phase is regulated to a lesser extent than in both Australia and the US. Similarly, in the UK, the decumulation phase is moving in the opposite direction to the accumulation phase, which has become more regulated due to the introduction of automatic enrolment.
- In terms of the management of longevity risk, Australia and the UK appear to be moving in very different directions in the current policy/regulatory debate. The Australian Financial System Inquiry report (Murray Review) has proposed default income products for all superannuation funds. In contrast, the UK Government has argued that there should be no explicit defaults offered to retirees.
- If the proposed guidance system (Pension Wise) and second line of defence prove to be inadequate there is the risk that individuals will access unsuitable retirement products or access their pension savings rapidly and become liable for a higher rate of tax than anticipated.

<sup>1</sup> Murray, D. (2014)

<sup>2</sup> Social Policy Institute (2013)

<sup>3</sup> Vanguard (2012)

<sup>4</sup> Vanguard (2012)

<sup>5</sup> Challenger (2012)

**In some respects, the UK DC market has significant differences from overseas markets. These may impact on its response to pension flexibilities from April 2015.**

- The UK pensions industry has a sophisticated understanding of the various types of risk, including longevity and market risk, and has the infrastructure to offer investment and risk pooling strategies in a more challenging environment.
- While some UK asset managers and pension providers have made alterations to their default asset mix in response to the new flexibilities, there is currently no single approach or default, although there are likely to be more changes once the pension freedoms have bedded down.
- Differences between the UK and the US, in particular, mean that some of the barriers to annuitisation are absent in the UK:
  - Annuities are widely available in the UK.
  - Individuals and organisations are used to framing retirement decisions in terms of the purchasing power of a regular income rather than investment returns or the possibility of losing their whole pension pot on death where they have annuitised it. It has been suggested that where retirement decisions are framed in this way, individuals are more likely to annuitise.
  - A sophisticated market has developed, including a market for underwritten annuities, that takes into account lifestyle and health conditions, suggesting that individuals may be more likely to find an annuity that meets their needs.
  - The UK regulatory framework does not discourage annuitisation.

**The new pension flexibilities will radically change decumulation in the UK DC market. International examples suggest areas where challenges may arise and some possible remedies for the UK Government and pensions industry.**

- The focus of regulation in the UK has been the introduction of a standards regime to ensure the quality and consistency of guidance. This includes Pension Wise, to provide free, face-to-face or telephone based guidance for individuals approaching retirement and the FCA's 'second line of defence' rules.
- Other liberal regimes have gone further, for example Australia is now considering rules to ensure retirement defaults for members with some provision for managing longevity risk. It is possible that further steps will be considered in the UK to 'nudge' individuals towards decisions that ensure they have a regular income stream over the course of their retirement.
- International experiences show that governments have a wide range of options to promote better outcomes. Depending on how the UK DC market evolves, the UK Government will have access to various levers, as follows:
  - Changes to the State Pension
  - Tax changes
  - Regulation (e.g. minimum drawdown amounts)
  - DC governance placing requirements on trustees, employers or providers
  - Financial product sales regulation
  - Guidance or advice

## Introduction

*How might the UK pensions landscape evolve to support more flexible retirements?*, is part of the PPI Transitions to Retirement series exploring how people access pension savings.

This report follows the first report in the series *How complex are decisions that pension savers need to make at retirement?* and the interim report for the third part of the series *Supporting DC members with defaults and choices up to, into, and through retirement*. The first report found particular challenges with levels of financial engagement and numeracy amongst those expected to be the most reliant on their Defined Contribution (DC) savings. This suggested a need for either personalised guidance and advice or robust defaults that can protect consumers from the greatest risks. The interim third report found that the idea of being offered a default investment or drawdown option into retirement resonated with DC savers. It also found that there was sufficient commonality around appetite for investment risk and growth, along with a willingness to sacrifice capital protection and ease of access, for the development of meaningful defaults to be viable.

This report builds on these findings and, using evidence from four countries, Australia, Ireland, New Zealand and the United States (US), considers how the UK pension and retirement income system might evolve in the context of changes in the retirement landscape. In particular, this report considers the impact of the new flexibilities introduced in April 2015.

This report also draws heavily on discussions with experts in the four countries under consideration, who have also acted as peer reviewers of the report. In addition, the report draws on interviews with asset managers representing organisations that are active in the UK, Australia and the US.

The following important developments are likely to interact with the new flexibilities to influence the products and strategies required (these are explored further in a separate Appendix A, available on the PPI website).

### **Increased longevity**

- Accumulated pension savings generally have to be able to provide individuals with resources over a longer period than in the past.
- As lifetime annuities are unlikely to be a default option how individuals manage the impact of living longer will be a key challenge.

### **An increase in the numbers of individuals with DC pension savings relative to those with DB pensions**

- Unlike those individuals with Defined Benefit (DB) pensions only, individuals hold their retirement resources in a form that lends itself to being accessed in a flexible way.

### **Changes to retirement patterns**

- Greater variation in retirement patterns, such as part time working, along with later retirement, suggests that individuals require more flexibility in the management of their DC savings.

### **A move away from means-tested state benefits in retirement**

- The introduction of the New State Pension has been highlighted by the Government as a way in which the issue of moral hazard (a process whereby individuals exhaust their private pension savings on the basis that they will subsequently be able to access means-tested benefits)<sup>6</sup> should be sidestepped in the future.<sup>7</sup>
- The New State Pension can be perceived as an enabling factor for the removal of limits to the amounts of private pension income that individuals can withdraw.

These factors interact to influence the pension landscape. To some extent the new flexibilities have been portrayed as a reaction to these developments; they have been described as a way of increasing individuals' choice over DC savings that have amassed as a result of automatic enrolment.<sup>8</sup> Similarly, where an individual has a DC pension pot it is possible to alter the rate at which this is drawn down in line with changes in circumstances, something that is not available to DB scheme members unless they transfer to a DC arrangement. The growth in the number of DC pension savers represents an increase in the number of individuals who will be in a position to exercise the new flexibilities. At the same time, developments such as changes to retirement patterns will affect the way in which the new flexibilities will play out. Others, such as increased longevity, represent challenges that any solutions will be required to address.

The first chapter of this report compares the pension systems in Australia, Ireland, New Zealand, and the US with that of the UK and includes case studies in order to illustrate how the systems work in practice.

The second chapter compares the needs of UK DC savers with those in other countries. The third chapter focuses on developments in two countries with relatively mature DC markets in which the rules have been liberal relative to the UK; Australia and the US. The fourth chapter considers ways in which the UK DC market is similar and different to the DC markets in Australia and the US, and the implications of this for the UK. Consideration of the regulatory environments that have developed around these DC markets also suggests possible lessons for the UK.

<sup>6</sup> IFS (2014)

<sup>7</sup> IFS (2014)

<sup>8</sup> HMT (2014)

## Chapter one: comparison of pension systems in Australia, Ireland, New Zealand and the US with that of the UK

This chapter compares the pension systems in four countries, Australia, Ireland, New Zealand, and the United States (US) with that of the UK. It discusses the stated objectives of these pension systems and provides an overview of the pension systems so as to provide some insight into what might happen in the UK. More detailed overviews of each of the countries' pension systems are provided in Appendix B (available on the PPI website). It goes on to consider the needs of UK individuals with DC savings.

Chart 1 provides an overview of the five country's pension systems, specifically:

- Type of state pension and means-tested pension as proportion of average wage - countries typically have a combination of three elements of state pensions; a flat rate state pension, an earnings-related state pension and a means-tested pension. Although some countries may not describe means-tested benefits in retirement as part of state pension provision.

Where a means-tested pension is in place, as in Australia, this can act as a safety net for individuals, but can also be considered as increasing the risk of moral hazard. Such a risk is not present in, e.g. New Zealand, where there is a flat rate pension equal to a relatively high proportion of average worker earnings.

- Requirement for the individual to pay for proportion of health or social care - the risk of high costs in later life, such as those typically accrued through health or social crises, may theoretically lead individuals to conserve their pension savings rather than using these to purchase an annuity.
- Average DC pension pot at retirement - this interacts with other elements of the retirement landscape to determine how the pension system evolves.
- Ways in which funds are accessed - this provides some insight into ways in which pension savings are accessed when there is not a requirement for individuals to annuitise.

Chart 1<sup>8</sup>

	Type of state pension	Means-tested or minimum pension as proportion of average wage	Whether the individual has to pay for proportion of health or social care	Median DC pension pot per individual at retirement (among those with DC savings)	Ways in which funds are accessed
Australia	All means-tested	29%	Health Social care	AU\$150,321 (£77,565) (individual aged 60-64)	54% members - lump sums, 46% - drawdown
Ireland	Flat rate contribution based	31.5%	Health Social care	No figures available	Individuals opt for drawdown where possible
New Zealand	Flat rate residency based	n/a	Health Social care	NZ\$10,500 -15,000 - (£5,352- £7,645) median for those eligible to withdraw from KiwiSaver in 2012-13	Lump sum or gradually withdrawn from KiwiSaver
United Kingdom	Flat rate contribution based	19.9%	Social care	£19,400 - project for an individual aged between 50 and SPA at their SPA	Lump sum and annuitisation until April 2014
US	Earnings-related	N/A	Health Social care	IRA balance US\$49,899 (£33,915) (individual aged 60-64)	Frequently retained in IRAs or 401(k)s and drawn down when necessary

### Objectives of pension systems

The Organisation for Economic Co-operation and Development (OECD) has identified some overarching objectives for pension systems, including both state and private pensions. While most countries have identified some of these as objectives for their own systems, their specific emphasis provides further insights. Three of these objectives emerge as being particularly important when reviewing the objectives for the countries considered in this report:<sup>10</sup>

- **Social protection or poverty rationale** – individuals who are no longer able to earn a sufficient livelihood should receive income assistance.
- **Reward rationale** - individuals who have contributed to economic/social development of the country should receive retirement economic benefits from the state.
- **Long-term savings rationale** - individuals may underprovide for their retirement income, so the pension system redistributes income over their lifetime. This rationale recognises that individuals might not be sufficiently motivated or knowledgeable to make adequate pension savings. In turn, the pension system may either need to incentivise pension saving or provide retirement income for these individuals.

<sup>8</sup> Information for Australia from National Commission of Audit <http://www.ncoa.gov.au/report/appendix-vol-1/9-1-age-pension.html> and ASFA, information for Ireland from OECD (2013), information for New Zealand based on PPI analysis of Inland Revenue, KiwiSaver evaluation, Annual Report June 2012 to June 2013, information for United Kingdom from OECD (2013) and (2014), information for USA from EBRI (2014) In 2013, assets in IRAs were \$6.5 trillion compared to \$5.9 trillion in 401(k) plans (Source: Investment Company handbook). 401(k) plan balances by age were not available found. Exchange rates calculated using xe.com on 15 April 2015

<sup>10</sup> OECD (2008)

### **Social protection vs reward rationale**

The countries under consideration place emphasis on the following objectives:

- **Australia**, the means-tested Age Pension in Australia emphasises the social protection rationale.
- **Ireland**, both the state and private pension systems emphasise the social protection rationale.
- **New Zealand**, while a number of objectives have been identified, the relatively generous state pension emphasises the social protection rationale.
- **UK**, the emphasis for the State Pension has moved away from the reward rationale as the amount of the New State Pension received by individuals will no longer be related to their earnings level in their working life.
- **US**, the earnings related public pension in the US emphasises the reward rationale.

### **Long-terms savings rationale**

All the five countries emphasise the long-term savings rationale, in terms of ensuring that individuals or their employers make provision for their retirement throughout their working lives. However, they use different levers to achieve this. Australia uses mandatory employer contributions. The UK, New Zealand, and to some extent the US, look to harness inertia via automatic enrolment. This suggests that these countries' objectives are similar enough for their pension systems to helpfully inform an appraisal of how the UK might evolve.

All countries use incentivisation by the provision of tax relief, although the generosity of tax relief given varies between countries.

### **Countries differ in terms of their tax treatment of pension contributions and withdrawals**

Broadly speaking, the UK pension tax system is based on an **EET** system; the principle of contributions being **Exempt** from tax, investment returns being **Exempt** from tax and withdrawals from pension being **Taxed**. In contrast, the Australian pension system, is **broadly** based on a **TEE** system where contributions are **Taxed** at a concessional rate (up to an age-based dollar limit) and then at the marginal tax rate up to a more generous limit, and both returns and withdrawals are tax-free (**Exempt**) once the individual has reached preservation age (currently age 55, increasing to age 60).

Chart 2 provides a breakdown of the tax treatment in the UK and the countries under consideration. The implications of any differences in tax treatment between the countries for the evolution of the UK pension system is explored in Chapter Two.

**Chart 2**

	Payments into pensions	Returns on pension assets	Withdrawals from pensions
Australia	Employer and pre-tax employee contributions are subject to concessional tax rate of 15%. Employee or personal contributions made from after-tax income ('non-concessional' contributions) are not taxed further.	Tax-free once the individual has reached preservation age and elected to enter the 'pension' phase.	Generally tax-free once preservation age is reached.
Ireland	Contributions are subject to tax relief.	Returns are tax-free.	Withdrawals are taxed, after a 25% tax-free lump sum.
New Zealand	Contributions are made from pre-taxed income.	Returns are taxed, although there are tax-advantages for some retirement-related products.	Tax-free.
United Kingdom	Contributions are subject to tax relief.	Returns are broadly tax-free.	Withdrawals are taxed, after a 25% tax-free lump sum.
USA	Contributions are subject to tax relief in a standard IRA (however, individuals may purchase Roth-IRAs for which the tax treatment is TEE).	Returns are not taxed	Withdrawals are subject to tax

**Case studies enable consideration of how, under different pension regimes, changes in behaviour and circumstances can affect retirement income**

Consideration of case studies can help illustrate the interaction of private and state pension savings.

Points highlighted by these case studies:

- In Ireland, the UK and the US changes to the rate of withdrawal have an impact on tax liabilities and/or means-tested benefits. In contrast, this is not the case in terms of tax in Australia and New Zealand where withdrawals from pension pots are effectively tax-free. In addition, the use of calculating notional income from a pension pot regardless of the amount that is withdrawn in Australia<sup>11</sup> means that any changes to the rate of withdrawal does not have an impact on the level of the means-tested Age Pension received.
- The UK, along with New Zealand, has no minimum withdrawals.
- In Australia even individuals with very high DC savings, relative to the UK, receive at least a part means-tested pension.

