

# Reform of the UK's decumulation market – background note for decumulating retirement savings forum

Research Note

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# Overview

## Key points

- This research note provides background material for the forum on “decumulating retirement savings: making the options work” held by the Retirement Policy and Research Centre at the University of Auckland on 21 November 2014.
- This research note focusses on the operation and role of the decumulation market in the context of an ageing population. This market includes financial products and activities which help people convert assets that have been built up earlier in life into incomes at and throughout retirement. This can include annuities, income drawdown and home equity release. This market can also include products which help manage costs in later life, such as long-term care insurance.
- Interventions into retirement income systems pursue a range of objectives. Two prominent objectives are to prevent poverty or to replace incomes from working lives. New Zealand Superannuation is relatively successful at addressing pensioner poverty but is less effective at replacing income from work (particularly for pensioners who were higher earners in their working lives). One goal of KiwiSaver is to help close this gap but the effectiveness of this policy will be reduced unless there is a properly functioning decumulation market.
- A number of overseas reviews have highlighted the need to improve choice and competition in the decumulation market. The interim report of Australia’s Financial System Inquiry (the Murray Review) noted the limited range of financial products available at and during retirement in that country. Earlier this year the United Kingdom’s Financial Conduct Authority announced revised terms of reference for a retirement income market study, following their previous thematic review of annuities.
- The growing importance of the decumulation market reflects demographic changes which are altering the population’s risk profile. Not only will a greater share of the population be older but people can expect to live for longer. Based on current policy settings many people can expect to spend as long in retirement (or, more correctly, being above state pension age) as they spent paying off their mortgage. However, unlike a mortgage, when it comes to decumulation people will have fewer opportunities (if any) to make up for poor decisions. Retirees will increasingly need to have a clear understanding of several types of risk – including longevity risk, inflation and interest rate risk, stock market risk and income shocks.
- Managing the changing population risk profile requires a mixed model approach. Mixed model systems provide a number of benefits.
  - They can reduce pressure on public systems and so mean programmes are more affordable (sustainable) in the long run.
  - They can also increase the range of tools available for smoothing income over the lifecycle, pooling risk and converting illiquid assets into income.
- However, internationally markets for products such as annuities, long-term care insurance and home equity release do not appear to be meeting their potential. One market where these products are relatively advanced (although perhaps still below potential) is the United Kingdom. The Coalition Government has, however, recently introduced reforms that are having a major effect on these markets.

- Following earlier efforts to liberalise the United Kingdom's annuity market the 2014 Budget included new tax pension rules that removed the effective requirement to buy an annuity. This has significantly reduced the incentive for purchasing an annuity. Given the newness of these reforms their final impact is still unclear. However, annuity sales are likely to be permanently and significantly reduced. The Prudential Regulation Authority is assessing the impact of these changes as they may give rise to a fresh set of prudential regulatory issues.
- Greater emphasis is instead being placed on guidance. Every individual with defined contribution pension savings will have a right to free and impartial guidance at retirement. This will not recommend specific products or providers. The Financial Conduct Authority will have responsibility for setting guidance on and monitoring compliance with these standards. Improved guidance could potentially strengthen the market for products at retirement, particularly if guidance can address barriers related to a lack of consumer demand. However, supply side barriers to expanding the market for decumulation products remain.
- Recommendations on improving customer guidance were also a feature of the Dilnot reforms to the funding of long-term care. As well as guidance, these reforms included a measure (a lifetime cap on the cost of care) designed to remove the tail end risk and to, in turn, encourage a supply side response. However, there is a view that even with such a cap there is unlikely to be a full market for products to fund the cost of care.
- While differences in context mean there are limits in the ability to draw lessons from reforms in the United Kingdom for New Zealand, several factors suggest that drawing lessons could still nonetheless be a valuable exercise. These factors include an increasing role of capital in retirement incomes in New Zealand, a gap in income replacement for middle to higher earners and increasing longevity (future demand for decumulation products).
- As noted above, these reforms highlighted the importance of guidance. This guidance has explicitly stopped short of recommending specific products or providers. Debates have also recognised the importance of starting well before retirement and not seeing retirement as a one-off event. Guidance is not only needed when making the initial decision on whether to, for example, take an annuity or not but also as people consider their finances throughout retirement.
- This highlights the importance of a certain and stable policy environment. Decisions regarding savings and the purchase of private income support policies are by their nature long-term decisions. The more uncertain the decision making environment, the harder it will be for people to make the decisions that are in their longer term interests. And better informed customers can support product innovation too. As the Association of British Insurers has noted, whether and how people plan ahead is one thing that providers have in mind when committing capital for product development.



# 1 Introduction

The Productivity Hub's governance board has developed a Forward Looking Agenda of Research (FLARE). The goal is to produce an agenda to aid in the coordination and collaboration of research on understanding and improving New Zealand's productivity performance. This FLARE process identified priority research projects for the next two years in five different research buckets: theory of the firm and firm-level productivity; efficiency of resource allocation; innovation ecosystem; natural and intangible assets; and skills, migration and demographic change.

This research note falls within this final research bucket, particularly on questions relating to demographic change. While the fiscal implications of demographic change have been widely canvassed, less emphasis has gone on understanding the broader economic effects that changes like population ageing will have. This research note focusses on one part of this latter question – particularly the operation and role of the decumulation market. This market includes financial products and activities which help people convert assets that have been built up earlier in life into incomes at (and throughout) retirement. This is also known as decumulation and can include annuities, income drawdown, long-term care insurance and home equity release.

Interventions into retirement income systems pursue a range of objectives. Two prominent (but not uncontroversial) objectives are to prevent poverty or to replace incomes from working lives. New Zealand Superannuation is relatively successful at addressing pensioner poverty but is less effective at replacing income from work (particularly for pensioners who were higher earners in their working lives). One objective of KiwiSaver is to help close this gap, but the effectiveness of this policy will be held back unless there is a properly functioning decumulation market.

A number of overseas reviews have highlighted the need to improve choice and competition in the decumulation market. These include:

- The interim report of Australia's Financial System Inquiry (the Murray Review), which noted that in that country the "current retirement income system provides limited choice for managing risks in retirement. The system lacks a sufficient range of financial products to help provide retirees with income and flexibility and to manage risks, particularly longevity risk" (Commonwealth of Australia, 2014, p. 1-25).
- The United Kingdom's Financial Conduct Authority, which announced revised terms of reference (revised in the light of changes announced in Budget 2014) for a retirement income market study, following their earlier thematic review of annuities. This earlier thematic review found that some parts of the annuities market were not working well for some consumers and that eight out of ten consumers who purchased their annuity from their existing provider could get a better deal on the open market. The purpose of the market study is thus to assess whether there are obstacles to competition working more effectively for consumers in this market (Financial Conduct Authority, 2014, p. 1).

The growing significance of this market reflects important demographic changes: the bulge of people – particularly baby boomers born between 1946 and 1964 – reaching retirement age and people living for longer. Consider the changes in New Zealand's population over the last decade. Statistics New Zealand's national population estimates show that at 30 June 2003 New Zealand's population was a little over 4 million and of this 12% of people were aged 65 or older. By 30 June 2013 the total population had increased by around a tenth to reach close to 4.5 million. But the number of people aged over 65 had increased by almost 29%. As a result the share of the population aged 65 or older had grown to 14%. Overall, the median population age increased from 35.0 to 37.1 during these 10 years.

Statistics New Zealand's national population projections for 2011 to 2061 (median scenario) show that these changes are not just a short term phenomena. Between 2013 and 2043, for example, the number of people aged over 65 could more than double to around 1.3 million from 0.6 million now. It

is projected that in 2043 people aged over 65 could account for 23% of the total population – a full 9 percentage points above the current level.

In many ways this is a good thing. It is much better for people to be living for longer than for the opposite to be taking place. And people who enter retirement now tend to be healthier, wealthier and more active than previous generations of retirees. But, as the Treasury (2013) illustrated in their last Long Term Fiscal Statement, these changes mean we need to think carefully about the fiscal outlook.<sup>1</sup> And the impact of these changes will go well beyond their fiscal impact with, for example, population ageing potentially impacting on labour productivity (Guest, 2014).<sup>2</sup>

These demographic changes will also reshape the world of retirement. Based on current policy settings people can expect to spend more time in retirement. Of the people who reached 65 in 2013, 44% could expect to live to 90 and so receive a state pension for at least 25 years (assuming no change in the age of eligibility). Over time these odds will improve so a person who retires at 65 in 2043 would have a 56% chance of living to 90. Perhaps Woody Allen was on to something when he joked on his 60<sup>th</sup> birthday that “practically a third of my life is over.”

While it is likely that norms around people retiring at 65 will change over the next 30 years, the figures above do, nonetheless, highlight how people can expect to spend longer in retirement. Given this when they retire they will need to think more carefully about how any assets they have built up during their working lives can be converted into incomes that will last until death. As the Commission for Financial Literacy and Retirement Income (2013) has noted, we need to think more about the “far end” of retirement.

Work being done at the University of Auckland’s Retirement Policy and Research Centre has shown how challenging this change will be (St John, 2009; St John, 2014). Retirees will not only have to consider how long they will live, but what impact inflation and movements in markets may have on their investments. They may need to consider how to convert investments into income streams (e.g., through using drawdown strategies and annuities). It is also likely that people may need to consider releasing housing wealth to lift their incomes, which makes decisions around downsizing and the use of equity release critical. And, of course, many retirees may consider extending their working lives through working part time.

This highlights the need for broader debate in New Zealand (Stephens, 2014). While the retirement age, cost of New Zealand Superannuation and the design of KiwiSaver are important, they only make up part of the story. As John Hutton (2012), former Minister for Work and Pensions in the United Kingdom, once wrote, when it comes to thinking about retirement, change is the order of the day.