<sup>11</sup> The deeming rules assume your financial assets are earning a certain amount of income, regardless of the income they actually earn, see <http://www.humanservices.gov.au/customer/enablers/deeming>

- In New Zealand, over 95% of pension income for someone with average KiwiSaver savings<sup>12</sup> comes from the state. While this is likely to change, the state pension is likely to continue to make up a high proportion of pension income for many people.
- In the US the earnings-related state pension, along with low levels of Social Security Minimum Pension, means that different individuals receive different levels of state pension, depending on their earnings history.

The size of pension pot for each individual has been selected to reflect the average DC pension pot for that country. The age at which minimum pension withdrawals apply in the US is 70.5, so this has been used for all countries to enable some comparisons to be made. It has been assumed that the minimum withdrawal has been made, where such minimums exist.

A sterling amount has been included to enable comparison, however, these comparisons do not take into account differences in purchasing power in different countries.

Lastly, the following variations have been considered in order to illustrate how the outcome for the individual can change:

- **Australia**, comparison with a DC pension pot worth twice the average to illustrate the impact on the individual's level of means-tested benefits.
- **Ireland**, comparison with a withdrawal rate twice the minimum rate to illustrate the impact on the individual's tax liability.
- **US**, comparison with an individual who has half the median earnings to illustrate the impact on the state earnings-related pension.

The proportion of income received from the state (social security) differs from the figures shown in Chart 1 which are based on safety net retirement benefits as a proportion of average worker earnings. These case studies are typically based on an individual with an average pension pot at age 70.5. Their circumstances mean that these individuals do not receive safety net retirement benefits. In practice this would mean that in Australia Individual A receives the means-tested Age Pension at a reduced rate. In all four case studies, the individuals' gender does not have an impact on their receipt of state or private pensions. In some cases, individuals' marital status would make a difference to the pension that they receive, e.g. in New Zealand, a different rate of state pension is paid to a couple who live together.

These case studies are designed to provide an insight into the interactions of private and state pension saving. These should be treated as illustrative rather than providing direct comparisons around the level of pension income received in each country.

<sup>12</sup> This paper has focused on KiwiSaver, however, while this is the only Government incentivised DC scheme, there are significant funds in other registered DC schemes.

### Individual A retiring in Australia

He is aged 70.5 with a pension pot of AS\$200,000.<sup>13</sup> He is single and owns a home with no mortgage.

It is assumed that he withdraws the minimum payment of 5% - AS\$10,000 per year. Means-testing of the Age Pension determines that deemed fortnightly income is in excess of AS\$160, so he does not receive the full state Age Pension of AS\$776.70 per fortnight. His private pension is not taxable while the tax that would have been payable on his Age Pension is reduced to nil by the pensioners' tax offset.

Individual A receives the following payments:

Private: DC pension	AS\$10,000
State: Age Pension	AS\$19,384
State: Pension Supplement	AS\$1,585
<b>Total annual income</b>	<b>AS\$30,969 (£15,979)<sup>14</sup></b>

In addition, Individual A would be eligible for the following state benefits:

- More generous Medicare safety net benefits via the Pensioner Concession card than if he was not in receipt of the Age Pension.
- State-level benefits, where applicable, including reduced fares on public transport, a reduction on motor vehicle registration and free rail journeys.

Where an individual with a DC pension pot worth AS\$200,000 withdraws 5% of their pension, they receive **68%** of their income from the means-tested Age Pension. Even where individuals have large pension pots, they continue to receive a relatively high proportion of their income from the Age Pension; for example, where an individual with a DC pension pot worth AS\$300,000 withdraws 5% of their pension, they receive **54%** of their income from the means-tested Age Pension.

<sup>13</sup> Challenger (2012), How much super do Australians really have?

<sup>14</sup> Exchange rate from xe.com, 15 April 2015

**Individual B retiring in Ireland**

He is aged 70.5 with a pension pot of €144,000,<sup>15</sup> is single and owns his home.

It is assumed that Individual B withdraws the minimum payment of 4% - €5,760 per year. He also receives the contributory state pension of €230.30 along with the household benefit package, designed to cover the cost of fuel.

Both his private DC and state pension are subject to tax at the 20% rate (less a tax credit of €3,545, which reduces it to nil).<sup>16</sup> The Universal Social Charge (USC) is not payable on his state pension and, in this case, would not be payable on his private pension as this is less than €12,012 per year.

Individual B receives the following payments:

Private: DC pension €5,760

State: Contributory pension €11,976

<b>Net annual income</b>	<b>€17,736 (£12,752)<sup>17</sup></b>
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As individual B is aged under over 70 and his income is under €500 per week, he would be eligible for the medical card entitling him to receive certain health services, such as GP visits, some prescription drugs and inpatient care, for free.

At his current rate of DC pension drawdown, she would receive 68% of his gross income from the state contributory pension. As the state pension is contributory, the amount of state pension that he would receive would not change if he drew down a higher proportion of his DC pension pot.

If individual B drew down 8% of his pension, he would pay annual tax of €1,154 and would still be eligible for the medical card. In this case, he would receive 51% of her gross income from the contributory state pension.

Private: DC pension €11,520

State: Contributory pension €11,976

Less: tax and USC (€1,154)

<b>Net annual income</b>	<b>€22,342 (£16,062)</b>
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<sup>15</sup> This figures is taken from Irish Life Defined Contribution Retirement Readiness Report 2014 - it is a projected figure for a male currently aged 43, a fund of €45,000 who continues to contribute until age 65 at a total contribution rate of 6%.

<sup>16</sup> This would actually reduce the liability to €2, but this has been reduced to nil for this calculation in order to simplify it.

<sup>17</sup> Exchange rate from xe.com, 15 April 2015

### Individual C retiring in New Zealand

She is aged 70.5 with a pension pot of NZ\$12,500,<sup>18</sup> is single and owns a home with no mortgage.

While there is no minimum payment, it is assumed that Individual C withdraws 5%, NZ\$625. Also, it is assumed that she qualifies for the full residency-based state pension.

Her private DC withdrawal is not taxable while her state pension is subject to tax at graduated rates (10.5 and 17.5% respectively). Interest on the remaining pot is also taxed.

Individual C receives the following payments:

Private: DC lump sum withdrawal	NZ\$625
Interest on remainder of pension pot at say 4%	NZ\$475
State: Residency-based pension	NZ\$22,417*
Less: tax	(NZ\$3,026)
<b>Net annual income</b>	<b>NZ\$ 20,491 (£10,439)<sup>19</sup></b>

Most health care delivered through public hospitals is free while other services are heavily subsidised.<sup>20</sup> Specialist care is also free, provided that the individual is referred by their GP. Patients are charged for GP appointments; a typical fee for an appointment would be NZ\$50.

There are particular concessions for low-income people or those who need lots of support from the health system, for instance, the High Use Health Card means that people may get discounted rates for some GP visits and some prescriptions.<sup>21</sup>

At her current rate of DC pension withdrawal, she would receive 95% of her gross income from the state residency-based pension. However, KiwiSaver is in the early years of implementation and the average DC pension pot size will increase in the future. As the average pot size increases individuals will be likely to receive a lower proportion of their gross income from the state pension. As the state pension is residency-based, the amount of state pension that she would receive would not change if she drew down a higher proportion of her DC pension pot.

\*Rate from 1 April 2015 - 30 March 2016

<sup>18</sup> PPI analysis of KiwiSaver early retirement withdrawal survey

<sup>19</sup> Exchange rate from xe.com, 15 April 2015

<sup>20</sup> <http://www.workingin-newzealand.com/live-and-settle/health-and-wellness/healthcare#.U9ohOfldUYE>

<sup>21</sup> See <http://www.health.govt.nz/new-zealand-health-system/claims-provider-payments-and-entitlements/high-use-health-card-payments>

**Individual D retiring in the US**

He is aged 70.5, having retired at age 66, with a pension pot of \$65,419,<sup>22</sup> is single and owns a home with no mortgage.

It is assumed that he withdraws the minimum payment of \$2,468 from his DC pension pot.<sup>23</sup> Also, it is assumed that he has accrued an earnings-related pension of \$1,812.52<sup>24</sup> per month, based on a median income of approximately \$50,000 over the course of his working life of at least 35 years. Lastly, it is assumed that he lives in Florida and is therefore liable to federal but not to state income tax.

Individual D receives the following payments:

Private: DC pension	\$2,468
Social security: Earnings-related pension	\$21,750

<b>Total income</b>	<b>\$24,218 (£16,459)<sup>25</sup></b>
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As Individual D's social security earnings-related pension is less than \$25,000, it is not taxable. As his private pension is less than the Personal Exemption of \$3,950 (similar to the UK personal allowance) he does not pay any tax on that either. His income level means that he would not need to pay a premium for prescription drugs but he is likely to have to pay a healthcare premium of \$104.90 per month.

At his current rate of DC pension withdrawal, he would receive 90% of his income from the state earnings-related pension.

If Individual D earned half the median income, the amount of earnings-related pension that he receives would be lower in absolute terms (although it would provide a greater benefit relative to working life earnings than the earnings-related pension received by the higher earner).

Individual D receives the following payments:

Private: DC pension	\$2,468
State: Earnings-related pension	\$13,752

<b>Net annual income</b>	<b>\$16,220 (£11,076)</b>
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In this situation he would receive 85% of his income from the earnings-related state pension.

<sup>22</sup> Average IRA balance - Employee Benefit Research Institute (EBRI) (2014) Individual Retirement Account Balances, Contributions and Rollovers 2012; With Longitudinal Results 2010-2012: The EBRI IRA Database

<sup>23</sup> Vanguard - minimum distribution calculator

<sup>24</sup> This is a simplified calculation using this year's median wage rather than indexed career earnings with the past year's earnings indexed to the growth in wages.

<sup>25</sup> Exchange rate from xe.com, 15 April 2015

### Individual E retiring in the United Kingdom

He is aged 70.5 with a DC pension pot of £19,400 and receives the whole New State Pension of £155 per week (or £8,060 per year).<sup>26</sup> He is single and owns a home with no mortgage.

It is assumed that he withdraws the equivalent of what he would receive from an index-linked annuity purchased at age 70.5 of £865 per year (approximately 4.5% of the fund). His level of income is within the personal tax allowance and means that he would not be liable for tax.

Individual E receives the following payments:

Private: DC pension	£865
State Pension	£8,060

<b>Total annual income</b>	<b>£8,925</b>
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Individual E would receive healthcare free of charge.

Where an individual with a DC pension pot worth £19,400 withdraws 4.5% of their pension, they receive 90% of their income from the New State Pension. Regardless of their level of private pension savings, the individual will still receive the full New State Pension provided that they accrued 35 years of National Insurance payments or credits.

As Individual E is a homeowner, he would not be eligible for UK Housing Benefit. However, levels of withdrawal from DC pensions can have an impact on eligibility for means-tested benefits.

### While the needs of UK DC savers differ, it is possible to draw some conclusions around these in the context of UK policy objectives

The UK has many objectives for pensions with variations between different parts of the pension system. For example, the five objectives published by the Department for Work and Pensions (DWP) informing the development of the New State Pension and automatic enrolment<sup>27</sup> include:

- Promote personal responsibility
- Be fair
- Be simple
- Be affordable
- Be sustainable

The Freedom and Choice consultation, outlining the new pension flexibilities, identifies broad objectives including assurance of the UK's future economic security and the embedding of a culture of quality and flexibility of pension provision.<sup>28</sup>

<sup>26</sup> Based on average DC savings at SPA from PPI (2014)

<sup>27</sup> DWP (2006)

<sup>28</sup> HMT (2014)

By introducing more choice and flexibility into how individuals use their DC pensions to support themselves in retirement, the reforms have also introduced risks of resources being expended too quickly or too slowly.

There are both risks to the individual and to the state where individuals exhaust their resources too early; the individual may not be able to maintain the quality of life, may end up relying on means-tested state benefits or unable to bequeath assets on their death.

Individuals will have varying objectives for their retirement, with some of these including:

- Provision of regular income.
- The ability to improve the home environment through renovation or extension.
- Meeting unpredictable, potentially high costs.
- Minimising future outgoings by eliminating or minimising interest payments on debts.
- Making sure that they don't run out of money throughout their retirement.
- Leaving a bequest on their death.

Individuals may use a range of different products or strategies in order to meet these objectives including:

- Paying off debt
- Annuity purchase
- Purchase extra state pension
- Hold in cash savings
- Hold in investments
- Hold cash savings/investments in a drawdown product
- Insurance purchase

The evolution of the UK pension system will be influenced by a range of factors:

- Individuals have different levels of costs in retirement from other countries influenced by:
  - Health expenditure is minimal, due to the availability of the National Health Service (NHS).
  - Although a lower rate of home ownership there is a higher proportion of individuals paying below market rates for rent.
  - Relatively high level of personal debt.
- Particular characteristics of the welfare system.
- The level of income received in the form of the New State Pension, supported by means-tested benefits.
- Currently, a relatively low value of average DC pension pots.
- The tax treatment of state and private pensions.
- The (low) level of pension charges.

**For many people their financial needs in retirement are unlikely to be met by the state pension alone**

There are different ways of calculating an individuals' financial needs in retirement, based on measures of basic minimum income and measures of

acceptable or expected standard of living. Additionally, there are different ways of measuring what constitutes a basic minimum income. Broadly speaking, financial needs are identified in one of two ways:

- **A replacement rate measuring to what extent retirement income allows individuals to replicate the standards of living they had while in working life.** This rate has historically been estimated at between 50% and 80% of their pre-retirement income. Typically, those on lower incomes need a higher replacement rate. Based on the average weekly earnings of £474,<sup>29</sup> a 50% target replacement rate would result in £237 per week for an individual, or £474 per week for a couple
- **The provision of a Minimum Income Standard based on basket of goods that an individual requires.** An example of a measure of basic minimum income is 'The Minimum Income Standard' developed by the Joseph Rowntree Foundation, which uses feedback from members of the public to look at people's needs in retirement.<sup>30</sup> The Minimum Income Standard for couples is £262.76 pw after housing costs.<sup>31</sup> To many couples, this is the bare minimum that they would consider acceptable. The full New State Pension for an individual is expected to be approximately £155 per week (in 2014 earnings terms) or £310 per week for a retired couple. Although this is higher than the Minimum Income Standard it is lower than the average 50% replacement rate for a couple. Additionally, some individuals will not receive the full New State Pension.