## 2 Demographic change and the population risk profile

Demographic changes will alter the population’s risk profile. Not only will a greater share of the population be older but retirees can expect to spend longer in retirement. Consequently, as Kirova has noted, as “the pool of retirees will expand rapidly, necessitating a shift of attention in the private-sector savings market, from the present focus on asset accumulation towards development of appropriate vehicles for converting savings into income to provide means for surviving in old age” (Kirova, 2012, p. 46). Increasingly the challenge will be to not only help families accumulate assets during their working lives (e.g., issues relating to contribution levels, charges and investment strategies

<sup>1</sup> This is especially true for the pension and health systems, given the growing need to care for people with long-term conditions. Also, because the share of the population who pay taxes at work can be expected to fall these demographic changes will have a big impact on future government’s accounts.

<sup>2</sup> These go both ways. The changing demographic outlook will, for example, impact on productivity through changing the composition of the workforce and environment for savings. An older population will also make lifting productivity more important. An economy’s production not only depends on how much time is spent in work but also the productivity with which resources are converted into goods and services. As the population gets older and the relative size of the workforce shrinks it will become more difficult to increase production through simply working more. Success will increasingly depend on productivity.



and returns) but to help them make the most of their financial and housing assets at retirement (decumulation).

Decumulation is a process where assets that have been built up earlier in life are converted into incomes at (and through) retirement. Not only are growing numbers of people entering this phase but decumulation decisions are becoming more important. Based on current policy settings many people can expect to spend as long in retirement (or, more correctly, being above state pension age) as they spent paying off their mortgage. However, unlike a mortgage, when it comes to decumulation people will have fewer opportunities (if any) to make up for poor purchases. The result is that retirees will need to have a clear understanding of several types of risk. These include (Kirova, 2012, p. 50):

- Longevity risk: for retirees this is the risk of outliving their resources. For pension funds and insurance companies this is the risk of higher than expected pay-outs due to the increasing life expectancy of pensioners and policy holders.
- Inflation and interest rate risk: inflation can erode the purchasing power of fixed incomes or assets. Lower interest rates can also reduce retirement income, e.g., lower incomes from investments like saving account deposits.
- Stock market risk: fluctuations in the stock market can lead to the value of investments increasing or falling. This can mean that two people with the same level of savings can have different retirement incomes depending on the market conditions when they retire.
- Income shocks: this can include providing for private medical and long-term care needs, which implies liquidity of assets can be important too.

Structural changes mean that these risks are going to grow in importance. These changes include the ageing of the population, increasing time spent in retirement, benefit packages provided by employers coming under pressure due to globalisation and a growing reliance on defined contribution pensions. The longer term trend towards defined contribution pensions away from defined benefit ones (such as the old Government Superannuation Fund) has shifted more of the investment return risk to individuals. This investment risk can be seen in the pressure on yields for private pensions (the “demise of yield”) due to any falls in interest rates and volatility in equity markets.

Traditional welfare state programmes will also come under increasing pressure. This reflects the impact on government finances from increasing dependency ratios and changes in the tax base, which will mean that funding public programmes will be a growing challenge. Consequently, as Liedtke and Schanz (2012) noted, “state pensions are being reined back and occupational schemes are getting not only less generous but also less predictable. In order to offset [...] this] the two remaining pillars, i.e. private savings and insurance solutions as well as working beyond formal retirement ages, will need to be strengthened markedly.”

## 2.1 A mixed model approach

Managing the changing population risk profile requires a mixed model approach. As the Geneva Association has noted “the current debate about sustainable pension systems is all about spreading the burden over several pillars. There should be (1) a state pension to meet basic needs in old age and avoid people falling into poverty, (2) a private occupational pillar, funded by employers and employees that tops up the first to keep living standards on a higher level, (3) a voluntary individual savings pillar that contributes additional income and risk diversity and (4) [...] a fourth pillar based on part-time post-retirement work” (Liedtke and Schanz, 2012, p. 3).

Welfare states need strong private pillars as well as public ones. Mixed model systems provide a number of benefits. By reducing fiscal pressure on the public system they can mean programmes are more affordable for governments in the long run (although this may be undermined by policies like

poorly designed tax-breaks).<sup>3</sup> From a national-economy perspective a stronger private pillar can also make the welfare state more efficient by increasing the range of tools available for smoothing income and spreading risk. A mixed model also has important political effects, with a stronger private pillar helping to build consensus that funding the welfare state requires a team effort (it is not just the job of the government) (Nolan, Thorpe and Trehwitt, 2012). As a result of population ageing, it could be expected that countries with small private pillars will face pressure to further expand their welfare states, while the broader funding base in other countries will mean greater flexibility to introduce pro-growth policies.

Yet there are limits to the potential use of private instruments like insurance. As Söderström and Rikner (2003) noted, private insurers will not be willing to cover all income risks or may only want to partially cover particular segments of markets as not all risks are insurable. This may be because of adverse selection, moral hazard and collective risk:

- Adverse selection: when the insurance company has less information on individuals' risks than the individuals themselves, expensive customers are most likely to take-up insurance.
- Moral hazard: occurs when, due to having insurance, people change their behaviour to increase risk. In the case of benefits with children, for example, private insurance would require a large co-insurance rate or high premium as the activity that triggers assistance is something that families can alter.
- Collective risk: occurs when the risks for different individuals are strongly positively correlated, and so insurers would face the risk of having to pay a large amount of compensation at the same time. In the case of unemployment insurance, for example, weak labour demand (such as during a recession) would mean that the costs of unemployment may be uninsurable.

## 2.2 Adverse selection in annuity markets

This section above highlighted key reasons a market for decumulation products may fail to maximise social welfare. These can be explained in more detail with the example of annuity markets.<sup>4</sup> The small size of these markets is a puzzle. As Benartzi, Previtro and Thaler (2011) wrote "Rational choice theory predicts that households will find annuities attractive at the onset of retirement because they address the risk of outliving one's income, but in fact relatively few of those facing retirement choose to annuitize a substantial proportion of their wealth. Adding some behavioural factors only deepens the puzzle because annuities have the potential to solve some complex problems with which individuals' struggle, like when to retire and how much they can spend each year in retirement, and thus they might be expected to be attractive for that reason as well."<sup>5</sup>

A number of reasons have been given for the small size of annuity markets. Some individuals are likely to have a bequest motive (although consumer research in the United Kingdom suggests that this motive is becoming weaker over time (Just Retirement, 2012)). Providers may fail to provide a

<sup>3</sup> Complex issues, which are not covered in this note, can arise at the interface between the public and private pillars (e.g., a trade-off between poverty reduction effectiveness and targeting efficiency) (see, for example, Nolan, Thorpe and Trehwitt (2012, pp. 36-37).

<sup>4</sup> An annuity is a policy that allows a person at retirement to convert a lump sum into an income that can last for the rest of their life. Annuities can come in a range of forms. As the United Kingdom provider Just Retirement (No date) has noted these include: conventional (or traditional or standard lifetime annuities) annuities – these provide the recipient with a guaranteed income for the rest of their life, regardless of what happens to the performance of the financial markets; enhanced annuities – are a type of conventional annuity which reflects health and lifestyle when determining the level of income the recipient receives. Enhanced annuities offer increased levels of income depending on whether they have, or have had in the past, a mild health or lifestyle condition, or a more serious impairment or illness that affects life expectancy. Annuity providers pay more each year as the recipient is likely to receive the income for fewer years than a healthy individual; fixed term annuities are a type of drawdown arrangement that offer more flexibility than traditional lifetime annuities but without exposing the pension fund to any investment performance risk. They offer a guaranteed income (within government limits) for a fixed period of time and a guaranteed maturity lump sum at the end of the chosen plan term; variable annuities provide a guaranteed level of income, lower than a conventional annuity, with the potential of future increases as a result of the performance of a selected investment fund; and investment-linked annuities offer the potential for retirement income to change based on the performance of underlying investments.

<sup>5</sup> Indeed, as Yari (1965, in Benartzi, Previtro and Thaler, 2011) demonstrated "rational individuals with no bequest motive should convert all of their retirement wealth to an annuity at retirement. [...] Suppose you only care about your own utility, and you do not know how long you are going to live. You can either invest your money in a bond or buy an annuity. Yari shows that by buying an annuity you assure yourself a higher level of consumption in every year that you live compared to holding the bond. The reason is that those who die early subsidize those who live a long time. In the literature, this is called the 'mortality premium.' Since by assumption those who die early no longer care about consumption, they do not mind sharing their wealth with those still lucky enough to be around."

complete annuity market at actuarially fair prices and face loading factors (e.g., administrative costs), and assumptions regarding utility functions (additive separability and expected utility maximisation) may not hold. And research also suggests that adverse selection plays a role in explaining these small markets. As Levin and Poterba (2012, p. 176) noted, “If the only buyers of annuities are those who expect to live for many years, and if these expectations are correlated with actual life length, then an annuity policy that is actuarially fair for annuity buyers will be unattractive from the perspective of an individual with the population-average mortality rate.” This potential role of adverse selection has been established in a number of studies:

- Mitchell, Poterba, Warshawsky, and Brown (1999) showed that the fees and expenses associated with annuities were not large enough to explain the lack of annuitization.
- Davidoff, Brown and Diamond (2005) noted that even with incomplete annuity markets consumers will generally want to annuitize a substantial proportion of their wealth.
- Brown (2007) noted that some combination of fees, inflation, and adverse selection can explain the behaviour of Social Security participants in claiming benefits.<sup>6</sup>
- By comparing age-specific mortality rates Finkelstein and Poterba (in Levin and Poterba, 2012, p. 176) found a greater degree of adverse selection in the voluntary than the compulsory annuity market in the United Kingdom.<sup>7</sup>

It is usually argued that adverse selection arises because individuals who purchase an annuity have private information (particularly on their probability of loss or expected costs). It is also often assumed that an individual’s willingness to pay for an annuity reflects their expected costs and that the market demand curve reflects the cumulative distribution of individuals’ willingness to pay (Einav and Finkelstein, 2011, p. 117). Consequently individuals who have the highest willingness to pay are those who are expected to be the most costly to cover. The cost of providing a contract depends on the characteristics of the individuals who purchase it.

In this case the demand curve is always above the firm’s marginal cost curve as all individuals are risk averse and there are no other market frictions (Einav and Finkelstein, 2011, p. 118). The marginal cost curve is downward sloping as the marginal buyer is always associated with a lower expected cost than infra-marginal buyers. The optimal solution (in terms of welfare maximisation) would thus be for all individuals to purchase contracts.