In addition, individuals' needs typically vary over the course of their retirement, with the following 'typical' pattern being noted:<sup>32</sup>

- Pensioners spend a large proportion of income on leisure and recreation in the early years of their retirement, whilst still enjoying good health.
- They tend to decrease spending during the middle years (aged 75 to 85) due to a reduction in mobility.
- Spending tends to increase again at age 85 due to disability-related expenditure, such as the cost of personal care and increased transport costs.
- Spending tends to decrease again around age 90 as pensioners meet their basic needs while spending on other goods reduces due to mobility, preferences and / or the need to restrict spending due to limited income.

Individuals do not know how long they will live and if or when they will reach each stage of the profile of costs described above. In addition, PPI research found that individuals significantly underestimate chances of surviving to older ages (for example, beyond age 90).<sup>33</sup> Furthermore, this profile of costs may change over time, particularly due to the interaction of changes in life expectancy and healthy life expectancy. This suggests that the management of DC pension savings will be challenging.

<sup>29</sup> <http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/may-2014/info-awe-may-2014.html>

<sup>30</sup> Joseph Rowntree Foundation (2014)

<sup>31</sup> Joseph Rowntree Foundation (2014)

<sup>32</sup> PPI (2009)

<sup>33</sup> PPI (2014)

## Chapter two: the implications of other countries' experiences for individuals in the UK

This chapter compares the needs of UK individuals with those of Defined Contribution (DC) savers in the other countries under consideration. This chapter goes on to consider ways in which the UK pensions system, based on the needs of UK DC savers, might evolve in order to meet individuals' needs.

### **Elements of the UK pension landscape are different to those of the other countries - with implications for UK DC savers**

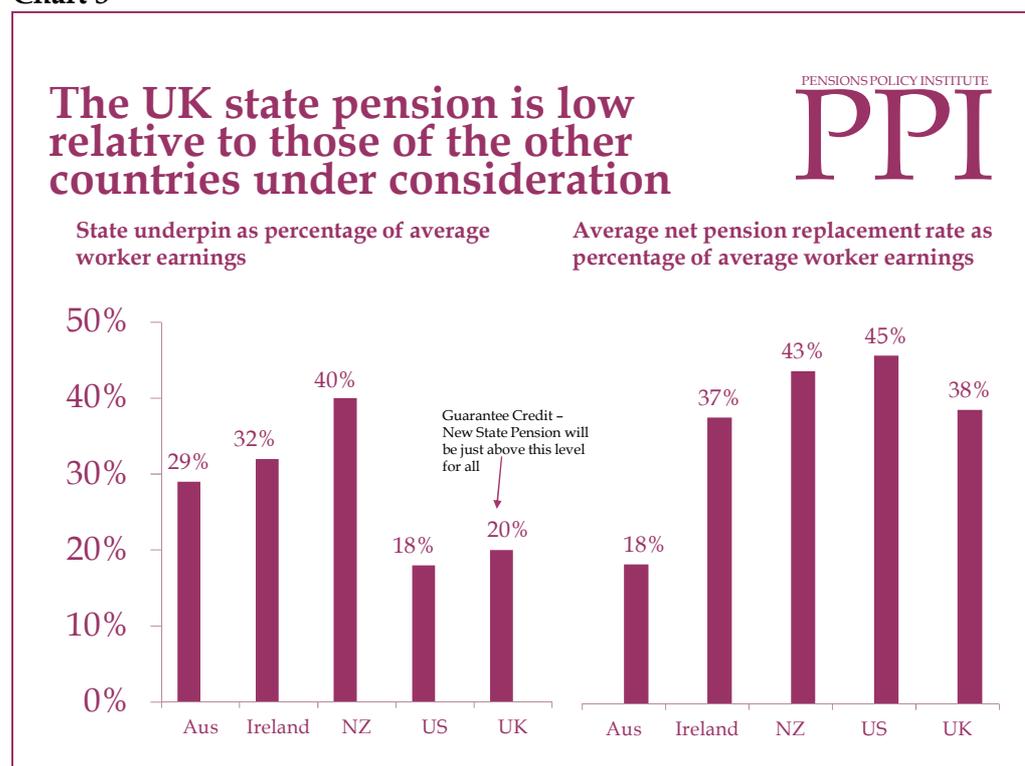
The elements considered here include:

- The level of the UK State Pension
- Healthcare costs
- Minimum withdrawals
- Tax treatment of withdrawals

### **The low level of the UK State Pension suggests that, relative to other countries, individuals will typically require another source of income in retirement**

Other countries have a mixture of means-tested (Australia and Ireland), earnings-related (Ireland and the US) and residency-based pensions (New Zealand). Compared to these countries, except the US, the UK's New State Pension remains low, in average earnings terms.

Chart 3 shows the average State Pension received and the underpin (typically the minimum income that an individual would receive in retirement) provided by the state as a percentage of average earnings.

Chart 3<sup>34</sup>

The following observations relate to these figures:

- The figures for average replacement rates are net, with the Organisation for Economic Co-operation and Development (OECD) highlighting that net replacement rates are often higher than gross replacement rates due to tax additional allowances or tax credits.<sup>35</sup>
- The Australian means-tested state Age Pension is implemented so that the average state pension received is lower than the full Age Pension.
- The opposite is currently true of Ireland, the UK and the US and is particularly pronounced in the US, where the earnings-related state pension<sup>36</sup> means that many individuals receive a large state pension relative to the underpin.
- The UK additional State Pension, currently in place, is earnings-related and, therefore, the average State Pension received is higher than the state underpin. However, as the New State Pension will be introduced at a level just above Guarantee Credit, the average State Pension received by UK individuals is likely to decrease to just above this level, depending on earnings (once the New State Pension is fully introduced).
- The New Zealand flat rate pension means that the level of the minimum and average pension are close to each other.

<sup>34</sup> OECD (2013)

<sup>35</sup> OECD (2013)

<sup>36</sup> In the US, the state pension is referred to as the public pension

In all the countries considered many individuals will need to supplement their state pension income with private pension assets. However, the low level of the New State Pension, relative to average earnings, suggests that in the UK this might need to be supplemented to a higher degree than elsewhere. There is consensus in the literature around target replacement rates that, while the State Pension may be adequate for individuals with lower incomes this will need to be augmented with private pension income in order to achieve a suitable target replacement income for those with higher incomes.

**A view of the UK freedom and choice reforms from New Zealand**

Malcolm Menzies, Group Manager, Research, Commission for Financial Capability, New Zealand

Comparison of the UK State Pension with New Zealand Superannuation (NZS - the New Zealand state pension) shows that the level of the UK State Pension has been relatively low. 60% of over 65-year olds rely entirely or almost entirely on NZS for their income and at the same time there are low rates of old-age poverty, suggesting that NZS is very effective in poverty alleviation.

NZS provides a regular, stable income and also to a large extent manages longevity risk for individuals. There is however still an important role for DC pension savings in both New Zealand and the UK to bridge the gap between the state pension and what many individuals need over the course of their retirement. In comparison to the simple (and low cost) New Zealand system, both the UK state and private pensions are complex and challenging for individuals to navigate, if they are to make the most of their private pension savings.

**While there is a risk of moral hazard in the UK it is likely that the effects of running out of resources will be felt mainly by the individual**

Moral hazard is the process by which individuals withdraw their pension savings more quickly than they would otherwise have done in order to access state means-tested benefits. In the UK, it has been suggested that some individuals may exhaust their pension savings too quickly, deliberately or not, under the new flexibilities.

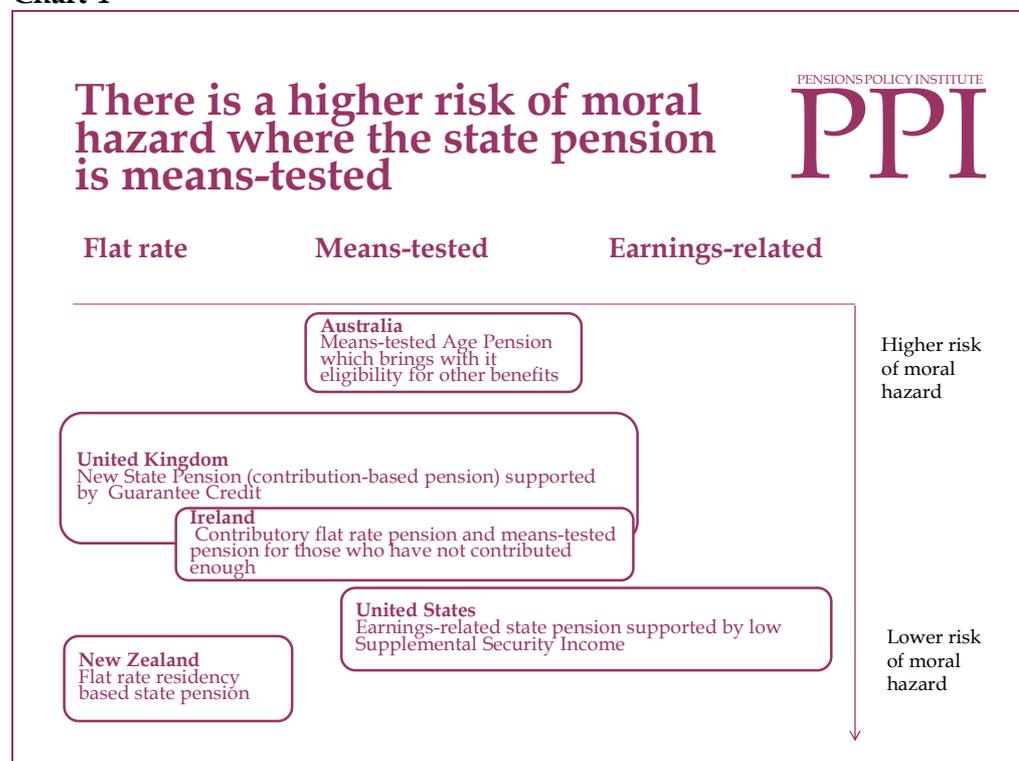
Overall, there is more likely to be a risk of moral hazard where the following factors are in place:

- Absence of flat rate or universal benefits
- High rates and/or use of means-tested benefits

In many countries, the burden falls on both the individual and the state to varying degrees.

Chart 4 rates countries by the risk of moral hazard that their pension system poses.

**Chart 4**



The means-tested Age Pension in Australia brings with it eligibility for other benefits and, for this reason, it is widely considered that introduces a risk of moral hazard. In contrast, New Zealand has a flat rate residency-based pension and, if individuals exhaust their private sources of income, individuals will typically not access higher amounts of other state benefits. While supplementary benefits are available in New Zealand, these tend to be designed for the short term and the take-up of benefits, such as Accommodation Supplement, tends to be low relative to the UK. In March 2012, 5.6% of those aged over 65 received Accommodation Supplement, with an average week payment of NZ\$57.

There is also a low risk of moral hazard in the US because both Social Security Minimum Benefit and Supplemental Security Income (a means-tested benefit), are below the federal poverty guideline of \$11,670 for a single person.<sup>37</sup> In addition, Social Security Minimum Benefit is set at the time that an individual reaches retirement and this will not change even if they exhaust their pension savings.

On Chart 4, the UK and Ireland are similarly rated in terms of moral hazard. This is because both have a means-tested state pension that is slightly lower than the contributions based state pension. Therefore, any individual who

<sup>37</sup> AARP (2014)

receives the full contributions-based state pension will not be eligible for the means-tested state pension. While there is means-tested support for individuals who pay rent in both countries, the high level of home ownership in Ireland means that those individuals who exhaust their private pension savings may be less likely to receive rent assistance. For an individual on average wages, the means-tested state pension in Ireland is higher than the UK New State Pension. Those individuals who exhaust their private pension savings in the UK may be left with slightly lower amounts of State Pension than individuals in the same position in Ireland; in this way, using up private pension savings in order to access the means-tested State Pension may be less attractive. For these reasons, the UK and Ireland have been placed on an equal footing in terms of moral hazard.

In the UK, the effect of running out of resources is likely to be felt for the most part by the individual rather than the state. While there are some means-tested benefits in retirement in the UK healthcare is free, regardless of income and asset level, while benefits such as Attendance Allowance are awarded on the basis of need and not subject to means-testing (meaning that individuals are not able to exhaust their private savings to become eligible to Attendance Allowance). In addition, the New State Pension is set above the level of the Guarantee Credit, the means-tested benefit that guarantees pensioners a particular level of income, and will mean that those individuals who retire with the full New State Pension will not be eligible for Guarantee Credit even if they exhaust their pension savings.

**The absence of healthcare costs in later life may remove one of the barriers to conversion of pension savings to a regular income during retirement**

It has been suggested that, where households are concerned about increased costs in later life it is rational for them not to convert all of their pension savings to a regular income at retirement.<sup>38</sup> In contrast, regular ongoing costs that individuals are likely to incur until they die may best be provided for by a retirement income product, such as an annuity.

It is difficult to assess what costs might arise in retirement, particularly where these are related to health and social care needs; for instance the cost of residential care. While other costs may arise from the requirement for repairs to a property or the purchase of a new vehicle, these are typically not quite as unpredictable as costs associated with health and social care. The cost of social care can be very high, and is difficult to predict; estimates around these and an overview of the Dilnot proposals around social care are in Appendix C (available on the PPI website).

Unlike most of the countries under consideration, the NHS means that most individuals in the UK will not need to make provision for health-related costs, or result in individuals purchasing health insurance, unless they wish to receive

<sup>38</sup> Pashchenko, S. (2012)

treatment privately. This contrasts with the US, which spends on average, nearly \$9,000 per head per year on healthcare.<sup>39</sup>

This means a source of difficult to predict costs, healthcare costs, is absent and, for this reason, it may make sense for individuals to convert a higher proportion of their pension pots to a regular income than individuals in similar circumstances in the other countries considered here.

The target replacement rates that individuals would need to achieve in retirement in order to replicate their standard of living in working life provide us with some insight into the level of costs that individuals in different countries might incur during their retirement.

The replacement rate in the US, in particular, is higher than in the UK where the Pensions Commission calculated replacement rates of between 50% and 80% depending on an individual's level of earnings in their working life. A report covering employees of large companies in the US found that the workers surveyed have a target replacement rate of 85% of their earnings just before retirement for the first year of their retirement.<sup>40</sup>

Replacement rates in the US are for the first year of retirement expressed in terms of the employee's pay at age 65. In contrast, in the UK, the calculation is based on average income across retirement while income in work is based on average earnings for those years in work between age 50 and State Pension Age (SPA).