However, as the firm cannot perfectly price discriminate in this model (the firm must charge all customers a single price) the relevant cost curve facing the firm is the average cost curve, which is above the marginal cost curve. This means the equilibrium quantity of contracts will be less than the efficient quantity and the equilibrium price will be above the efficient price. The result is that, as Einav and Finkelstein (2011, p. 118) illustrated, “individuals who have the lowest expected costs remain uninsured because the [average cost] curve is not always below the demand curve. These individuals value the insurance at more than their expected costs, but firms cannot insure these individuals and still break even.”

## 2.3 Welfare losses from a small annuity market

The section above illustrated how adverse selection could explain a small annuity market. This does not, however, necessarily justify government intervention. Adverse selection is a feature of many markets and the case for intervention must be based on an assessment of the welfare costs of any market failure while also recognising the potential for government failure. Indeed, there is evidence

<sup>6</sup> As Brown (2007) noted, by “delaying the onset of benefits, participants can buy, at better-than-market prices, a larger annuity, and one that is indexed for inflation and offers survivor benefits. [...] But few participants avail themselves of this opportunity. Most people begin claiming within a year of becoming eligible, and less than 5 per cent delay claiming past age 66.”

<sup>7</sup> Finkelstein and Poterba (in Levin and Poterba, 2012, p. 176) contrasted “the voluntary U.K. annuity market, in which individuals purchase annuities with wealth that has been accumulated outside retirement accounts, with the compulsory market, in which individuals who have accumulated resources in defined contribution pension plans are required to annuitize a fraction of these assets. [...] The age-specific mortality rates for the population as a whole are greater than those for compulsory annuitants, which are in turn greater than those for voluntary annuitants. This finding is consistent with a greater degree of adverse selection in the voluntary than the compulsory annuity market.”

that the welfare costs of adverse selection in insurance markets are smaller than is often expected. For example, as Levin and Poterba (2012, p. 173) noted, simple theoretical models predict that adverse selection (where individuals who are at high risk purchase more insurance) and moral hazard (where individuals who purchase more insurance take fewer precautions against loss) should mean that the losses of people with insurance should be higher than the losses of people without. However, empirical studies of insurance markets have not always shown a positive correlation between insurance coverage and subsequent loss.

There are two important reasons to think that the consequences of adverse selection may differ from what the textbook model suggests. These reflect differences in individuals' risk aversion and the ability of insurance companies to condition prices on individual characteristics.

The textbook model assumes that people hold private information (on the probability of their losses) but are identical in their risk aversion. However, as Finkelstein and McGarry (in Levin and Poterba, p. 174) argued "potential insurance buyers differ on two dimensions: their risk of experiencing an insured event, and their risk aversion. For a given risk aversion level, individuals with greater risk of loss – that is, with a higher probability of needing long-term care – should be more likely to purchase policies. At the same time, for a given probability of loss, individuals who are more risk averse should be more likely to purchase policies. When the two dimensions of heterogeneity are both present, however, whether or not policyholders will experience a higher rate of claims is ambiguous: it depends on the relative performance of, and the correlation between risk aversion and risk type."

Finkelstein and McGarry (in Levin and Poterba, 2012, p. 174) went on to note that "individuals seem to have some private information about their potential long-term care needs. At the same time, individuals [...] who buy insurance are more likely to engage in health-promoting 'preventive behaviours,' such as self-care and seat belt use, that may be correlated with risk aversion." Thus the "presence of multiple dimensions of private information, such as beliefs about the likelihood of nursing home use, are positively correlated with the demand for long-term care insurance and with the likelihood of receiving payment from the policy, while other types of private information, such as seat belt use, are positively correlated with the demand for insurance but negatively correlated with policy payouts."

The textbook model also fails to account for the fact that "the degree of adverse selection and the extent to which risks are pooled depends a great deal on whether insurers can condition prices on individual characteristics. [...] Insurers] may find a range of ways to induce self-selection in the insurance market, for instance by offering back-loaded and front-loaded policies. [For example, if] policies are priced so that women find the back-loaded policies more attractive, and men the front loaded, then the selection generated by these voluntary choices will reduce the degree of redistribution associated with a ban on gender-based pricing" (Levin and Poterba, 2012).

Thus while there may be evidence of adverse selection the conditions for large welfare distortions may not be met. "In a competitive insurance market, the potential for welfare losses arises because at a zero-profit equilibrium the market price for insurance is equal to the cost of covering the marginal enrollee. With adverse selection, this price is above the cost of covering the marginal enrollee, so that too few individuals purchase insurance. Practically speaking, welfare losses are likely to be large only when adverse selection results in a substantial price distortion and there is enough price-sensitivity on the part of consumers that the overly high price deters many from purchasing. [...] Adverse] selection could be substantial, yet the resulting welfare distortion relatively modest" (Levin and Poterba, 2012).

This has important implications for public policy. In particular it is no longer necessarily efficient to require all individuals to purchase contracts. As Einav and Finkelstein (2011, p. 122) noted "Even if all individuals are risk averse, the additional cost of providing an individual with insurance [due to administrative costs (or loads)] may be greater than the risk premium for certain individuals, making it socially efficient to leave such individuals uninsured."

Further, the "existence of unobserved preference heterogeneity opens up the possibility of *advantageous* selection, which produces opposite results to the *adverse* selection results" (Einav and

Finkelstein, 2011, p. 124). If heterogeneity in risk aversion is small then the main insights from the textbook analysis remain. However, if “high-risk individuals are less risk averse and the heterogeneity in risk aversion is sufficiently large, advantageous selection may emerge. Namely, the individuals who are willing to pay the most for insurance are those who are the most risk averse [... and] are also those individuals associated with the lowest (rather than the highest) expected cost. Indeed, it is natural to think that in many instances individuals who value insurance more may also take action to lower their expected costs: drive more carefully, invest in preventative health care, and so on” (Einav and Finkelstein, 2011, p. 124). Advantageous selection has been documented in several insurance markets, including the market for long-term care insurance (Einav and Finkelstein, 2011, p. 126).

### 3 Reform of the United Kingdom’s decumulation market

The section above discussed potential market failures in the decumulation market and whether or not this could justify government intervention. It showed that the theoretical case for intervention in the presence of (even a large degree of) adverse selection is mixed and that intervention should be based on more than simply the potential presence of adverse selection. A different perspective on these questions is provided in the section below, which considers important changes to the United Kingdom’s welfare state over the last few years. The focus is on changes relevant to the market for decumulation products but to provide additional context for these changes the more general direction of reform is first discussed.

The United Kingdom’s coalition government has undertaken a high-profile programme of fiscal consolidation. However, spending on pensions was one of the few areas of public spending protected from this. Indeed, overall spending on pensions was increased through more generous indexation of the state pension (the triple lock). This change to indexation more than offset the fiscal savings from bringing forward already planned increases in the State Pension Age. Further, poorly targeted spending to this group, such as the winter fuel allowances and free bus passes (but not concessionary coach travel), has been protected (Nolan, 2011).

The reform agenda went beyond spending on public programmes. As well as the increase in the State Pension age, the default retirement age was scrapped. Changes were made to the system of pension tax relief and moves were made to phase out age-related personal income tax allowances. The requirement to purchase an annuity at retirement was ended and the taxation of pension funds was reformed. The Office of Fair Trading undertook a market study of defined contribution workplace pensions and the Pensions Minister expressed a desire to encourage defined ambition pension schemes (hybrid defined contribution and defined benefit schemes). The funding of long-term care also underwent reform with the government committing to introduce a lifetime cap (the Dilnot cap) on the cost of care.

Following the recommendations of the 2004 Pensions Commission auto-enrolment into defined contribution pension schemes was introduced. This policy reflected concern with the decline of active membership in private sector pension funds (especially the fall in membership in defined benefit schemes). However, as McClymont and Tarrant (2013) argued, because auto-enrolment is a mass inertia-based system it is likely to increase the risk of people failing to make important decisions, such as choosing an appropriate annuity at retirement. The Pension Income Choice Association (2009) had earlier found that only around 1 in 3 people approaching retirement move their pension fund to improve their retirement income. More recent research by the Association of British Insurers (2013) showed that while shopping around had been increasing (the number of people switching provider at retirement increased from 31% to 47% between 2003 and 2012) most customers still do not receive quotes from multiple providers.

As Lowe (2014) noted annuity rates in the United Kingdom have fallen steeply over the last 25 years, primarily due to rising longevity. Thurley (2014, p. 6) also cited data that showed this decline over

recent years, potentially reflecting the low interest rate environment (“financial repression”) in the United Kingdom following the Global Financial Crisis. Securing a £5,000 income at age 65 in 2009 required £118,000 in savings for men and £133,500 for women, and by 2013 this required £152,800 savings for men and women. There have also been important debates on asset allocation, reflecting, as the McKinsey Global Institute (Roxburg, Lund, Dobbs, Manyika and Wu, 2011) noted, household portfolios shifting away from equities as investors shift from accumulation to decumulation (and from defined benefit to defined contribution schemes) and new capital requirements (such as Basel III and Solvency II).<sup>8</sup> Consideration was also given to issuing super long and perpetual gilts. The UK government issues conventional gilts and index-linked gilts with maturities up to around 50 years and in 2011-12 the average maturity of gilt issuance was 17.48 years (UK Debt Management Office, 2012, p. 4). Focus has also gone on the potential for unlocking equity in housing assets through downsizing and the use of products like equity release, although both of these markets have failed to deliver on their potential (Nolan, 2013b, pp. 12-13).

### 3.1 Freedom and choice in pensions

Given the introduction of auto-enrolment and the continued shift towards defined contribution pension schemes there was always going to be debate over government policy on the drawdown of pensions in the United Kingdom. This includes questions on whether “government policy is overly restrictive in limiting the levels and forms of drawdown (perhaps to reduce the ability of pensioners to manipulate their incomes to gain eligibility to means-tested benefits). A related point is the tax treatment of assets at draw down, with the UK operating a complicated and expensive tax regime for pensions” (Nolan, 2013b, p. 7). This shift in the political agenda intensified with the 2014 Budget announcing further liberalisation of the United Kingdom’s annuity market.

The UK annuity market has grown to be the largest in the world. In 2012, 420,000 new annuities were taken out and there were 6.3 million pension annuities policies in payment. Annuities sold in 2012 had a premium value of £14 billion, which was well in excess of the £1.2 billion spent on income drawdown products. The average (mean) annuity in 2013 was bought by a pension fund of £35,600 but the median was around £20,000 (so half buy an annuity with less). The majority (68%) of purchases were for a single-life annuity and around a third (32%) of purchases were for a joint-life annuity. Level annuities accounted for 87% of purchases, 6% were for an escalating annuity and 7% an investment-linked annuity (Thurley, 2014, pp. 4-5).

In the 2014 Budget the coalition government announced new pension tax rules that aimed to “ensure that people have greater freedom and choice over how they save money and access their pension, and [...] support savers to make the long-term decisions that ensure they can benefit from a better and more secure financial future” (HM Treasury, 2014). These changes followed earlier steps by the Coalition Government to liberalise drawdown, particularly through removing the requirement to convert a pension pot into an annual income stream or annuity by the age of 75 (compulsory annuitisation).<sup>9</sup> Features of the regime in place immediately prior the Budget 2014 included:

- Savers who had relatively small pots (£18,000) were able to drawdown the full amount in cash at retirement (trivial commutation). 25% was tax free and the remainder was taxed at the recipient’s marginal tax rate.
- Other savers could access a single lump sum of up to 25% and which was tax-free.
- For further withdrawals the default option was an annual limit (capped drawdown) based on the income from a comparable annuity (initially 100% but increased to 120% in 2013). These drawdowns were taxed at the recipient’s marginal tax rate. A higher rate of 55% applied to drawdowns above the capped level.

<sup>8</sup> The Basel III and Solvency II directives set new capital and liquidity rules for banks (Basel III) and capital rules for insurance companies (Solvency II). Solvency II is scheduled to come into effect on 1 January 2016. Implementation of Basel III is scheduled for 31 March 2019.

<sup>9</sup> These earlier reforms themselves had followed previous efforts to relax the requirement to purchase an annuity. In 1995 the ability to delay the purchase of an annuity to the age of 75 was introduced. In 2006 Alternatively Secured Pensions were allowed to draw down funds beyond the age of 75. In 2011 the Coalition Government introduced a two tier system containing capped and flexible drawdown (House of Commons Treasury Committee (2014, p. 39)).

- Flexible drawdown for people who could show they have a sufficient guaranteed income. This allowed additional drawdown of unlimited amounts from their pension pots subject to their marginal tax rate.

Thus under these rules people's choices depended on the size of their defined contribution pension pot. All pensioners could take a single tax-free lump sum of up to 25% but there was additional flexibility for people with small and large pots. People with small pots were able to withdraw fully at their marginal tax rate, while people with large pots and who could meet a minimum income requirement were able to use flexible drawdown. However, for most retirees drawdowns above a capped limit were taxed at a 55% rate and around three-quarters of people retiring each year purchased an annuity.

The 2014 Budget announced further reforms to the ways in which people can access their defined contribution pension savings. Major changes are shown in Table 1 and Appendix B.

**Table 1** Changes to the system of accessing defined contribution pension funds

	Before Budget 2014	Transitional measures (Budget 2014-April 2015)	From April 2015
25% tax free lump sum	Must be taken in a single lump sum	N/A	Can be taken as multiple withdrawals
Annual withdrawal limit for capped drawdown	120% of an equivalent annuity	150% of an equivalent annuity	N/A
Flexible drawdown	Available with guaranteed income of £20,000 p.a.	Available with guaranteed income of £12,000 p.a.	Available to all
Taxation of remaining pension at death	Taxed at 55% if touched (lump sum taken or in drawdown) or death after 75. Tax free if untouched and death before 75	N/A	Recipient's marginal tax rate if touched, death after 75 and funds not retained in a pension. Otherwise tax free

*Source:* Based on HM Treasury (2014)

From 6 April 2015 all members of defined contribution pension schemes will continue to have access to up to 25% tax free. However, this no longer has to be taken as a single lump sum. All members will also be able to access remaining funds as income that is taxable at their marginal income tax rate. Further, any money remaining in drawdown or pension fund not being used to provide benefits was taxed at 55% if the pension had been touched (e.g., the tax free lump sum had been taken or the pension was in drawdown) or if death occurred after the age of 75. This tax has been removed so that pensions can be passed on tax free or at the recipient's marginal tax rate if the pension has been touched, death occurs after 75 and the funds are not retained in a pension.

Anyone with a defined contribution pension scheme will have a right to impartial financial guidance at the point of retirement. This guidance will be delivered through a range of organisations. The earliest age at which members can draw their pensions is currently 55. This will increase in line with the increases in the State Pension with the first rise being to 57 in 2028. From then on it will be set at 10 years below the State Pension Age.

These changes will weaken the incentives for taking income as an annuity. Their importance can be shown by the immediate effect that their announcement had on the market capitalisation of major annuity providers. On the day of the announcement the value of shares in the annuity provider Partnership Assurance fell 55% and Just Retirement fell 42% and the market capitalisation of the life insurance sector as a whole fell £4.4 billion. Legal and General was reported as saying the size of the annuity market will shrink from £11.9 billion before the changes to about £2.8 billion after 2015 (Uren, 2014). RBC Capital Markets estimated that the individual annuity market could shrink to 10% of its post

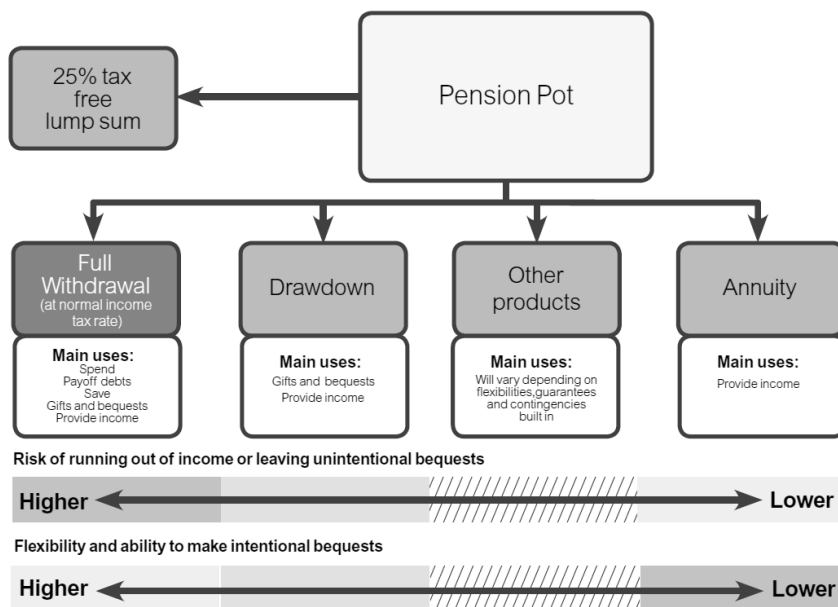
reform level (Cookson, Vincent and Cumbo, 2014). Towers Watson has, however, noted that increased flexibility should encourage innovation from providers and, along with wider savings market trends, should result in annuity sales rebounding to over £10 billion by 2023 (Ugwumadu, 2014).

**Table 2 Changes in annuity and drawdown sales**

	Q2 2014	Q2 2013	% Change
Annuity sales (number)	46,368	89,896	-48.4
Annuity sales (£ million)	£1,792	£3,098	-42.2
Average fund size	£38,600	£34,500	11.9
Income drawdown sales (number)	9,498	5,476	73.4
Income drawdown sales (£ million)	£669	£425	57.4
Average fund size	£70,500	£77,700	-9.3
Drawdown value as % of annuity sales	37.3	13.7	

Source: Association of British Insurers (2014), *ABI statistics Q2 2014: The UK retirement income market post-Budget*, Association of British Insurers, London

**Figure 1 Options under defined contribution pension liberalisation**



Source: Lowe, J. (2014), *Whither UK annuities? Why lifetime annuities should still be part of good financial advice in the post-pension-liberalisation world*, International Longevity Centre-UK, London, p. 5

Given the newness of these reforms their full impact is still to be felt. However, as Lowe (2014, p. 4) has argued there are a range of financial goals of saving and while “the types and features of annuities on offer may need to adapt, this much maligned financial product should ideally still play a key role in most people’s retirement planning.” The greater flexibility could also make pension saving a more attractive option for consumers (House of Commons Treasury Committee (2014).

There is a risk that the greater flexibility could increase moral hazard (e.g., people exhausting their funds to fall back on means-tested programmes) but as Gemma Tetlow of the Institute for Fiscal



Studies, has noted, this risk is likely to be reduced (but not fully eliminated) with the proposed introduction of a single tier pension (House of Commons Treasury Committee (2014)). Joanne Segars, of the National Association of Pension Funds, has also noted that while like-for-life comparisons with other countries are difficult, evidence from Australia suggests that retirees do not “blow” all their pension funds in one go. The United Kingdom’s overall tax regime for savings (“EET”) could also act as a break on incentives to drawdown money in one go.<sup>10</sup> Nonetheless, there is concern that the greater flexibility could see an increase in the use of salary sacrifice arrangements for tax minimisation purposes.

Overall annuity sales are likely to be permanently and significantly reduced as customers choose to either take their money or move into alternative drawdown products (Bulley, 2014, p. 3). As Andrew Bulley, the Director of Life Insurance at the Bank of England, has noted: “such changes will undoubtedly give rise to a fresh set of prudential regulatory issues and so [the Prudential Regulation Authority within the Bank of England] will be considering how the changed environment will affect firms and what actions are needed to mitigate the risks that arise. Significant potential issues include:

- Whether the viability of existing business models will be affected by the changes;
- Increased competition for the reduced pool of annuities, for drawdown business and in other business segments (to compensate for the decline in annuity business) and the impact of these on margins and profitability across the industry;
- The potential for industry consolidation which may give rise to risks from the integration of different cultures and systems;
- Product innovation which, while welcome in principle, places a clear onus on firms to ensure that they are not becoming exposed to unexpected or poorly understood risks” (Bulley, 2014, p. 3).