The higher replacement rate in the US is consistent with the findings from the same report that, in the US, an employee needs about 4.5 times pay at retirement to pay for unsubsidised retiree medical coverage. This contrasts with the UK where individuals are not required to make provision to cover their medical costs in retirement with the exception of dentistry and glasses (although eye tests are free).

**Minimum withdrawal policies, in place in Australia, Ireland and the US, are designed to ensure that individuals access their pension pots, but there are currently no published plans for their introduction in the UK**

In Australia, the US and Ireland, there are policies that aim to ensure that individuals withdraw from their pension pots at a suitable rate. In Australia and the US there are minimum rates of withdrawal from pension pots. In the US the required minimum withdrawal for each year is calculated by dividing the Individual Retirement Account (IRA) balance by an applicable distribution period<sup>41</sup> or life expectancy while allocated pensions in Australia have stated minimum withdrawal rate.

In Ireland, an individual with an Approved Retirement Fund (ARF) is treated as if they have drawn down a certain proportion each year for tax purposes. While

<sup>39</sup> <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/highlights.pdf>

<sup>40</sup> Aon Hewitt (2012)

<sup>41</sup> Determined by the Internal Revenue Service

there is nothing that prevents individuals from withdrawing these amounts from their pension savings and placing these in an alternative form of investment, taxation of minimum withdrawals at least means that the government is able to recoup some tax on these.

In the UK, there is no minimum withdrawal from pension savings; however, changes to the taxation of bequests of pension pots from April 2015 mean that there may no longer be an incentive to leave pension savings untouched. As things currently stand, the beneficiary can pay 55% tax on the pension that they inherit if the fund-holder dies under the age of 75 and has taken money out of the pot, or they die over the age of 75.

Under the Chancellor's proposals from April 2016 where the fund-holder dies under the age of 75 inherited pensions are tax-free regardless of whether they have been accessed. Where an individual dies over the age of 75 beneficiaries are able to access the pension funds flexibly and pay tax at their marginal rate of income tax.

#### **A view of the UK freedom and choice reforms from Ireland**

*Philip Shier, Senior Actuary, Aon Hewitt, Ireland*

Even though the Irish government introduced measures 15 years ago to give individuals more choice around how they withdraw their DC pensions, this has not amounted to the extent of liberalisation that will be seen in the UK from April 2015.

Regulations in Ireland are designed to protect both the individual and the state from adverse consequences – to avoid the Lamborghini scenario arising. A retiree who wishes to invest in an Approved Retirement Funds (ARFs) in Ireland must meet a Minimum Income Requirement, or alternatively invest part of their retirement account in an Approved Minimum Retirement Fund (AMRF) from which drawdown is restricted until age 75, which means that individuals are not able to run down their DC savings prematurely to the same extent as in the UK after April 2015. While the Minimum Income Requirement is currently €12,700 per year, this has been as high as €18,000 before 2013 and is expected to revert to this higher level in 2016. At the same time, there are minimum withdrawal requirements – these were designed to ensure that ARFs are not used purely as a tax deferral or estate planning device for high net worth retirees.

There is no requirement for retirees in Ireland to access financial advice around the use of their DC pensions and there is a concern that, without this advice, some of the investment strategies taken by individuals with ARFs are already sub-optimal. Without sufficient guidance UK individuals will run the same risk under the new pension flexibilities.

**As pension withdrawals are taxable in the UK, withdrawing money from a pension pot gradually is likely to be beneficial**

In Australia and New Zealand withdrawals from pension pots are tax-free, resulting in concerns about individuals running out of income too quickly.<sup>42</sup> In broad terms, tiered tax rates in the UK mean that it is likely to be advantageous for many individuals to withdraw their pensions gradually over a number of years in order to avoid incurring a higher marginal rate of tax. For example, individuals with a modest amount of pension saving and the Basic State Pension (BSP) (around £8,500 per year) may wish to restrict any withdrawals to less than £10,600, the current personal allowance for tax, to avoid paying 20% tax on any of their pension income.

By withdrawing their pension savings gradually, the risk of individuals running down their pension savings too quickly may be lessened.

There is, however, the risk that individuals do not understand the tax treatment of pension income and, as a result, access their pension savings rapidly becoming liable for a higher rate of tax than anticipated. The value of their post-tax pension savings would then be lower, overall.

The new flexibilities will also interact with means-tested benefits in the UK. An individual who withdraws a large amount of income from their pension pot in a single year may receive lower amounts of Housing Benefit and Guarantee Credit.

**International DC savings behaviour has implications in terms of how the UK pension system might be expected to evolve**

The factors and implications considered here include:

- Blurring of boundaries between DC pensions and other forms of saving
- Take-up of financial advice
- Relative popularity of drawdown products
- Use of pension savings to repay debt

**The recent pension freedoms in the UK suggest that boundaries between pension savings and other forms may become increasingly blurred**

The prevalence of Defined Benefit (DB) pensions and quasi compulsory annuitisation have meant that UK pension pots typically have not been considered as part of a range of assets and debts. This contrasts to the position in other countries:

- **Australia - DC plans are typically framed in terms of overall fund value; there has been an increase in the number of households with outstanding mortgages as DC savings have increased.** It has been observed that the typical Australian DC plan is framed in terms of overall fund value, rather than the provision of a particular level of income. This suggests that DC pension savings are aligned with other types of wealth accumulation to a greater extent than in the UK.<sup>43</sup> As pension savings have increased in

<sup>42</sup> Murray, D (2014)

<sup>43</sup> Cooper, J. (2014)

Australia, so has the number of individuals reaching retirement with mortgages. In 1994-95, approximately 80% of households where the reference person for the household was aged 55-64 owned their own home, and only 10% of these had a mortgage. By 2009-10, the number of home-owning households among this group had increased to 82%, but the number of households in this category with mortgages increased to 30%. Further evidence suggests that roughly one-quarter of households in 2009-10 were paying off their mortgages when they retired.<sup>44</sup> While this does not amount to proof that all individuals are acquiring mortgages with the expectation that they will use their pension savings to repay them, this demonstrates how pension savings can form part of individuals' overall financial perspective, and how an holistic approach to manage their finances may be required.

- **US - individuals can borrow from their 401(k)<sup>45</sup> plans (workplace pensions), however levels of borrowing tend to be modest.** In some cases, it is possible to access a particular proportion of a pension fund before retirement, hence, some individuals in the US have used their retirement savings to pay off debts during their working life. Levels of borrowing pre-retirement tend to be modest; of all 401(k) participants, 18% had loans outstanding at the end of 2012. Of those with loans, the average amount was about 13% of the 401(k) account balance (net of the unpaid loan balance).

**Some individuals could make the best use of their pension savings if they structure these as a package that includes their other assets and debts, but there is a risk around individuals building up debt on the basis of their pension pot**

Consideration of pension savings as part of a range of assets and debts is a rational approach and can bring advantages. For example, in Australia the value of the home is not taken into account for the calculation of the relatively generous Age Pension. In addition, any increase in value is not subject to capital gains tax and the main residence is typically exempt from any tax on the individual's death. For these reasons, it may be rational for individuals in Australia to acquire a larger mortgage on the basis that they will use their pension pot to repay this at retirement. Similar types of advantages could accrue to individuals in the UK.

This could also bring about problems; for example, if individuals build up consumer debt on the basis of their pension pot, they may leave themselves with inadequate retirement income. It also brings greater complexity to the management of finances over the course of individuals' lives, as the mixture of assets and debts changes.

In the UK the proposals to remove the limits to how individuals access their DC savings, alongside changes to ISAs (so that individuals can choose how they distribute their ISA savings, in terms of stocks, shares and cash) mean that pension savings and other savings are becoming aligned to a greater degree

<sup>44</sup> Estimates provided by Challenger

<sup>45</sup> Investment Company Institute (2008)

than they have been in the past in the UK (where quasi-compulsory annuitisation meant that DC savings were treated separately), particularly once individuals reach minimum pension age.

### **Low numbers of people in the UK receive pensions advice relative to the US and Australia**

It has been widely acknowledged that the financial decisions made by individuals will be increasingly complex. The findings of previous PPI research concluded that it was more difficult to make an informed decision around accessing DC savings<sup>46</sup> when benchmarked against a range of other decisions, such as buying a house and purchasing life insurance.<sup>47</sup>

The UK Association of Professional Financial Advisors (APFA) estimated that, in 2013 there were 14,300 financial advice firms. On average, firms had 200 clients, of which 120 were designated as active. At this point in time, around 1.72 million individuals were receiving financial advice, around 3.5% of the population aged over 19.<sup>48</sup> However, these individuals may well have received financial advice for something other than pensions.

Research around individuals' confidence around retirement finds that, in the US, 25% of retirees report that they have obtained investment advice from a professional financial advisor who received fees or commission.<sup>49</sup> As in the UK, those with higher levels of assets were more likely to use this advice.

In contrast, in Australia, pension administrators play an important role in the provision of advice and guidance around account-based pensions while uptake of advice from independent financial advisors is low, with reports that financial advisors are not trusted.<sup>50</sup> Proposals by the Financial System Inquiry report suggest defaults in the decumulation phase of DC funds. The proposals around use of defaults stem from the recognition that advice alone is not sufficient to ensure the best possible outcomes for all pension savers.

The UK Government has acknowledged the level of complexity of the system under the new flexibilities, and has introduced Pension Wise. Under this service, DC savers are guaranteed a session of free, impartial guidance that provides structured help with decision-making. The guidance will also set out the next steps for the saver with one of the options being regulated advice. However, the extent to which DC savers will purchase advice is unclear, with it traditionally being considered to be expensive especially for those on limited means or with small pension pots. There is a particular challenge in the UK

<sup>46</sup> PPI (2014)

<sup>47</sup> PPI (2014)

<sup>48</sup> [http://www.apfa.net/APFA/Policy/Campaigns/The\\_Financial\\_Adviser\\_Market\\_In\\_Numbers/APFA/policy/Client\\_Base.aspx](http://www.apfa.net/APFA/Policy/Campaigns/The_Financial_Adviser_Market_In_Numbers/APFA/policy/Client_Base.aspx)

<sup>49</sup> EBRI (2014)

<sup>50</sup> Oxera (2014)

around the provision of a low cost source of advice to those individuals with relatively modest pension pots.

#### **A view of the UK freedom and choice reforms from Australia**

Jeremy Cooper, Chairman, Retirement Income, Challenger, Australia

The decision to end compulsory annuitisation in the UK was a dramatic policy shift. While a wider range of financial product choices for retirees is generally positive, choice itself is not a retirement income policy.

There are behavioural finance and financial literacy challenges, product design issues, and the availability of competent and un-conflicted advisers, to name but a few of the challenges that lie ahead. The measure of an effective retirement income system is centred on adequacy and sustainability; the ability of retirees to live with a certain level of dignity in retirement.

There will be some hard yards to traverse in reaching a point where the average person has access to the right products and advice to mitigate the risks they face in retirement, such as longevity risk, market risk and inflation. Annuities issuers will also have to innovate their products and provide a better value proposition to consumers.

It would also be a great shame if the net effect of the policy shift was a significant reduction in the use of annuities in retirement. Partial annuitisation is useful for nearly all retirees at some point in their lives.

#### **Drawdown products may be popular if these are widely offered to individuals on acceptable terms**

International experience around income drawdown suggests that, where individuals have the option of using drawdown products, rather than purchasing annuities, most individuals opt for these. In Ireland, for example, it has been noted that individuals with a choice between Approved Retirement Funds (ARF) (similar to drawdown products) and annuities have chosen ARFs because of the flexibility that they offer and the perception of annuities as giving poor value.<sup>51</sup> Similarly, in Australia, approximately half of individuals use phased drawdown while the other half withdraw their pension as a lump sum.

As the size of pension pots increases, individuals are more likely to use a drawdown facility rather than taking their pension pot as single cash payment. It has been reported that individuals with pension pots to the value of AU\$50,000 overwhelmingly withdraw lump sums while those with pension pots worth over AU\$100,000 use flexible drawdown via account-based pensions; these are tax-incentivised accounts that allow individuals to keep their savings invested while they take an income stream.<sup>52</sup>

<sup>51</sup> Indecon (2007)

<sup>52</sup> Pauline Vamos (CEO of the Association of Superannuation Funds of Australia) speech at NAPF conference, Liverpool, United Kingdom

**Individuals with low levels of pension savings or other savings tend to use these to pay off debt or make specific purchases, whilst individuals with higher levels of savings are more likely to reinvest these**

In New Zealand, individuals with no savings or lower levels of other savings are more likely to spend their KiwiSaver savings outright or use them to pay off mortgage debt.<sup>53</sup> In contrast, individuals with savings/investments of higher worth are more likely to invest them.

Similarly in Australia, those with lower levels of pension savings are more likely to withdraw these as a lump sum; of the 50% of individuals who opt for a lump sum, 32% use it to pay off housing costs, to purchase a home or to make home improvements and 12% used it to pay off other debts.<sup>54,55</sup>

**Where individuals use drawdown products there is a risk that they will withdraw their resources too slowly or too quickly**

The OECD has warned that the new pension flexibilities in the UK could be detrimental overall to retirement income adequacy due to myopia and lack of financial literacy.<sup>56</sup>

- **Individuals will withdraw their pension resources too slowly.** This has been observed in the US where it has been highlighted that, while DC pensions and IRAs decrease in value, the value of individuals' financial assets overall may increase.<sup>57</sup> In Australia, a concern has been expressed that, on individuals' deaths, these resources are effectively removed from the pensions systems as they are bequeathed to other individuals. This is portrayed as inefficiency within the Australian pension system.<sup>58</sup> This may be of particular concern where pension saving is tax-advantaged in order to incentivise pension saving and pension savings are not ultimately being used to provide retirement income.
- **Individuals exhaust their capital too quickly.** There are conflicting views around the extent to which individuals exhaust their capital too quickly.<sup>59</sup> Reports have tended to focus on concerns around individuals running out of money in the future (Ireland), having insufficient resources (US) and running down their private pensions in order to access means-tested benefits (Australia).