### 3.2 The guidance guarantee

As HM Treasury (2014) noted as part of this package of reform every individual with defined contribution pension savings will have a new right to free and impartial guidance at retirement. This guidance will be tailored to individual’s personal circumstances but will not recommend specific products or providers. The Government will legislate to give the Financial Conduct Authority responsibility for setting standards for guidance and monitoring compliance with those standards. Pension providers and schemes will be under a duty to ensure that they make people aware of their right to impartial guidance and signpost them to the guidance service as they approach retirement.

There have been long running concerns regarding financial literacy in the United Kingdom. For example, as the Money Advice Service (2013) noted, “when shown a sample bank statement, 16% of people failed to correctly identify the available balance, with this rising to over a quarter of those aged over 55.” This poor financial literacy is reflected in a lack of engagement on pensions and a failure to understand the risks that changes to workplace pensions pose. As the Money Advice Service also showed “when asked to identify whether inflation at 5% would have eroded the purchasing power of money in an account paying 3% interest, over a third of people (35%) got this wrong.”

This failure to understand inflation risk is especially important with the continued roll-out of auto-enrolment. This will amplify the move towards a world of defined contribution pension schemes and shift more of the risk onto savers with, for example, the final pension pay-out received depending on investment returns and not just contributions made or time spent in work. This is an important change and could pose a real challenge as the United Kingdom moves from an ‘opt in’ to an ‘opt out’ workplace pensions system (McClymont and Tarrant, 2013). Unless savers appreciate the risks they are taking on there is a threat that auto-enrolment will experience reputational damage.

<sup>10</sup> The Institute for Fiscal Studies has noted that the United Kingdom’s tax regime for pensions is closest to an EET regime: contributions and investment returns are generally exempt from income and capital gains tax and pension payments are subject to income tax (with the exception of a tax-free lump sum). The ability to withdraw a lump sum tax free means that 25% of pension contributions are effectively subject to an EEE regime. The IFS has also noted that in 2011-12 net tax relief was estimated at around £38.3 billion (Emmerson (2014, pp. 226-230)). This can be contrasted with New Zealand’s TTE tax regime (see, for example, Marriott (2008, p. 4)).

There have also been long running concerns regarding the quality of financial advice provided to customers, as shown in the Thoresen Review of Generic Financial Advice (HM Treasury, 2008). The Chartered Insurance Institute has noted that this not only requires thinking about the role of Government but also the roles of independent financial advisers. And for providers the Association of British Insurers had developed a Code of Conduct on Retirement Choices (Association of British Insurers, 2013). This code set out to ensure “customers consider their options and shop around to choose the retirement income product that best meets their needs.” The code was implemented on 1 March 2013 and required Association of British Insurers members to:

- Give customers all the information they need to shop around on the first page of every cover letter.
- Prominently highlight that enhanced annuities can potentially offer much higher income.
- Clearly signpost customers to sources of advice and support.
- Ask customers a set of key questions when buying an annuity and highlight risks arising from their answers.
- Provide clear communications to customers, consistent across the industry (Association of British Insurers, 2013).

The Association of British Insurers commissioned research in 2012 to serve as a baseline for measuring progress on the code. This was based on people who been sent a ‘wake-up pack’ in autumn 2012, which took place between two to five months before their selected retirement date. This research was published in May 2013 and key findings were:

- Perceived understanding of the decisions required at retirement is high and respondents generally feel comfortable making decisions relating to their broad retirement options. However, 36% do not read the retirement pack and 32% do not feel informed enough to compare quotes from another provider.
- The majority claim to be aware of a variety of annuity types. While 24% say they have a good understanding of different annuity types, 54% say they have a basic understanding and 23% claim they know little or nothing about annuities.
- The vast majority (91%) of annuity purchasers are aware of the option to shop around but the degree of shopping around differs, and less than half gathered annuity quotes from other providers (Association of British Insurers, 2013).

They (Association of British Insurers, 2013) also noted that the products that people buy and the way that they make their purchases were changing. The products that people buy were already becoming more varied than the single, level, standard annuity. In particular:

- The proportion of annuities that are enhanced – with some form of medical or lifestyle underwriting – has grown from 1.5% of purchases to around 25%. Annuity rates are now gender neutral and more providers are offering medical underwriting on annuities.
- The proportion of joint annuities – providing for a dependent as well as the main annuity-holder – accounted for 42% in 2011, up from 29% in 2008.
- Around 10% of all annuities are bought with any kind of escalation (e.g., increasing in line with inflation). This has been consistent since 2008.
- The proportion of investment-linked annuities has increased but remains less than 5% of all annuities.
- The Retail Distribution Review is changing the way people buy investment products. It is expected that more annuities will be bought without advice and as the use of the internet as a way to buy is increasing.

- Increasing numbers of people are switching provider at retirement. In 2012, 47% of people who bought an annuity purchased from a different provider than the one they had their pension savings with, up from 31% in 2003.

The potential for improved guidance to help strengthen the market for decumulation products has been highlighted by the Association of British Insurers (2014). As they noted, “consumers do make choices about their retirement income, which in turn drives provider supply of products. [...] Financial services providers have a responsibility to ensure that products meet consumer needs, but providers are also acutely aware that products must be what consumers want and afford. In the Department of Health’s rapid review of the role of financial services products for social care, the industry explored the potential for greater use of retirement income products to help pay for care. While the review found that there could be new social care products, lack of consumer demand was the major inhibitor.”

Further, as the Association of British Insurers (2014) went on to note, in “social care, part of the rationale for the introduction of a cap on eligible care costs was that it would encourage people to plan ahead by creating a known amount to plan for. However, it remains unclear whether and how people will plan ahead, and providers will have this in mind when thinking about committing capital for product development. We believe that the reforms to the retirement income market will have an even greater impact on consumer behaviours, and therefore it will take time to understand what consumers want and need once these choices are available.” In summary, innovation “within the retirement income market must be driven first and foremost by consumer demand.”

However, this raises questions around the sequencing of reform (Nolan, 2013a). Will the increasing take-up of defined contribution pensions (a demand side change) be a catalyst for industry and regulators to continue reform? And will this, in turn, improve the products being offered and encourage consumers to be more informed? Or, alternatively, should there be change on the supply side before demand is increased? These supply side changes could set out to address the issues facing the defined contribution pension market identified by the Office for Fair Trading (2013).

There are a number of other questions. Just how active can people be expected to be when the United Kingdom is moving to a system based on opt out? Will this transform the retail market in the way hoped (making consumer choice the driver of change) or should focus instead go on getting the defaults right? There also needs to be a greater focus on pension companies’ roles as asset managers, not just as providers, improving governance and disclosure (such as employing standard definitions and writing in plain English), and reducing fragmentation. Decumulation requires attention, but how realistic is it to expect people to become engaged at and during retirement when their accumulation of assets has largely been based on relying on default settings?

### 3.3 The Dilnot cap on the cost of funding long-term care

The Dilnot cap illustrates an approach where government policy aims to create architecture that encourages a private sector response to a policy problem. There has been a long running debate on the funding of long-term care in the United Kingdom. The system is poorly understood. Many families assume that care would be free given that the National Health Service is generally provided free at point of care. While local authorities provide a scheme that allows people to defer the cost of care (with the cost (without interest) being recovered from the recipients’ estate) this has very low take-up. The United Kingdom’s population is ageing faster than New Zealand and there is likely to be greater pressure on age related spending given the existing higher levels of pension spending. The United Kingdom’s public finances are already in a weaker position than New Zealand’s.

In July 2010 the Coalition Government established an independent Commission on Funding of Care and Support (the Dilnot Commission) to review the funding system in England. In July 2011 the Commission reported to the Government and recommended:

- Increasing the threshold for the means-test that determines whether people are entitled to financial support from their council to pay residential care costs. They proposed increasing the upper threshold of the means-test from £23,250 in assets (such as savings or property) to £118,500

(approximately £100,000 in 2013 prices (Isden, Norton and Abrahams, 2013)). Between this threshold and a lower threshold (remaining at £14,250) people are only partly responsible for their care costs. All capital and savings below the lower threshold of £14,250 are disregarded for the means-test.

- Capping individuals' lifetime contributions to their social care costs. People with capital and savings above the lower threshold for the means-test will be expected to pay care costs up to (but not beyond) the cap. This includes the costs of care that people receive either in their home or living in a care home. The Commission recommended a cap of between £25,000 and £50,000, with £35,000 being the Commission's favoured figure. The Government agreed with the concept of a cap and, after accounting for inflation, proposed a level of £72,000 from April 2016 (approximately £61,000 in 2013 prices (Isden, Norton and Abrahams, 2013)).
- Basing the cap on the cost of care at the local authority rate. If people choose a more expensive care option then the additional cost will not be covered. Contributions to general living costs when living in a care home are also generally not covered. These general living costs reflect the costs that people would have to meet if they were living in their own home – such as for food, energy bills and accommodation. The expectation is that people who can afford it will pay around £12,000 (approximately £10,000 in 2013 prices (Isden, Norton and Abrahams, 2013)) a year towards their general living costs. People may be eligible for financial help to pay for their general living costs if they have less than £17,000 in assets and if they do not have enough income to cover their costs.
- Introducing national eligibility criteria and portable assessments to ensure greater consistency. Spending will be metered by the local authority. The meter will only start once the person has been assessed by the council as having needs that meet national criteria.
- Making the existing scheme of deferred payment agreements more widely available from 2015. People who own their own home will be able to make an arrangement where they do not have to sell their home during their lifetime. Instead, the local authority will pay the costs and recover the money that the person owes at a later date. The major change from the earlier deferred payment scheme is that local authorities will now be able to charge interest and so will face fewer costs and thus be more likely to encourage take-up.