To some degree, this may reflect the difficulty in measuring the extent to which individuals run out of resources, particularly where individuals change their spending habits towards the end of their lives in order to live within their means with negative consequences for their quality of life. Rather, there is a risk in these types of situations that individuals do not structure their savings in a way that balances the optimisation of income and the matching of income with their

<sup>53</sup> Inland Revenue (2013)

<sup>54</sup> Challenger (2012)

<sup>55</sup> Murray, D (2014)

<sup>56</sup> OECD (2014)

<sup>57</sup> Browning et al (2014)

<sup>58</sup> Deloitte (201)

<sup>59</sup> Oxera (2014)

needs over the course of their retirement; this is something that is almost impossible to achieve at an individual level.

**A view of the UK freedom and choice reforms from the US**

David John, Senior Strategic Policy Advisor, AARP Public Policy Institute, US

For Americans, the UK's retirement reforms of the last decade have been the gold standard. The automatic enrolment system shows real potential to provide all UK citizens with retirement assets. We are working to see that the US takes similar steps.

However, neither of our countries has successfully dealt with how best to use those assets in retirement. The US has no real policy, but is gradually moving towards encouraging some level of annuity. Most likely, this will be longevity insurance that starts making payments well after retirement and protects retirees against running out of money.

The UK's new pension freedoms appear to be going too far in the other direction. Guidance alone is not likely to be enough. Literally every minute that passes after general advice is given reduces the chance that the consumer will act on it - even when they have decided to do so. And in the US many of those who consult with a financial planner fail to follow that guidance.

US experience suggests that many UK retirees are likely to see their savings exhausted too quickly. There are alternatives that could do a better job of protecting retirees.

**Box 1: Concerns around rate at which individuals access DC savings**

**Ireland**, a review of the Irish annuities market conducted in 2007 found that people purchasing Approved Retirement Funds (ARF) and withdrawing from it the same amount as they would have received as an annuity from an equivalent pension fund had a 50-60% chance of exhausting their pot before they died.<sup>60</sup>

**US**, it is estimated that almost half (47.2%) of the cohort aged 56 to 62 in 2010, are at risk of having insufficient resources to pay for basic expenditure and any health costs not covered by insurance, including nursing home and home care expenses. It is estimated that, within this group, 41% of those in the lowest income quartile will have run out of money ten years into retirement, compared to less than 5% of the highest income quartile.<sup>61</sup>

**Australia**, the concerns around this have focused on the fact that individuals can access the Age Pension, which also gives them access to other benefits such as healthcare and rent assistance once they have spent down their savings. Any concerns have tended to be theoretical and centred around the following:

- Some individuals can access their superannuation pension ten years before the Age Pension. The concern is that they might use these as a bridge to Age Pension benefits (however, the age gap between when individuals can access their superannuation and the Age Pension is decreasing).<sup>62</sup>
- There are concerns that, if people increased their pre-retirement indebtedness on the basis that they could repay this debt in retirement, this could undermine the superannuation system.<sup>63</sup>
- It has been found that there are individuals who are using their retirement funds to pay off debts and risk running down their private retirement savings, despite rules around maximum withdrawals for some products, and consequently falling back on the Age Pension. However, there is no conclusive evidence to date that individuals are gaming the system in this way.

It has been reported that, in Australia, 25% of people aged 55 deplete their balances by the age of 70.<sup>64</sup> In the past, those individuals who withdrew their private pension savings between the ages of 55 and 64 with lower levels of private pension savings, were more likely to be single and to have experienced the onset of disability. This suggests that this group may exhaust their pension savings partly because their costs are higher than average, due to their disability, and their savings being lower.<sup>65</sup>

<sup>60</sup> Indecon (2007)

<sup>61</sup> EBRI (2010)

<sup>62</sup> Agnew, J (2013)

<sup>63</sup> Australian Government (2010)

<sup>64</sup> Murray, D (2014)

<sup>65</sup> Social Policy Institute (2013)

**Box 1 continued**

While these risks have been identified in Australia and the US, and there is a consensus that this will also happen in Ireland, the realisation that it is important to deal with longevity risk is only starting to take hold. The Australian approach, in particular, is explored in Chapter 3.

**New Zealand**, concerns have not been raised widely – this may be because the relatively high rate of the state pension has meant a lower risk of poverty for older individuals in New Zealand than in other countries.

**Use of particular products depends on these being made available to DC savers**

Following the announcement of the pension flexibilities in the UK, there has been discussion around the extent to which different products will be suitable for different groups of individuals. For example, drawdown products have in the past been considered inappropriate for individuals with less than £100,000 due to their charging structures. Therefore, the use of these for those with fewer assets will depend on the emergence of low cost alternatives.

In a US survey conducted in 2007, only 70% of DC plan participants recalled having multiple withdrawal options at retirement while the remainder recalled having only a single option; of which around three quarters indicating that the option was a lump sum and a quarter indicating that it was an annuity.<sup>66</sup>

If the same situation arises in the UK, there is a risk that some individuals will not benefit fully from the new pension flexibilities. While individuals may have the option of moving their DC savings into a product which offers a range of retirement options, tendencies towards inertia and lack of understanding around pensions may mean that individuals do not move their pension savings.<sup>67</sup>

Chapter 3 considers the Australian and US DC savings markets and Chapter 4 explores the evolution of the UK DC market.

<sup>66</sup> Investment Company Institute (2008)

<sup>67</sup> Investment Company Institute (2008)

## Chapter three: Australian and US DC savings markets

This chapter focuses on two countries with relatively mature Defined Contribution (DC) markets in which the rules have been liberal relative to the UK (Australia and the US). It looks at the role of annuitisation in these countries and the allocation of assets during the transition to, and through retirement, along with behaviours and rules of thumb around withdrawals.

### **Annuities are available but are not generally popular in either Australia or the US**

In both countries there is either an existing or growing acceptance that a large proportion of individuals will need to supplement their state income. However, existing levels of annuitisation are low in both countries:

- In Australia estimates vary; somewhere between 2% and 10% of DC pension assets are used to purchase a lifetime annuity.<sup>68</sup>
- In the US lifetime annuities account for less than 2% of pensioner income (2009).<sup>69</sup>

Reasons for the lack of popularity of annuities vary by country and by an individuals' income level; however, there are some common explanations:

- **The high cost of annuities in terms of the initial outlay can be off-putting.** This can be the case for a variety of reasons; it may be that annuities are judged to offer bad value per se, or the income stream may seem low in relation to the cost, as the value of future income payments would be realised over a very long period of time.<sup>70</sup> A further element may be the lack of liquid wealth available for annuity purchase where, for example, an individual's wealth is in illiquid assets such as housing.<sup>71</sup>
- **Individuals with greater levels of wealth are more likely to purchase annuities.**<sup>72</sup> This wealth may include Defined Benefit (DB) pensions, other household income or state pensions and it is highlighted that, for a high proportion of those households with low levels of wealth, assets for retirement are (typically consisting of regular receipts of state pensions or benefits), in effect, already completely annuitised without them purchasing an annuity.<sup>73</sup>

In the US wealthier individuals are more likely to purchase annuities. Approximately 15% of people in the highest income quintile in the US reported having private annuity income in 2006, while among the bottom quintile this proportion was less than 1%.<sup>74</sup>

<sup>68</sup> PPI (2014)

<sup>69</sup> PPI (2014)

<sup>70</sup> Paschenko (2010), Howes (2012)

<sup>71</sup> Paschenko (2010), Benartzi et al (2011)

<sup>72</sup> Paschenko (2010)

<sup>73</sup> Benartzi et al (2011)

<sup>74</sup> Paschenko (2010)

In Australia this lack of demand for annuities relates to the availability of the means-tested Age Pension, received by three quarters of retired Australians.<sup>75</sup> This may deter individuals from purchasing an annuity because of the lack of available funds. Alternately, this may stem from the fact that the requirement for regular income has already been met for a household.

- **The impact of uncertain future medical costs and bequest motives vary by income level.** Where the impact of the effect of bequest motives on participation rates was modelled in the US, the percentage of retired individuals involved in the annuity market decreased by 4%, with most of the reduction coming from the highest income quintile. The same research in the US found that uncertainty around future medical expenditure decreased annuity market participation in the lower income quartiles where individuals give up on meeting these costs. In contrast, in the higher income quintiles those individuals who can afford to finance their medical expenses do this partly by purchasing annuities.
- **Behavioural factors can influence levels of annuity purchase.**
  - Loss aversion - individuals dislike negative outcomes to a greater degree than they like positive outcomes. It has been suggested that US retirees demonstrate a higher degree of loss aversion than the average US person. The explanation given is that these individuals would simply see giving up control over the money to purchase a lifetime income product as another type of loss.
  - Overweighting the occurrence of unlikely events - Australian and US individuals are found to overestimate the probability of dying within a particular time frame, e.g. the next two years. Again, this can lead to individuals underestimating the value of annuities.<sup>76</sup>
  - Framing in terms of investment return rather than spending power - behavioural research has suggested individuals are less likely to purchase an annuity where the focus of the description is around the potential loss of buying an annuity but dying early. In contrast, they are more likely to purchase an annuity where the focus is on the security of a predictable income.<sup>77</sup> The negative description focuses more on investment return rather than consumption; it frames the decision as an investment plan where there is a risk of losing the whole investment on death.<sup>78</sup> This is consistent to a greater extent with the Australian and US pension landscapes, than the UK, that have focused on the value of pension funds over that of a potential retirement income for life.

<sup>75</sup> Howe (2012)

<sup>76</sup> Howes (2012), <https://www.soa.org/News-and-Publications/Newsroom/Press-Releases/2012-07-30-retirees-under.aspx>

<sup>77</sup> Lown (2011)

<sup>78</sup> Benartzi (2010)

- **Lack of availability of annuities is an important factor in the US.** In 2009, only 21% of US DC plans offered annuities as an option with almost no 401(k) plans offering these.<sup>79</sup> While this may be due to low demand for annuities, this factor demonstrates how low demand and supply for annuities may re-inforce each other.
- **Regulatory and legal treatment of annuities specific to the US and Australia has also had a negative impact on their popularity but governments are changing these rules.**
  - US - recent guidance from the Treasury and Labor departments has clarified the point that sponsors are able to include deferred-income annuities in target date funds used as default investments.<sup>80</sup> In practice, target date funds used by employers as default investments are covered by the 'safe harbor' rules that mean that employers cannot be sued provided that they meet certain conditions. In addition, until summer 2015, the purchase of a deferred annuity (known as a longevity annuity in the US) did not count towards the minimum withdrawal received by an individual. This means that, from 2015, individuals will not have to start receiving their annuity before they would ideally wish to do so in order to comply with these regulations. Therefore, while the take-up of annuities is still low relative to other countries, there have been recent changes that enable 401(k) plans to include deferred-income annuities in default investments, as well as tax changes, and the use of deferred annuities is increasing.
  - Australia - individuals are considered to receive an income, for tax purposes, as soon as they have purchased the annuity even if it is deferred. This significantly reduces the attractiveness of deferred annuities. This approach is likely to change, however, as the Australian Government is expected to introduce new tax rules specifically for this type of annuity. The impact of combining a drawdown strategy along with the purchase of an indexed annuity has been considered in the US. It found that, at least in theory, income from an indexed annuity, along with payments from a withdrawal plan with no instances of failure (i.e. running out of money) can result in higher total retirement income at a lower risk than a plan that has no annuity component.<sup>81</sup> The extent of any additional benefit depends on the factors such as the percentage of withdrawal and the duration of retirement.

**In the US, funds are invested differently for 401(k) plans and Individuals Retirement Accounts (IRAs)<sup>82</sup>; asset mixes also vary by age**

DC retirement saving in the US occurs in 2 ways, via 401(k) schemes or via Individual Retirement Accounts (IRAs). A 401(k) is an employer-provided DC plan where it is common for the employer to incentivise saving into the plan by

<sup>79</sup> Benartzi et al (2011)

<sup>80</sup> <http://ww2.cfo.com/retirement-plans/2014/12/pension-power-for-the-401k-lifetime-income/>

<sup>81</sup> O'Flinn et al (2010)

<sup>82</sup> 401(k) are workplace pensions while IRAs are personal pensions

matching employee contributions in some way. An IRA is an individual account similar to a personal pension in the UK.

IRA investors are more likely to hold this investment on an advised basis and have typically actively made the choice to invest in a pension as they do not have access to a workplace one. In contrast, those individuals with a 401(k) plan may have been automatically enrolled into the pension in the first instance.

One of the key differences between the two is the range of investments available. In a 401(k) plan an employee is likely to be guided towards a default asset mix, albeit there may be an option to re-balance their portfolio if they choose to do so. In an IRA, there is more onus on the individual to choose either pre-packaged funds or decide the fund allocation entirely. When older workers started to invest in 401(k) plans they generally did not have the option of a target date fund,<sup>83</sup> although they now have become the default option for many plans. Therefore, assets are more likely to be invested in target date funds for individuals in their twenties than for individuals in their sixties.

US data (Chart 5) shows the asset allocation in 401(k) plans for individuals in their twenties and sixties. A proportion of assets at each age (34% individuals in their twenties and 13% for individuals in their sixties) are invested in target date funds which are themselves invested in a mix of assets. This means that the underlying assets of target date funds affects the asset mix for 401(k) plans overall, particularly for those individuals in their twenties.