## Rationale for a capped-cost model

The Dilnot Commission considered barriers to the development of a market for pre-funded insurance for long-term care costs. They then used this analysis to outline barriers that needed to be overcome if the market was to grow. Barriers were identified on both the demand and the supply sides. On the demand side these included:

- "People's lack of awareness of the need to plan for care costs and misconceptions that it would be provided free by the state. The financial service sector would like a clear statement from Government on the state offer, and for there to be some certainty that any system will last in the longer term" (Dilnot, Warner and Williams, 2011).
- "The lack of appropriate financial advice – many claimed that only through better financial advice, would there be better financial planning. Some responses raised the fact that very few people who sold their home to pay for care received proper independent advice. It was felt that both local authorities and the Financial Services Authority could help signpost people to financial advice" (Dilnot, Warner and Williams, 2011).
- "Lack of demand due to individuals believing their families will look after them, and therefore being reluctant to pay for expensive financial products" (Dilnot, Warner and Williams, 2011).

The Commission also highlighted barriers on the supply side. These included:

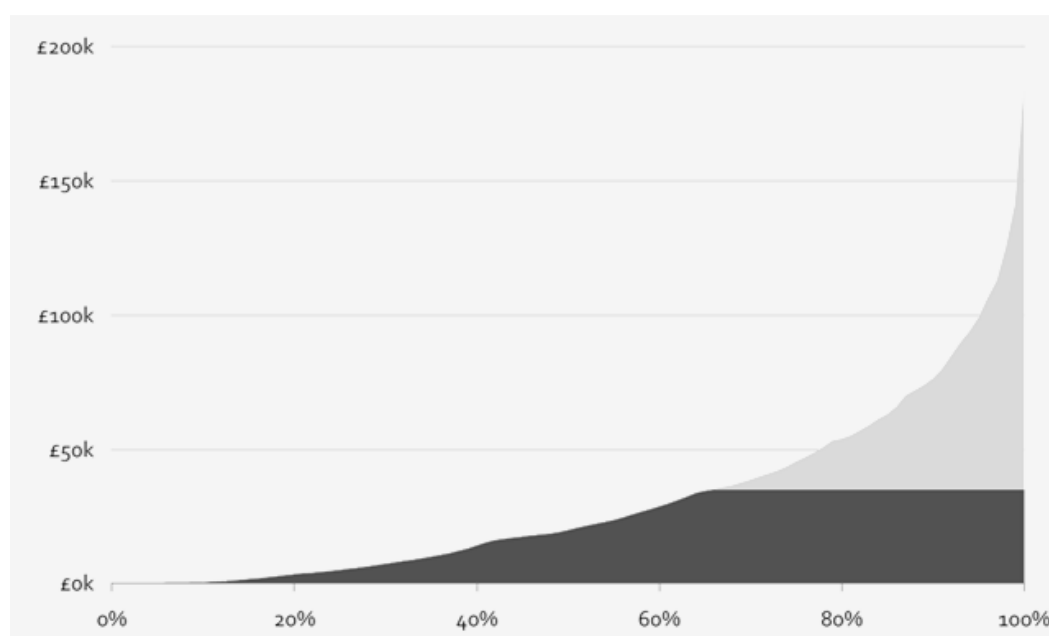
- "Anti-selection (e.g., more women taking out products than men) and the pricing of the tail end risk" (Dilnot, Warner and Williams, 2011).

- “Uncertainty over longevity risk, morbidity risk, and care inflation poses a reputational risk to insurance companies. Further uncertainty is added when products are linked to investments. The Commission received evidence from the US which highlighted the difficulty insurance providers have had in pricing and managing the risks” (Dilnot, Warner and Williams, 2011).

As the Commission went on to note, given “these supply side issues, the industry as a whole was not confident that it would be able to design pre-funded products which would be attractive to consumers. That is, they might be able to offer products, but they would be expensive and/or not have features (such as guaranteed premiums) which would lead to people wanting to buy them” (Dilnot, Warner and Williams, 2011).

The Dilnot Commission thus set out to “create a new space for financial products.” The Commission argued that by “capping the overall risk and encouraging people to plan, the opportunity arises for a range of new products to develop, suiting different wealth, income and age groups” (Dilnot, Warner and Williams, 2011, p. 163). In particular, it was hoped that a cap on the lifetime cost of care would make the funding system more transparent. This clarity over the limits of State support would, in turn, increase awareness of the need to prepare for the risk of facing these costs and to consider private instruments to help pool them across the population (such as private insurance).

**Figure 2 The potential for a cap to remove tail end risks (expected lifetime costs for people going into care in 2010/11, by percentile)**



Source: Dilnot (2011)

Uncertainty is not the only constraint on the development of private financial products to help pool the costs of long-term care. The cost of pooling these financial risks costs across the population as a whole is increased by the high cost of care for a relatively small group of recipients. As shown in Figure 2, the large majority of people who go into care face relatively small care costs. However, for a small proportion of the population higher longevity means that they will spend longer in care and face relatively high costs (the Dilnot Commission estimated that at age 65 around 1 in 10 people face lifetime costs in excess of £100,000 (Dilnot, Warner and Williams, 2011, p. 12)). The high cost of care for these few people makes the cost of covering the market as a whole more expensive. Removing this tail end risk could make it more feasible for private providers to pool these financial risks.

However, a number of concerns were raised over this approach of the state taking on the tail end risk. For example, as the Conservative MP John Redwood (2012) noted:

- The cost will go mainly towards protecting the inheritances of better off families. It is difficult to see this is a priority at a time of need for spending restraint.

- The cap will not do as much as some hope for the relatives it is meant to help. He argues that someone in care for four years in the south east with means of their own could have to find £149,000 under the Dilnot scheme, compared to £170,000 today.
- The Association of British Insurers and others who stand to develop new business from the right proposals think this cost cap is unlikely to help develop a better market to insure against such needs. This is likely to reflect remaining demand and supply side barriers to this market.
- The priority for the Coalition should be to spend what extra money there is on more choice and better quality of care for those who need it.
- There are other ways of incentivising self-provision to encourage forward-planning for care costs.

## 4 Is this a debate we need to be having in New Zealand?

The section above discussed several reforms impacting on the United Kingdom's decumulation market. Given the size and importance of this market, and also the significant nature of the changes being considered, there is obvious interest in these reforms. Further, while differences in context mean there are limits in the ability to draw lessons from these reforms for New Zealand, several factors in New Zealand suggest that considering what lessons could be drawn would nonetheless be a valuable exercise. These factors include an increasing role of capital in retirement incomes, a gap in income replacement for middle to higher earners and increasing longevity (future demand for decumulation products).

### 4.1 A growing reliance on capital

Pensioners receive incomes from a range of sources. As well as public transfers, pensioners' incomes may reflect the accumulation and drawdown of financial wealth (savings), the release of equity located in housing assets and their labour market participation. Over previous years there has been concern in New Zealand that individuals have not been doing enough to prepare themselves for retirement. This is some debate over this, though, and so Table 3 shows OECD data on the sources of pensioner incomes, relative pensioner incomes and pensioner poverty rates.

These data show that New Zealand had relatively narrow base for funding pensioner incomes prior to the introduction of KiwiSaver. According to the OECD, in the mid-2000s government transfers accounted for a much higher share of pensioner income in New Zealand (64.4% of income for the over 65s) than in Australia (44.6%) and the United Kingdom (49.8%). Work was a relatively high source of income in New Zealand (15.2%) at this time, with the importance of this source of income lying between Australia (19.4%) and the United Kingdom (11.9%). The importance of capital as a source of income was much lower in New Zealand (20.5%) than in either Australia or the United Kingdom (35.9% and 38.3%, respectively).

**Table 3** Sources of pensioner incomes, relative pensioner incomes and pensioner poverty rates

	New Zealand	Australia	United Kingdom	OECD
Sources of pensioner incomes, % of total (mid-2000s)	Public transfers, 64.4	Public transfers, 44.6	Public transfers, 49.8	Public transfers, 59.6
	Work, 15.1	Work, 19.4	Work, 11.9	Work, 21.4
	Capital, 20.5	Capital, 35.9	Capital, 38.3	Capital, 19.1
Sources of pensioner incomes, % of total	Public transfers, 48.2	Public transfers, 40.3	Public transfers, 49.7	Public transfers, 58.6
	Work, 21.7	Work, 23.6	Work, 11.8	Work, 23.9

	New Zealand	Australia	United Kingdom	OECD
(late-2000s)	Capital, 30.2	Capital, 36.1	Capital, 38.5	Capital, 17.6
Incomes of people over 65, % of population incomes (late-2000s)	All over 65, 86.2 66 to 75, 97.8 Over 75, 69.2	All over 65, 65.4 66 to 75, 69.3 Over 75, 60.0	All over 65, 81.2 66 to 75, 86.0 Over 75, 75.4	All over 65, 86.2 66 to 75, 90.1 Over 75, 79.9
Percentage of pensioners below 50% median equivalised household disposable income (2010)	All 65+, 12.5 66 to 75, 10.2 75+, 15.8	All 65+, 35.5 66 to 75, 31.2 75+, 41.5	All 65+, 8.6 66 to 75, 7.0 75+, 10.5	All 65+, 12.8 66 to 75, 11.3 75+, 13.8
Share of whole population below 50% median household disposable income (2010)	10.3	14.4	10.0	11.3
Public expenditure on old-age and survivors benefits, % of GDP	1990, 7.4 1995, 5.7 2000, 5.0 2005, 4.3 2009, 4.7	1990, 3.0 1995, 3.6 2000, 3.8 2005, 3.3 2009, 3.5	1990, 4.8 1995, 5.4 2000, 5.3 2005, 5.6 2009, 6.2	OECD 34 1990, 6.1 1995, 6.7 2000, 6.9 2005, 7.0 2009, 7.8

Source: OECD (2013), Pensions at a Glance 2013: Retirement Incomes in OECD and G20 Countries, OECD, Paris

The situation in New Zealand has changed markedly over recent years. Reflecting changes like the introduction of KiwiSaver, capital has become a more important source of pensioners' incomes, with the share of this factor rising almost 10 percentage points to 30.2% (compared to 36.1% in Australia and 38.5% in the United Kingdom). Work also increased in importance in New Zealand (to 21.7%) and so the overall reliance on public transfers fell to 48.2%, which was just below the level of the United Kingdom (49.8%).