As an illustration, if it is assumed that target date funds are invested in the same way as the US State Street target date fund, 64% of assets would be held in equities for individuals in their twenties and 39% of assets would be held in equities for individuals in their sixties.<sup>84</sup>

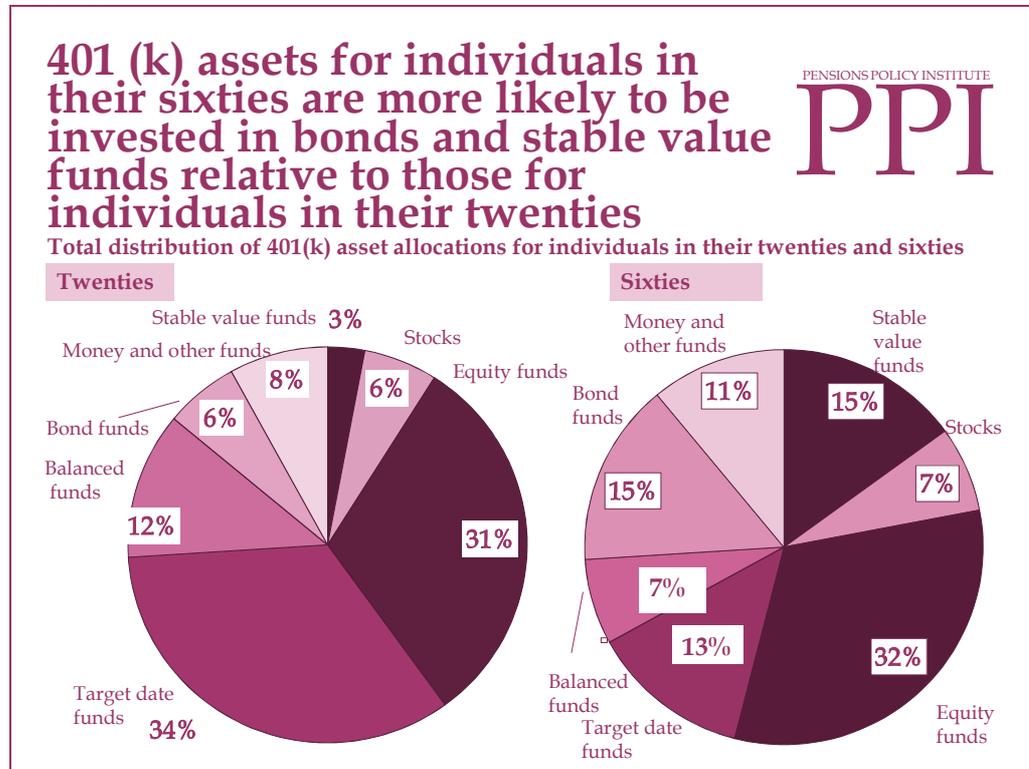
Overall, this illustration and Chart 5 suggest there may be a shift from equities and stocks, towards less risky assets, such as bonds, as individuals approach retirement and that some de-risking may have taken place. This becomes particularly pronounced where the asset mix for target date funds is also taken into account (as target date funds typically implement de-risking strategies as individuals approach retirement).

<sup>83</sup> Funds that automatically change the allocation of assets over time as it approaches the target date, e.g. an individual's retirement date

<sup>84</sup> This calculation assumes that 40 years before target date equates to individuals in their sixties while 5.5 years before target date equates to individuals in their twenties

Chart 5 provides an overview of the distribution of assets at a particular point in time and does not allow for comparison over the course of time. It does, however, provide some insight into how asset mixes might evolve.

Chart 5<sup>85</sup>

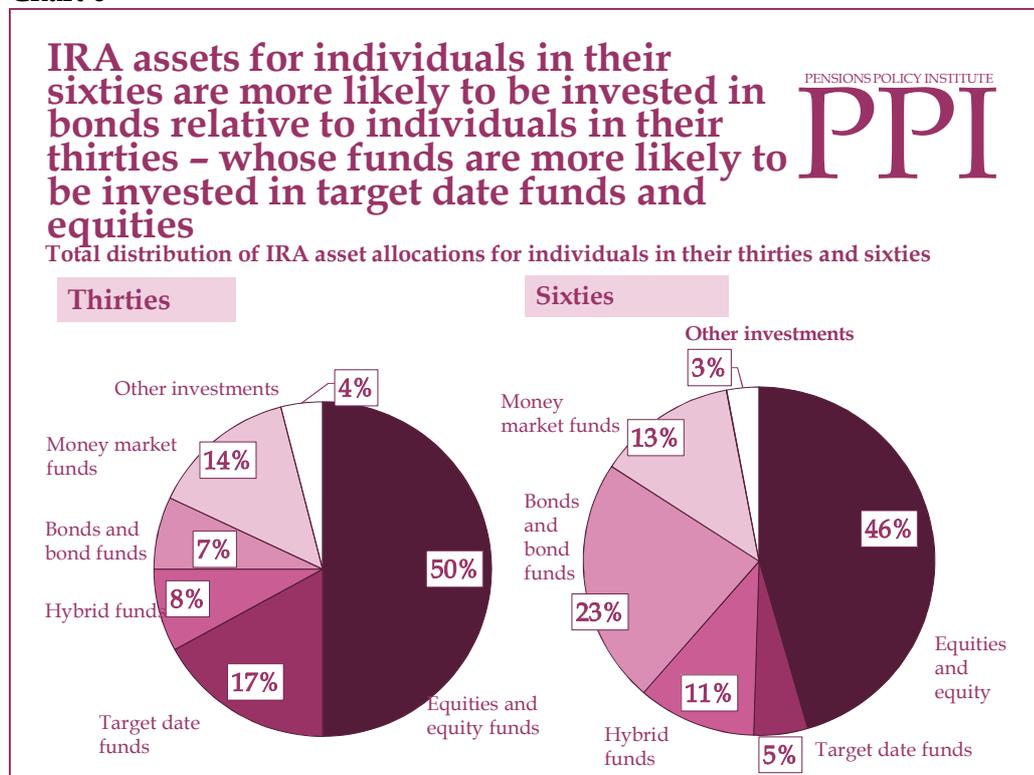


<sup>85</sup> Investment Company (2014)

Assets held in IRAs for those in their thirties are less likely than those held in 401(k) plans to be invested in target date or balanced funds, and more likely to be invested in equities and equity funds (Chart 6). This is likely to reflect the fact that target date funds have been less available to IRA customers as well as the fact that 401(k) figures are made available for individuals in their twenties, while the IRA figures are for individuals in their thirties which might influence these findings. Similar proportions are held in bonds and bond funds while a higher proportion is held in money market funds.<sup>86</sup>

As mentioned previously, to some degree, the significance of any differences depends on the asset mix of target date funds and the proportion of these that is invested in equities.

Chart 6<sup>87</sup>



**An overview of target date funds suggests that during the early years, the amount allocated to equities is higher for target date funds than for pension funds more generally**

An overview of the asset mixes for single target date funds for two asset managers, State Street and BlackRock enables a greater understanding of the distribution of assets. However, these findings are based on two funds only and should be treated as illustrative. This analysis shows the changes in asset mixes in these funds as individuals approach the target date, as well as what happens afterwards.

<sup>86</sup> Investment Company (2014)

<sup>87</sup> Investment Company (2014)

**Box 2: US State Street target date fund example<sup>88</sup>****Asset mix of US State Street target date fund by years in relation to the target date<sup>89</sup>**

<b>Year to retirement</b>	<b>40.5 years before</b>	<b>15.5 years before</b>	<b>5.5 years before</b>	<b>0.5 years before</b>	<b>5 years after</b>
US large capital stocks	35.9	33.7	27.0	20.6	13.8
US small, mid capital stocks	16.0	10.9	6.5	4.1	2.6
International stocks	34.6	29.7	22.0	15.7	10.1
<b>Total equities</b>	<b>86.5</b>	<b>74.3</b>	<b>55.5</b>	<b>40.4</b>	<b>26.5</b>
US aggregate bonds	0.0	11.0	18.0	25.0	20.0
Long term government bonds	10.0	10.0	5.5	0.5	0.0
Short term credit government bonds	0.0	0.0	0.0	1.3	20.0
High yield bonds	0.0	0.8	6.0	6.8	7.0
Treasury Inflation Protected Securities (TIPS)	0.0	0.4	9.2	0.0	0.0
Intermediate TIPS	0.0	0.0	0.0	17.8	18.0
<b>Fixed income</b>	<b>10.0</b>	<b>22.3</b>	<b>29.8</b>	<b>51.4</b>	<b>65.0</b>
Real Estate					
Commodities	3.5	3.5	3.5	3.5	3.5
<b>Alternatives</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>

55.5% of assets are invested in equities 5.5 years before the target date. 40.5 years before target date, this asset manager allocates just under 90% of assets to equities, again, this is high relative to the proportion of assets in equities/equity funds and stocks for 401(k) and IRAs more generally. After the target date, the asset mix continues to change, with equities reducing from 40% to 25%. This may reflect the fact that minimum withdrawals are applicable from age 70.5.

After the target date, some funds are moved into short term credit government bonds and Intermediate (1-10 years) Treasury Inflation Protected Securities. The use of these suggests the asset manager is looking to manage inflation risk as individuals move into the decumulation phase.

<sup>88</sup>[http://www.ssga.com/definedcontribution/us/docs/SSgADC\\_Target%20Retirement%20Funds%20Brochure.pdf](http://www.ssga.com/definedcontribution/us/docs/SSgADC_Target%20Retirement%20Funds%20Brochure.pdf)

<sup>89</sup>[http://www.ssga.com/definedcontribution/us/docs/SSgADC\\_Target%20Retirement%20Funds%20Brochure.pdf](http://www.ssga.com/definedcontribution/us/docs/SSgADC_Target%20Retirement%20Funds%20Brochure.pdf)

**Box 3: US BlackRock target date fund example<sup>90</sup>**

**Asset mix for BlackRock mixed-asset target 2020 portfolio in the US in 2014<sup>91</sup>**

Name	Weight
US Bonds	39.8%
US Large/Mid Cap Equities	28.0%
International equities	15.3%
TIPS	6.5%
US Small Cap Equities	3.5%
Commodities	3.5%
Global REITs	3.1%
Money Market	0.2%

The BlackRock 2020 portfolio (the target date suggests that this would typically be for individuals in their sixties) had the distribution listed above in 2014.

**Most Australian funds do not change their default assets allocation from accumulation to the decumulation phase**

In Australia, the introduction of MySuper<sup>92</sup> has resulted in many retail providers switching to balanced or lifecycle approaches, with a selected sample of balanced funds having an average of 72% in growth funds.<sup>93</sup> Despite this, 51% of funds currently do not change their default asset allocation from accumulation into decumulation.<sup>94</sup>

Overall, the allocation to growth assets shown in Chart 7, appears high – 69%.<sup>95</sup> The allocation to growth assets across the whole accumulation period in Australia is similar to the proportion allocated to growth assets for American savers in their twenties.<sup>96</sup> This may relate to the fact that the Australian Superannuation Guarantee was only introduced in 1992, suggesting that on average savers in these schemes may be younger than in the US.

<sup>90</sup> <http://www.blackrock.com/investing/literature/fact-sheet/oef-lifepath-2020-fund-fact-sheet.pdf>

<sup>91</sup> <http://www.blackrock.com/investing/products/227789/blackrock-lifepath-2020-portfolio-class-i-fund>

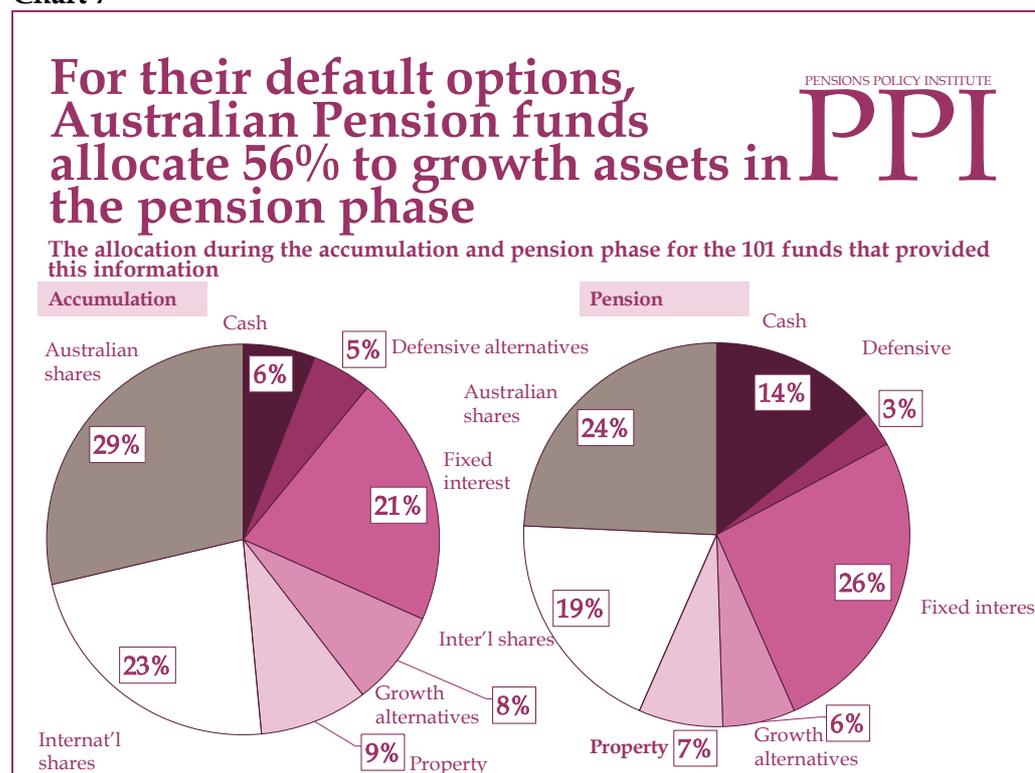
<sup>92</sup> DC pensions designed to be a default, low cost, with a simple design and invested in either a diversified or lifecycle option

<sup>93</sup> MySuper: A New Landscape for Default Superannuation Funds

<sup>94</sup> Mercer (2014)

<sup>95</sup> Based on the default options for 1010 providers that provided asset allocation information

<sup>96</sup> For the purpose of this report, Australian shares, international shares, property and growth alternatives have been categorised as growth assets

Chart 7<sup>97</sup>

Analysis of those schemes that do change their allocation shows that around a third apply a lifecycle approach with retail funds (those run by institutions for individuals) being more likely to change their asset allocation than industry funds. While there is a scarcity of information around the transition and decumulation phases in Australia, available data shows the following<sup>98</sup>:

- The average exposure to growth assets falls from 69% to 56% from accumulation to decumulation on average, for those funds where there is a change made (based on the default options for the 101 providers that provided asset allocation information).<sup>99</sup>
- While 6% is allocated to cash during the accumulation phase, 14% is allocated to cash in decumulation.
- The proportion allocated to fixed interest bonds increases from 21% to 26%.
- The proportion allocated to international shares decreases from 23% to 19%.
- The proportion allocated to Australian shares decreases from 29% to 24%.
- A relatively high proportion of assets is allocated to Australian shares in both phases.

<sup>97</sup> Mercer (2014), For the purpose of this report, Australian shares, international shares, property and growth alternatives have been categorised as growth assets

<sup>98</sup> Mercer (2014)

<sup>99</sup> Mercer (2014)

By July 2017, all remaining default fund balances must be transferred to MySuper products, which must offer a single diversified investment strategy or a lifecycle investment strategy. This should result in a higher proportion of assets being invested in funds with a de-risking strategy in place.

This demonstrates how the Australian and US systems are moving towards a system in which the risk profile of assets is changed in line with changes to individuals' circumstances. In Australia, in particular, approaches have already emerged that target individuals according to their level of engagement.

#### **Box 4<sup>100</sup>: Examples of approaches targeted by level of engagement**

Investment Magazine Australia has three examples of products that are designed specifically for an individuals' particular level of engagement:

**Example 1** - lifecycle funds for the disengaged investor (Smart Path - Mercer). This switches asset allocation according to the individual's age band. In the earlier years, this is invested in heavy equity and unlisted equity, ending up invested in a diversified portfolio as an individual approaches retirement. At retirement, the individual is switched to the pension phase to benefit from Australian tax concessions.

**Example 2** - target date funds for the informed and engaged investor (AMP) Funds are based on a 10-year cohort, and regular communication with members is used to ensure their engagement, particularly during the de-risking phase.

**Example 3** - to be offered by financial advisors (Specialist absolute return funds - State Street). Three different funds are designed to be offered by financial advisors to clients aged over 50, depending on their circumstances, as follows:

- First fund is designed for those who want to maximise returns as they approach retirement.
- Second fund is designed for those who have just entered retirement.
- Third fund is designed for those in the latter part of their retirement.

#### **There is a 4% 'rule of thumb' around withdrawals in place in the US**

For many years, a withdrawal rate of 4% has been suggested by financial advisors in the US:<sup>101</sup> this refers to 4% of the pension fund at retirement adjusted for inflation in each of the following years. This is just an average. For many, they take a modest rate of withdrawal until the age of 70.5 typically about 2% of account balances. This rate increases post age 70, when withdrawals are around 5% per year.<sup>102</sup>

<sup>100</sup> <http://investmentmagazine.com.au/2014/02/three-new-approaches-for-post-retirement/>

<sup>101</sup> <http://vanguardblog.com/2014/11/07/the-4-spending-rule-20-years-later/>

<sup>102</sup> Poterba et al (2011)

Similarly, it is accepted that, in reality, retirees do not stick to a particular level of withdrawal per year; instead they monitor their portfolios and change their withdrawal rate in line with changes in the market and their needs.<sup>103</sup>

Overall, there has been increasing recognition that individuals do not behave rationally and that this leaves them at risk of running down their pension savings too quickly or too slowly.<sup>104</sup>

<sup>103</sup> Vanguard (2012)

<sup>104</sup> Blake et al (2012)

## Chapter four: evolution of the UK DC market

This chapter considers ways in which the UK is similar and different to Australia and the US, and potential implications for the UK’s direction of travel. It also considers what might happen in the UK Defined Contribution (DC) market, post the introductions of the pension flexibilities. Specific consideration of the DC regulatory environments suggests lessons for the UK pension system.

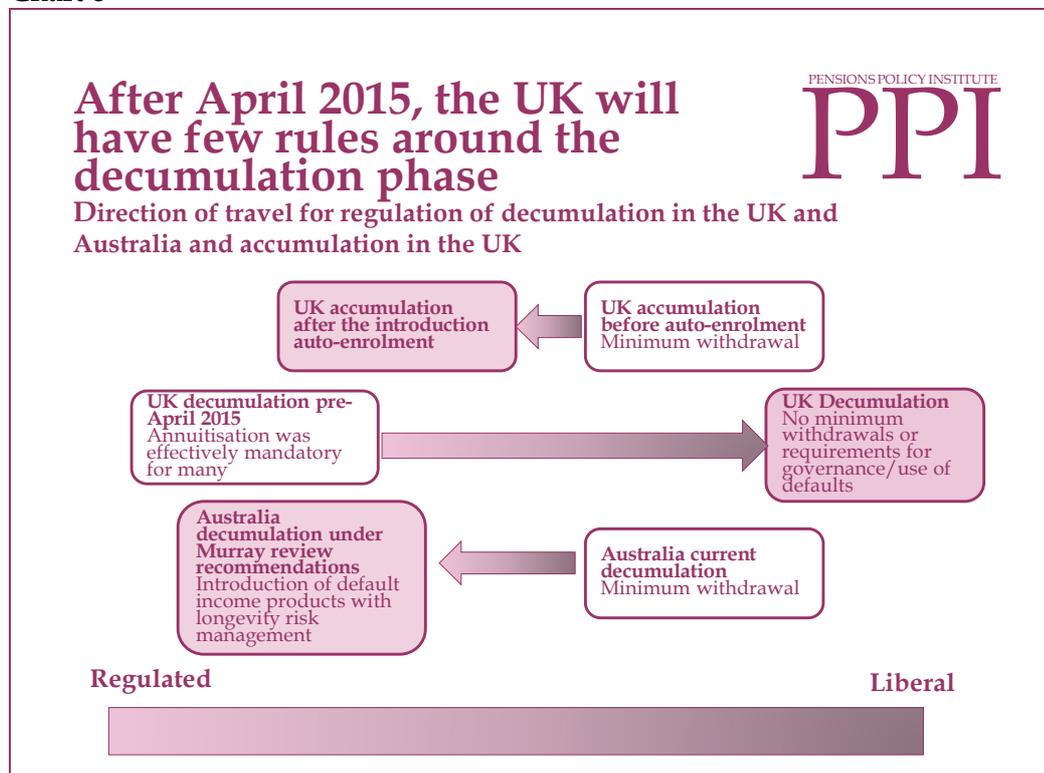
This section draws on both the available literature and interviews with asset managers.

### The UK policy/regulatory landscape is moving in opposite directions to Australia and the US with some significant governance gaps emerging

In the UK, the accumulation phase has become more regulated due to the introduction of automatic enrolment.

Prior to April 2015, the UK decumulation phase was strictly regulated with many DC savers effectively required to purchase an annuity. However, the absence of minimum withdrawals and rules around governance of and defaults during the decumulation phase from April 2015 means that the position has reversed. The UK decumulation phase is regulated to a lesser extent than in both Australia while the level of regulation in the US falls between Australia and the UK. The difference in the direction of travel is shown in Chart 8.

Chart 8



In terms of the management of longevity risk, Australia and the UK appear to be moving in very different directions. The Australian Financial System Inquiry<sup>105</sup> concluded that a lack of risk pooling and over-reliance on account-based pensions (drawdown products) meant that superannuation products were not being effectively converted into retirement incomes<sup>106</sup>. Sources estimate that moving to a pension system which manages longevity risk would reduce the amount of assets required for adequate retirement incomes by approximately 15%.<sup>107</sup> Consequently, the Financial System Inquiry report makes the following recommendation, that trustees should pre-select a comprehensive income product for retirement (CIPR) to serve as a default while, at retirement, individuals should have to indicate whether they would prefer this or an alternate product. The comprehensive income product should have the following attributes:

- Provision of a regular, stable income
- Management of longevity risk
- Flexibility
- Low cost
- Cooling off period

The report also highlighted that, in practice, a combination of products might be required in order to deliver this

Additionally, the Inquiry argues for strengthened governance during the decumulation phase in DC retirement markets (based on behavioural arguments) to protect consumers. In comparison, the UK Government's current approach has significantly reduced the level of regulation and consumer protection and has said very little so far about governance.

**The UK pensions industry has a sophisticated understanding of the various types of risk, including longevity and market risk and the infrastructure to offer investment and risk pooling strategies in a more challenging environment**

UK insurers, pension providers and asset managers have widely used de-risking strategies to manage the transition to retirement, in order to reduce the impact of any market volatility as individuals approach the point of annuitisation. For example, the DWP's guidance for qualifying schemes' default investment funds in DC schemes under automatic enrolment recommends that strategies should be in place to manage risk that take into account savers' likely retirement date. However, this approach has taken longer to gain currency in the other countries under consideration.

In the past, it has been relatively straightforward for the UK pensions industry to develop default de-risking strategies on the basis that the majority of DC savers purchase an annuity. Going forwards, the UK pensions industry will face the challenge of matching glide-paths to individuals' circumstances in an era where there is a growing range of circumstances and approaches to retirement.

<sup>105</sup> Murray D (2014)

<sup>106</sup> Murray, D (2014)

<sup>107</sup> Deloitte (2013)

While in the past lifecycle and target date funds have been designed with a particular date of retirement in mind (at which annuity purchase typically occurred), the fact that individuals increasingly have different retirement dates to each other and do not know exactly when they will retire makes the implementation of risk management strategies more challenging.

Countries, such as Australia and the US, where pension flexibilities have always been in place, have already experienced this challenge. However it is only recently that there has been a consistent approach to the management of different types of risk at an appropriate time. It is important that the UK pensions industry maintains expertise around the management of risk and adapts these approaches in order to manage the different types of risk, such as market and longevity risk up to and through retirement.

Various elements of the existing UK infrastructure that could provide for strategies that manage investment returns and risk pooling, including annuities, are:

- Trustees, insurers and pension providers are used to providing strategies that manage different types of risk, such as longevity and market risk.
- A sophisticated market that offers different risk pooling strategies that cater to individuals' circumstances and that deal with specific issues that might otherwise deter individuals from annuitising<sup>108</sup>; these include value-protected, index-linked and enhanced annuities.<sup>109</sup>
- A large pool of non-mortgaged property that may be a candidate for equity-release schemes.
- Governance and regulatory regimes that are designed for risk pooling strategies and products, such as the FCA regulations around annuity sales practices.

**Differences between the UK and the US, in particular, highlight fewer barriers to annuitisation in the UK and suggest that behavioural economic concepts, such as framing, might be used to influence behaviour**

The history of annuitisation in the UK has the following consequences that suggest the absence of some of the specific barriers to annuitisation seen in other countries:

- Annuities are already widely available in the UK.
- Individuals and organisations are used to framing retirement decisions in terms of the purchasing power of a regular income rather than investment returns or the possibility of losing their whole pension pot on death. It has been suggested that where retirements is framed in this way individuals are more likely to annuitise.
- A sophisticated market has developed, including a market for underwritten annuities which takes into account lifestyle and health conditions, suggesting that individuals may be more likely to find an annuity that meets their needs.
- The UK tax and regulatory framework does not discourage annuitisation.

<sup>108</sup> Blake et al (2012)

<sup>109</sup> Blake et al (2012)

**However, some barriers to annuitisation are present in the UK.** Particular factors present in other countries are also present in the UK; these may have an impact on popularity of annuities to some degree:

- Loss aversion - where individuals dislike negative outcomes to a greater degree than they like positive incomes does have some influence in the UK. Similarly, previous research has suggested that, as in Australia, UK individuals are likely underestimate how long they will live, leading them to underestimate the value of annuities.
- Bequest motive - where individuals are keen to ensure that they can pass some or all their wealth onto the next generation. This can deter individuals from annuitizing and is likely to have an impact in the UK with the changes to taxation on such bequests. While particular products, such as value-protected annuities<sup>110</sup>, designed to address this issue are available in the UK, these have had limited uptake.

The UK is different from the other countries in that there are no minimum withdrawals. This, along with the rules around inheritance suggest that some individuals may withdraw their pension savings very slowly, deferring the tax on these.

**Other factors are present in the UK, but their impact may be diluted relative to other DC markets.** The two factors of level of pre-annuitised wealth and the perceived high cost of annuities are likely to have an impact in the UK. However, particular attributes of the UK pension system mean that their impact may be diluted to some extent:

- While high levels of pre-annuitised wealth may deter individuals from purchasing annuities, the relatively low level of the New State Pension (in particular related to the level of earnings-related US public pensions received by some individuals) may mean that demand for annuities remains high especially relative to the US.
- The perceived high cost of annuities may be off-putting in the UK. However, the offer of enhanced annuities, underwritten for lifestyle or health issues, may reduce the cost and increase attractiveness for some individuals.

PPI research suggests individuals would prefer to leave their options open for as long as possible, and are unlikely to want to commit to the option of securing an income until they are in their 70's or beyond.<sup>111</sup> Many participants in the research interviews were warm to the concept of a gradual payment for a longevity insurance product, with participants being able to see how this could help them to build up a 'safety net' against the risk that they live too long or take out too much income.

**For some individuals, annuities are still a good option.** A review of the UK annuities market by the Financial Conduct Authority (FCA) found that, while competition is not working well for the consumer in the UK market, 'the right annuity purchased on the open market offers good value for money relative to

<sup>110</sup> These provide beneficiaries with a lump sum on the annuitant's death

<sup>111</sup> PPI (2014)

alternative drawdown strategies and may therefore be a good option for those with low risk appetites.<sup>112</sup>

**The take-of up products providing either guarantees or longevity insurance has been limited, despite the advantages in terms of maximising income and managing risk**

In the US, products such as lifetime income security products have not garnered sufficient interest from employers. These products entail individuals paying an additional insurance premium alongside their investments in order to guarantee a particular level of benefit if the market falls. However, there has not been sufficient interest among US employers or individuals for there to be wide uptake in the US. In the previous decade, attempts to offer products such as variable annuities in the UK have met with a mixed reception.<sup>113</sup>

There have been similar challenges in terms of individuals' interest in longevity insurance. Even where there are some innovations in other countries e.g. longevity pension in Australia (deferred pension paid out at age 85) there has not been high uptake of these, possibly due to their tax treatment. Similarly, in the US, it is estimated that when guaranteed income is available within a plan, participants' take-up rate is 3%.<sup>114</sup>

Overall there appears to be no widely used product that addresses longevity risk in the countries under consideration.

A number of factors influence who might offer this type of product. It has been suggested that trust-based workplace pensions may not wish to take on this task because of the administrative burden and additional risks that this might present. Master Trusts may wish to offer this type of product as a way of enabling employers to share the costs and governance burden of offering this type of product. However, the regulatory framework have an impact on the willingness of Master Trusts to offer this type of product. The FCA regulates insurance products whilst Master Trusts are regulated by The Pensions Regulator (TPR).

Significant issues are likely to remain around driving consumer demand and their understanding of longevity risks. Previous PPI research shows that individuals significantly underestimate their chances of surviving to older ages (for example, beyond age 90),<sup>115</sup> suggesting they may fail to understand the importance of protecting themselves against longevity risk. In turn, this may negatively affect their assessment of the value of insurance style products including annuities, deterring them from purchasing these products.