RBNZ data on household financial assets and liabilities also show that the introduction of KiwiSaver has been associated with a notable increase in superannuation savings in New Zealand. In the period between 1993 and 2008 superannuation savings as a share of household disposable income fell from 34.2% to 16.9%. By 2013 superannuation savings had increased to be equivalent to 30.7% of household disposable income. This increase in superannuation savings cannot, however, explain all of the increase in household's financial wealth over this period. Indeed, the increase in deposits and managed funds over this period accounted for larger shares of the increase in total household wealth since 1993.

Housing wealth is another important source of potential income. Releasing equity tied up in housing can lift living standards of income poor but asset rich families, increase the time that they can comfortably live in their own homes and fund care. The importance of housing wealth in household net wealth can be shown with RBNZ data on household assets and liabilities. In 2013, for example, these data showed household net wealth of \$768 billion. This was made up of net financial wealth of \$49 billion and housing valued at \$719 billion. When housing loans are subtracted from this housing value, the net equity in housing was estimated at \$530 billion. Thus, while net financial wealth was estimated at around 35% of household disposable income, net equity in housing was over 10 times larger and equivalent to 381%.

**Table 4 Household assets and liabilities as percentage of household disposable income as at December (2013)**

	\$ million	% of household disposable income
Household financial assets	265,706	191%
Household financial liabilities	216,378	156%
Household net financial wealth	49,329	35%
Housing value	718,719	517%
Household net wealth	768,047	552%
Net equity in housing	530,153	381%
Household disposable income	139,065	

Source: RBNZ (2014), C18 Household financial assets & liabilities

## 4.2 A gap in income replacement for middle to higher earners

The decumulation market in New Zealand cannot be seen in isolation from New Zealand Superannuation. Indeed, as the discussion on multiple pillars above showed, it is important for public programmes and private products to play a mutually supporting role. This can perhaps be illustrated by considering two objectives for interventions into retirement income systems. Two prominent (but not uncontroversial) objectives are to prevent poverty or to replace incomes from working lives. New Zealand Superannuation is relatively successful at addressing pensioner poverty (Perry, 2012) but is less effective at replacing income from work (particularly for pensioners who were higher earners in their working lives).

To illustrate, the single rate of New Zealand Superannuation is \$19,080.88 after tax a year (\$366.94 per week) and \$21,931.52 (\$421.76 a week) before tax. This can be compared to the median weekly income (from all sources) for all people aged 60 to 64 in the June 2014 quarter of \$620, which is equivalent to \$32,240 on an annual basis. Thus the pre-tax single rate of New Zealand Superannuation is around 68% of median income for all people and from all sources in the years just before the state retirement age. However, for people with pre-retirement incomes above the median the rate at which New Zealand Superannuation replaces income from earlier life will be less than 68%.

The effectiveness of New Zealand Superannuation at reducing measured pensioner poverty suggests that KiwiSaver (and policies regarding the decumulation of these funds) should be seen as targeting income smoothing objectives for middle and higher earners. As the Inland Revenue Department has shown, 69% of people who became eligible to withdraw their KiwiSaver funds in July and August 2013 had balances below \$15,000. While it can be expected that the average balance will increase over time, for illustrative purposes a balance of \$15,000 could be converted into a payment of \$910.11 a year for 25 years (based on simple drawdown and an assumed 3.5% real interest rate).<sup>11</sup> Given this, at this early stage other options for decumulation (e.g., using the funds for capital spending, such as home repairs) could be equally valuable. Indeed, as Rashbrook (2008) shows whether an annuity is the right product depends on individual characteristics such as longevity and preferences (such as a bequest motive).

The Commission for Financial Literacy and Retirement Income (2013, p. 74) has noted that as KiwiSaver balances grow the very small market for private annuity products in New Zealand is likely to

<sup>11</sup> This can also be compared to the present value of New Zealand Superannuation payments. Based on an after-tax payment of \$19,080.88 a year and a real interest rate of 3.5%, the payment of New Zealand Superannuation for 25 years is equivalent to a level of savings at retirement of \$325,488.67.



present challenges. With this in mind a number of proposals have been raised to help a market develop. These include:

- The Ministry of Social Development has released a discussion paper that canvasses (among two other options) the establishment of a public annuity fund to accept contributions from eligible persons and pay annuities to them (Berthold, 2013).
- Hon Dr Sir Michael Cullen has proposed a requirement for people to annuitise half of their accumulated KiwiSaver balances on reaching the age of eligibility. The government would then top up the annuities of those whose balances were not high enough to receive an annuity of the same value as New Zealand Superannuation. Hon Dr Sir Michael Cullen has also proposed a withdrawal tax on accumulated KiwiSaver savings (Commission for Financial Literacy and Retirement Income, 2013, p. 74).

However, as the Commission for Financial Literacy and Retirement Income (2013, p. 75) went on to note “priority should rather be given to encouraging market responses as growing balances make these more commercially viable.” Further, while the lack of annuity products is emerging as a potential problem it is “not one of crisis proportions. To some extent, these issues will resolve themselves as balances grow and a normal market response occurs.” Indeed, as noted above, the universal nature of New Zealand Superannuation means that for many people this programme largely fulfils the role of an annuity (providing a guaranteed income), and a market is more likely to grow to help retirees who previously received middle and higher incomes to replace their incomes from work.

### 4.3 Future demand

Although the decumulation market is relatively undeveloped in New Zealand it is likely that trends such as population ageing and the growing KiwiSaver balances will transform this market. To illustrate population ageing Statistics New Zealand projections for the changing age profile are summarised below. However, as O’Connell (2012) noted, given “the complexity and uncertainty of processes driving mortality improvement, future lifespans cannot be known.” Population projections are based on important assumptions regarding death rates, birth rates and factors like migration. With the timeframes involved in these projections the choice of assumptions regarding these factors can have a material impact on the results produced.

**Table 5 People (thousands) in age bands for various start years**

Total	65+	75+	80+	85+	90+
2012	611,130	267,480	159,230	75,740	25,400
2015	679,940	290,670	168,420	83,540	29,700
2018	747,990	321,210	181,370	89,900	33,200
2021	823,540	357,560	203,570	95,770	36,800
2024	906,800	413,100	227,430	106,050	39,300
2027	998,290	465,310	263,470	124,200	43,100
2030	1,082,630	518,570	305,830	140,130	49,900
2033	1,151,850	576,500	344,390	168,590	58,600
2036	1,216,060	639,490	385,430	194,960	68,700
2039	1,264,100	700,830	429,210	219,160	84,800
2042	1,288,130	744,830	477,160	245,990	97,200

*Source:* Author’s calculations based on Statistics New Zealand (2012), National Population Projections: 2011(base)–2061 (median projections)

Nonetheless, while bearing these caveats in mind, these data show that 0.61 million people were over 65 in 2012. It is projected that this will increase to 1.29 million people by 2042. This is equivalent to an annual growth rate of 2.5%. This is in a context of average annual growth for the total population of 0.7%. Growth rates increase by age group, so the number of people over 75 is projected to grow by 3.5%, people over 80 by 3.7%, people over 85 by 4.0% and people over 90 by 4.6%. These figures are reflected in older age groups accounting for larger shares of the population. Thus, the share of the population aged 65 or older will increase from 13.8% in 2012 to 23.3% in 2042. The share aged 80 or older will increase from 3.6% to 8.6%, and the share 90+ will increase from 0.6% to 1.8%.

**Table 6** Share of population in age bands for various start years

Total	65+	75+	80+	85+	90+
2012	13.8%	6.0%	3.6%	1.7%	0.6%
2015	15.0%	6.4%	3.7%	1.8%	0.7%
2018	16.0%	6.9%	3.9%	1.9%	0.7%
2021	17.2%	7.5%	4.2%	2.0%	0.8%
2024	18.4%	8.4%	4.6%	2.2%	0.8%
2027	19.8%	9.2%	5.2%	2.5%	0.9%
2030	21.0%	10.1%	5.9%	2.7%	1.0%
2033	21.9%	11.0%	6.5%	3.2%	1.1%
2036	22.7%	11.9%	7.2%	3.6%	1.3%
2039	23.2%	12.9%	7.9%	4.0%	1.6%
2042	23.3%	13.4%	8.6%	4.4%	1.8%

*Source:* Author's calculations based on Author's calculations based on Statistics New Zealand (2012), National Population Projections: 2011(base)–2061 (median projections)

**Table 7** Survival rate of people aged 65 in reference year

Start year (reaching 65)	70	75	80	85	90
2012	95.7%	88.8%	78.3%	61.6%	43.2%
2015	96.2%	89.8%	79.8%	63.6%	45.2%
2018	96.5%	90.6%	81.2%	65.4%	47.0%
2021	96.7%	91.3%	82.4%	67.1%	48.7%
2024	97.0%	91.9%	83.6%	68.8%	50.5%
2027	97.3%	92.6%	84.7%	70.4%	52.2%
2030	97.6%	93.3%	85.9%	72.0%	54.0%
2033	97.9%	93.9%	87.0%	73.6%	55.7%
2036	98.1%	94.4%	88.0%	75.1%	57.3%
2039	98.4%	95.1%	89.0%	76.6%	Note 1
2042	98.7%	95.6%	90.0%	Note 1	Note 1

*Source:* Author's calculations based on Author's calculations based on Statistics New Zealand (2012), National Population Projections: 2011(base)–2061 (median projections)

*Note:*

1. These dates go beyond 2061 and so estimates were not calculated

These projections can also be used to indicate potential changes to longevity. As noted above it is important to recognise the inherent caveats involved in using long term population projections. It is also important to recognise that not all of the change in the numbers of people in a particular age group are due to changes in longevity (migration also plays a role, although this is unlikely to play a major role in explaining changes in the 65+ population). Further, these projections are used rather than Statistics New Zealand's existing cohort life tables as these cohort tables do not reach as far into the future. The national population projections show that there were, for example, 47,170 people aged 65 in 2012. Looking forward 46,080 people were expected to be aged 68 (in 2015), 44,570 aged 71 in 2018, 42,620 aged 74 in 2021, and so on. This can be compared to groups with later start years. With a start year of 2015, there will be 47,070 people aged 65 (in this year), 46,140 aged 68 three years later (in 2018), 44,750 aged 71 in 2021, and so on.