<sup>112</sup> FCA (2014)

<sup>113</sup> <http://uk.reuters.com/article/2015/02/20/uk-annuity-sales-idUKKBN0LO0V220150220>

<sup>114</sup> Vanguard (2014)

<sup>115</sup> PPI (2014)

### **There is an open question around the emergence and use of ‘rules of thumb’ in the UK**

Immediate withdrawal of the 25% tax-free lump sum is currently the norm and looks likely to remain. Other than this, it is difficult to know the extent to which ‘rules of thumb’ that look to guide withdrawal rates will emerge in the UK. In an environment in which it is uncommon to purchase financial advice, there will be a need for some guiding principles, specifically around withdrawal behaviour. However, if a rule of thumb for withdrawal rates emerges in the UK, it is likely to provoke the following questions:

- How likely it is that individuals in the UK would act in line with any ‘rule of thumb’? The experience of US individuals suggest that this may not be likely as individuals react to the development of their portfolios and changes to their own circumstances.
- How would UK individuals react if the rule that they adopted led to them exhausting their pension pots prematurely?
- How should the time horizon of any rules around withdrawals change over time as life expectancy increases (a 30 year time horizon is often adopted but this may not be sufficient)?

### **The process of ‘mental accounting’ whereby individuals earmark different elements of their retirement savings, could be used in the UK**

It has been pointed out that US individuals often divide their money into separate ‘buckets’ and that this approach could help individuals to manage their finances in a way that meets their needs.<sup>116</sup> For example, it has been suggested that individuals could manage a portion of their retirement funds conservatively to meet their essential expenses and could invest those pots for discretionary expenditure more aggressively.<sup>117</sup>

Until April 2015, the UK rules have meant that pension savings have had to be maintained separately to other savings. In this way, UK pension savers have had experience of considering their savings overall in this way, with pension savings as a separate ‘bucket’. They would need to extend this approach to the management of their pension savings during the decumulation phase. This would require them to manage different ‘buckets’ within their retirement savings in different ways, depending on how they wish to use them.

In addition, there have been reports that financial advisors are developing this type of risk-based model for their clients. However, the extent to which individuals would be equipped to achieve this, without financial advice, is not clear.

<sup>116</sup> Bernartzi (2010)

<sup>117</sup> Bernartzi (2010)

**While some UK asset managers and pension providers have made alterations to their default asset mix there is currently no single approach or default, although there are likely to be more changes once the pension freedoms have bedded down**

A survey of DC pension professionals, including trustees, conducted in July 2014 found that 66% were looking to change their default strategy within the next 18 months, while 52% were planning to implement new retirement solutions following the removal of compulsory annuitisation.<sup>118</sup> Although there have been some changes made by some, there is currently no single approach or default.

In the past, asset mixes at retirement or at a target date have mainly reflected the expectation that individuals take 25% of their pension pot as a lump sum and the remainder is used to purchase an annuity, e.g. a typical asset mix at retirement previously was 25% cash and 75% long-term bonds. Subsequent to the Budget 2014 announcements, some asset managers have reviewed their asset mix at retirement or target date to a range that lies between 20% and 40% in growth assets. Underlying this is the assumption that, once individuals have withdrawn the tax-free lump sum they will require a proportion of these to be invested in growth assets in order to deliver returns over the course of their retirement.

There is also no consistent approach to how asset managers treat funds beyond a target date. Approaches include:

- Maintaining the assets in the same mix as they were at the target date and closing the fund down from a particular date, e.g. 10 years later;
- Continuing to manage the asset mix of the funds until the last member of the cohort leaves the fund.

It is expected that as the freedoms settle down and there is greater information about individual's behaviours, UK asset managers will continue to review the relevance of the asset mix of their funds.

**While UK changes to regulations around pension flexibilities have focused on standards for guidance providers, other countries' experience suggests that the government may consider introducing further regulations, especially as issues arise**

The focus of regulation in the UK has been the introduction of a standards regime to ensure the quality and consistency of guidance. The FCA is charged with establishing standards for guidance providers that protect individuals. Other liberal regimes have introduced guidance as issues have emerged, e.g. the Financial System Inquiry in Australia made recommendations on the basis of a lack of risk pooling in the current system.

It is likely that, as the pensions flexibilities are rolled out, further regulation will be introduced to address some of the issues that have arisen. This may 'nudge' individuals towards decisions that ensure they have a regular income stream

<sup>118</sup> SEI (2014)

over the course of their retirement, or modify the behaviour of pension providers, employers, trustees or asset managers.

**Are the new pension flexibilities sustainable as an approach or are there risks and how might they be addressed?**

There is recognition in the industry and to some extent across Government and regulators in the UK around the risks under the new flexibilities. However, action has not yet been suggested on whether or how these issues should be addressed, beyond the provision of the Guidance Guarantee (and the Pension Wise service) which will try and signpost these issues directly to savers and the FCA requirement for what is known as the ‘second line of defence’.

Under the ‘second line of defence’ requirement, when an individual contacts their pension provider to access their pension, the provider must ask the consumer about their circumstances that relate to the choice they are making. The provider will be required to give relevant risk warnings in response to answers from the consumer.

Relative to Australia, where withdrawals are effectively not taxable, there is also the risk that individuals may incur an unexpected tax liability although the ‘second line of defence’ may work to address this by warning them of this before they make any withdrawal. This would rely on individuals reading and understanding any communications.

This paper was published shortly before the 2015 election and it is not clear how the UK pension system might evolve post the election. Relative to other markets the following are not currently present in the UK:

- A decumulation default that includes an element of longevity cover; without this, there is the risk that individuals will not withdraw their pension funds at an appropriate rate.
- A decumulation default with an appropriate risk profile; without this there is the risk that individuals may place their pension savings into unsuitable investments at retirement not matched to their level of risk tolerance.
- A minimum withdrawal; without this there is the risk that pension savings will be not used for retirement.

If the pensions system evolves so that some of the risks described above play out in practice, Government will have access to various levers, as follows:

- Changes to the state pension
- Tax changes
- Regulation (e.g. minimum drawdown amounts)
- DC governance placing requirements on trustees, employers or providers
- Financial product sales regulation
- Guidance or advice

However, the extent to which it is acceptable for governments to use these levers depends on whether they are compatible with government values and policy.

## Conclusions

**The UK policy/regulatory landscape is moving in opposite directions to Australia and the US with some significant governance gaps emerging**

In the UK, the accumulation phase has become more regulated due to the introduction of automatic enrolment.

Prior to April 2015, the UK decumulation phase was strictly regulated with many Defined Contribution (DC) savers effectively required to purchase an annuity. However, the absence of minimum withdrawals and rules around governance of and defaults during the decumulation phase from April 2015 means that the position has reversed. The UK decumulation phase is regulated to a lesser extent than in Australia, while the level of regulation in the US falls between Australia and the UK. Developments in other countries warrant consideration in terms of the UK.

**The size of DC pension pot plays an important role in how individuals access their savings.** Those with larger pension pots are more likely to withdraw these gradually. As DC pension pot sizes increase, it might be expected that there will be a shift from individuals taking their pension pots as lump sums to withdrawing these gradually, using products such as drawdown products.

**The UK pensions industry has a sophisticated understanding of the various types of risk, including longevity and market risk and the infrastructure to offer investment and risk pooling strategies, including annuities, in a more challenging environment**

UK insurers, pension providers and asset managers have widely used de-risking strategies to manage the transition to retirement, in order to reduce the impact of any market volatility as individuals approach the point of annuitisation. For example, the DWP's guidance for qualifying schemes' default investment funds in DC schemes under automatic enrolment recommends that strategies should be in place to manage risk that take into account savers' likely retirement date. However, this approach has taken longer to gain currency in the other countries under consideration.

In the past, it has been relatively straightforward for the UK pensions industry to develop default de-risking strategies on the basis that the majority of DC savers purchase an annuity. Going forwards, the UK pensions industry will face the challenge of matching glide-paths to individuals' circumstances in an era where there is a growing range of circumstances and approaches to retirement. While in the past lifecycle and target date funds have been designed with a particular date of retirement in mind (at which annuity purchase typically occurred), the fact that individuals increasingly have different retirement dates to each other and do not know exactly when they will retire makes the implementation of risk management strategies more challenging. Any future developments around the introduction of charge caps during the withdrawal phase may also have an impact on the evolution of the pension system.

**Behavioural economic processes such as ‘framing’ and ‘mental accounting’ could have implications for the evolution of the UK pension system**

Individuals and organisations in the UK are used to framing retirement decisions in terms of the purchasing power of a regular income rather than investment returns and the possibility of losing their whole pension pot on death where they have annuitised it – it has been suggested that where retirement is framed in this way, individuals are more likely to annuitise.

It has been pointed out that individuals often divide their money into separate ‘buckets’ and that this approach could help retired individuals to manage their finances in a way that meets their needs.<sup>119</sup> For example, it has been suggested that individuals could manage a portion of their retirement funds conservatively to meet their essential expenses. In contrast, they could invest those pots for areas of expenditure which are discretionary more aggressively.<sup>120</sup>

In the UK, the rules, until April 2015, have meant that pension savings have had to be maintained separately to other savings (and used conservatively). In this way, UK pension savers have had experience of considering their savings overall in this way, with pension savings as a separate ‘bucket’. They would need to extend this approach to the management of their pension savings during the decumulation phase. This would require them to manage different ‘buckets’ within their retirement savings in different ways, depending on how they wish to use them.

There have also been reports that financial advisors are developing this type of risk-based model for their clients. However, the extent to which individuals would be equipped to achieve this, without financial advice, is not clear. Alternately, more effective financial education around pensions may enable some individuals to understand better their own needs and the pensions landscape in order to take this approach.

<sup>119</sup> Bernartzi (2010)

<sup>120</sup> Bernartzi (2010)

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## References

- AARP (2014) *The Disappearing Social Security Minimum Benefit*
- Aon Hewitt (2012) *The Real Deal 2012 Retirement Income Adequacy at Large Companies*
- Agnew, J. (2013) *Australia's retirement system: strengths, weakness, and reforms*
- Australian Government (2010) *Super System review*
- Bateman, H. Piggot, J. (2010) *Too Much Risk to Insure? The Australian (non-) Market for Annuities*
- Benartzi, S. (2010) *Behavioural Finance and the Post-Retirement Crisis*
- Benartzi, S. Previtro, A. Thaler, R. (2011) *Annuity Puzzles*
- Blake, D. Boardman, T. (2012) *Spend More Today Safely: Using Behavioural Economics to Improve Retirement Expenditure Decisions*
- Browning, C. Huston, S. Finke, M (2014) *Cognitive Ability and Post-Retirement Asset Decumulation*
- Challenger (2012) *How much Super do Australians really have?*
- Cooper, J. (2014) *Are Defined Contribution Pension Plans Fit For Purpose in Retirement?*
- Deloitte Access Economics (2012) *Australian health insurance: extrapolated savings from health and medical research*
- Deloitte (2013) *Dynamics of the Australian Superannuation System: The next 20 years: 2013-2033*
- DWP (2011) *Guidance for offering a default option for defined contribution automatic enrolment pension schemes*
- DWP (2006) *Security in retirement: towards a new pensions system*
- DWP (2013) *Single-tier Impact Assessment*
- Employee Benefit Research Institute (2010) *The EBRI Retirement Readiness Rating: Retirement Income Preparation and Future Prospects*
- Employee Benefit Research Institute (EBRI) (2012) *401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2011*

- Employee Benefit Research Institute (EBRI) (2014) *Individual Retirement Account Balances, Contributions and Rollovers 2012; With Longitudinal Results 2010–2012: The EBRI IRA Database*
- FCA (2014) *Retirement income market study: Interim Report Provisional findings and proposed remedies*
- Government of Ireland (2007) *Green paper on pensions*
- HM Treasury (2014) *Freedom and choice in pensions*
- Howes, M. *Discussion Paper: Exploring barriers to Australia's annuities market*
- IFS (2014) *Budget 2014: pensions and saving policies*
- Indecon (2007) *Review of the Irish Annuities Market*
- Inland Revenue (2013) *KiwiSaver, early retirement withdrawal survey*
- Inland Revenue (2013) *KiwiSaver evaluation, annual report June 2012 to June 2013*
- Investment Company Institute (2008) *Defined Contribution Plan Distribution Choices at Retirement*
- Investment Company Institute. 2014. *2014 Investment Company Fact Book: A Review of Trends and Activity in the Investment Company Industry*. Washington, DC: Investment Company Institute. Available at [www.icifactbook.org](http://www.icifactbook.org).
- Irish Life (2014) *Irish Life Defined Contribution Retirement Readiness Report 2014*
- Joseph Rowntree Foundation (2014) *A minimum income standard for the UK in 2014*
- Lown, J. (2011) *Attitudes toward Immediate Annuities: Overcoming the Annuity Puzzle*
- Mercer (2014) *Post-retirement market trends in Australia*
- Murray, D. (2014) *Financial System Inquiry*
- OECD (2008) *Retirement income systems: the reform process across OECD countries*
- OECD (2013), "Basic, targeted and minimum pensions", in *Pensions at a Glance 2013: OECD and G20 Indicators*, OECD Publishing.  
[http://dx.doi.org/10.1787/pension\\_glance-2013-7-en](http://dx.doi.org/10.1787/pension_glance-2013-7-en)
- OECD (2013), "Net pension replacement rates: Public and private schemes", in *Pensions at a Glance 2013: OECD and G20 Indicators*, OECD Publishing.  
[http://dx.doi.org/10.1787/pension\\_glance-2013-16-en](http://dx.doi.org/10.1787/pension_glance-2013-16-en)

OECD (2014), *OECD Pensions Outlook 2014*, OECD Publishing.  
<http://dx.doi.org/10.1787/9789264222687-en>

O'Flinn, C. Schirripa, F. (2010) *Revisiting retirement withdrawal plans and their historical rates of return*

Office for Older Americans (2014) *Snapshot of older consumers and mortgage debt*

Oxera (2014) *The retirement income market*

Pashchenko, S. (2012) *Accounting for non-annuitization*

Poterba, J. Venti, S. Wise, D. *The Drawdown of Personal Retirement Assets: Husbanding or Squandering?*

PPI (2004) Briefing Note 66 - *Freedom and Choice in Pensions: comparing international retirement systems and the role of annuitisation*

PPI (2009) *Retirement income and assets: do pensioners have sufficient income to meet their needs?*

PPI (2014) *Supporting DC members with defaults and choices up to, into, and through retirement*

SEI (2014) *Defined Contribution Survey July 2014*

Social Policy Institute (2013) *In the Red and Going Grey? Wealth and Debt as Australians approach Age Pension Eligibility Age and Retirement*

The Strategic Society Centre (2014) *New Annuity Era: Understanding retirement choices and the annuity puzzle*

Vanguard (2012) *Revisiting the '4% spending rule'*

Vanguard (2014) *Tackling the retirement income challenges*

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