Based on this it is possible to say something about the survival rates of people who turn 65 in a particular year. Survival rates can be calculated by comparing the number of people who are 65 in a start year with the number of people who are 66 in the following year, 67 in the year after that, and so on. These data show that (while bearing the caveats above in mind) someone who turned 65 in 2012 had a 95.7% chance of reaching 70. With age the chance of surviving naturally falls and so it can be expected that 88.8% of these people would live to 75, 78.3% would live to 80, 61.6% to 85 and 43.2% to 90 or older. This means that, assuming these people retired at 65, 88.8% could expect at least decade in retirement, 61.6% could expect two decades in retirement and 43.2% could expect their retirement to last at least 25 years.

These data also show how longevity could be expected to increase. Based on these population projections a person who retires at 65 in 2036, for example, will have a 94.4% chance of spending 10 years in retirement (up from 78.3% for the 2012 cohort), 75.1% chance of spending two decades in retirement (up from 61.6%) and 57.3% chance of spending 25 years in retirement (up from 43.2%). This longevity is expected to increase, but, as the projections only run to 2061, the estimates for the people reaching 65 in 2039 and 2042 only go to 85 and 80, respectively. The assumption that people continue to retire at 65 is obviously critical to this analysis, but what these figures do nonetheless show is the growing need to help people better prepare for decumulation.

## 4.4 Conclusion

This note discussed reforms impacting on the United Kingdom's decumulation market. Given the size and importance of this market, and also the significant nature of the changes being considered, there is real interest in these reforms. Further, while differences in context mean there are limits in the ability to draw lessons from these reforms for New Zealand, several factors suggest that considering what lessons could be drawn would nonetheless be a valuable exercise. These factors include an increasing role of capital in retirement incomes in New Zealand, a gap in income replacement for middle to higher earners and increasing longevity (future demand for decumulation products).

Earlier research has highlighted several potential reasons for the small size of an annuity market in New Zealand. These include the role of New Zealand Superannuation, which, for many people, partly fulfils the role of an annuity (providing a guaranteed income – although it is less effective at replacing the incomes from work for retirees who previously received middle and higher incomes). It is also important to recognise that, from a consumer's perspective, the utility from an annuity will vary depending on individual characteristics such as longevity and preferences (such as a bequest motive). This can be influenced by the tax treatment of these products and there has been some debate on this in New Zealand. Further, as the Capital Market Development Taskforce noted in 2009, capital market initiatives (e.g., inflation-indexed bonds with long maturity dates) could potentially support supply-side innovation.

The recent reforms in the United Kingdom also highlight the importance of guidance. An important feature of this guidance is that it has explicitly stopped short of recommending specific products or providers. Annuities are not right for everyone and at all times. As Ros Altmann has noted annuities "will cover you against the risk of living a very long time, but there are many other risks in retirement

that people face that certainly a standard annuity will not cover you for. It is like having fire insurance but then you get flooded or burgled and you do not have any cover. The standard annuity will not cover you against inflation or for a partner. This was one of the problems. The annuity market has been regulated as if annuities are a no-risk product suitable for everybody and that simply is not the case” (House of Commons Treasury Committee (2014, p. 49)).

Debates on guidance in the United Kingdom have also recognised the importance of starting well before retirement and not seeing retirement as a one-off event. Guidance is not only needed when making the initial decision on whether to take an annuity or not, but also as people consider their finances throughout retirement. This highlights the importance of a certain and stable policy environment. Decisions regarding savings and the purchase of private income support policies are by their nature long-term decisions. The more uncertain the decision making environment, the harder it will be for people to make the decisions that are in their longer term interests. And this is important for product innovation too. As the Association of British Insurers has noted, whether and how people plan ahead is one thing that providers have in mind when committing capital for product development.

## Appendix A Household financial assets and liabilities

**Table 8 Household financial assets as at December (\$ million)**

	Total household financial assets	Deposits	Super-annuation	Life insurance	Managed funds	Other fixed interest assets	Direct domestic equities	Direct overseas equities
1993	90,474	29,838	17,298	11,122	9,237	7,362	13,000	2,616
1994	91,736	32,299	17,886	10,462	10,471	7,722	10,400	2,496
1995	97,958	35,375	18,769	10,893	11,546	7,944	10,700	2,730
1996	104,145	38,738	19,402	10,638	12,463	8,036	11,800	3,068
1997	108,129	40,888	20,358	10,890	14,449	7,780	10,200	3,564
1998	115,162	42,441	21,834	9,725	17,656	7,769	11,300	4,437
1999	124,023	43,293	22,843	9,636	22,366	7,720	12,600	5,565
2000	125,611	45,245	22,356	9,118	24,318	8,114	10,700	5,760
2001	128,866	49,353	21,105	8,467	25,017	8,324	11,300	5,300
2002	128,625	54,199	19,414	7,184	22,661	9,867	11,100	4,200
2003	139,450	58,958	18,567	7,517	24,200	11,508	13,300	5,400
2004	151,369	65,026	19,818	8,015	24,736	12,973	15,592	5,210
2005	162,379	72,785	20,265	8,373	27,395	13,479	14,114	5,967
2006	185,435	81,827	22,131	8,378	32,675	14,388	18,552	7,484
2007	196,000	90,420	22,765	7,748	33,025	16,712	16,834	8,497
2008	188,952	98,915	19,606	6,684	28,132	18,822	11,631	5,162
2009	203,729	100,732	24,204	6,135	30,227	20,312	15,274	6,844
2010	210,391	104,091	28,200	5,869	29,726	19,667	15,558	7,280
2011	218,499	111,000	30,849	5,816	29,018	20,326	15,093	6,397
2012	239,399	118,541	36,535	6,049	31,401	20,040	20,173	6,660
2013	265,706	129,422	42,742	5,790	35,185	21,004	24,714	6,851

Source: RBNZ (2014), C18 Household financial assets & liabilities

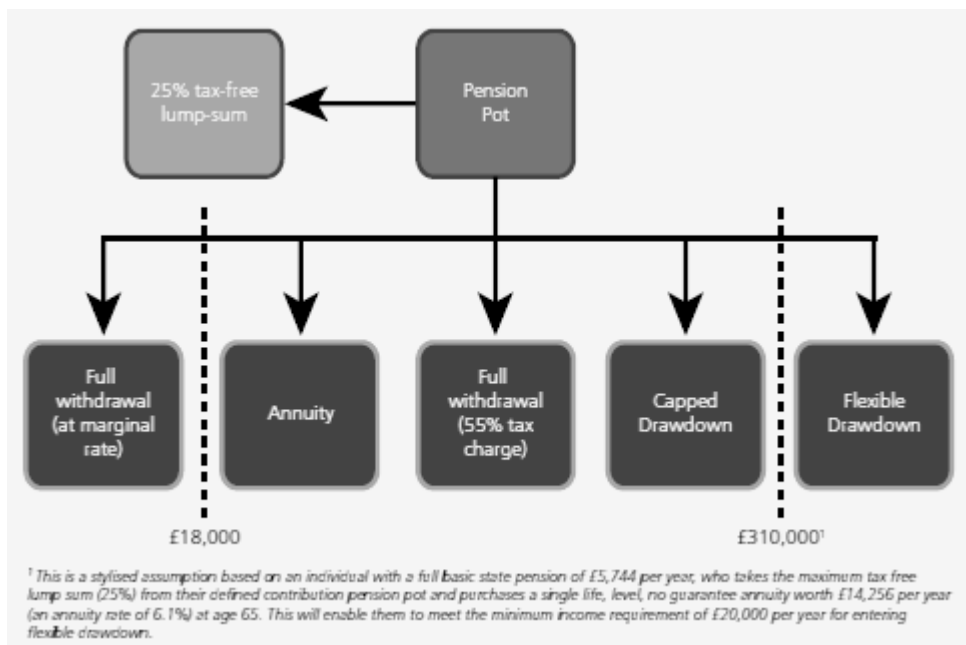
**Table 9 Household financial liabilities, net financial wealth and disposable income as at December (\$ million)**

	Total household financial liabilities	Loans from banks and non-bank lending institutions	Life, super & managed fund loans	Housing Corporation	Solicitors' trust loans	Student loans	Household net financial wealth	Household disposable income
1993	36,793	32,308	377	2,338	1,400	370	53,680	50,511
1994	41,910	37,673	421	2,031	1,100	685	49,826	53,367
1995	47,577	43,883	380	1,367	900	1,048	50,380	57,097
1996	54,332	51,398	399	362	650	1,523	49,813	61,669
1997	61,120	57,868	417	331	450	2,054	47,009	63,323
1998	65,949	61,380	1,440	128	350	2,650	49,213	65,738
1999	72,836	68,569	896	51	200	3,120	51,187	71,253
2000	78,198	73,689	584	55	200	3,670	47,413	71,438
2001	84,430	79,288	591	60	200	4,290	44,436	74,638
2002	93,581	87,050	642	65	175	5,650	35,044	76,351
2003	107,813	100,681	793	70	175	6,094	31,637	81,868
2004	123,893	115,901	946	76	150	6,821	27,476	89,648
2005	142,235	133,448	1,066	72	150	7,499	20,143	95,304
2006	160,101	150,152	1,381	74	125	8,370	25,334	102,399
2007	179,305	168,302	1,405	85	100	9,413	16,695	112,500
2008	186,035	175,183	1,085	104	90	9,573	2,917	116,036
2009	191,249	180,102	720	77	90	10,259	12,481	118,149
2010	194,744	182,918	527	73	81	11,145	15,647	123,711
2011	197,483	184,875	401	73	64	12,070	21,016	129,942
2012	204,952	191,517	340	73	54	12,969	34,447	132,106
2013	216,378	202,397	303	70	46	13,562	49,329	139,065

Source: RBNZ (2014), C18 Household financial assets & liabilities

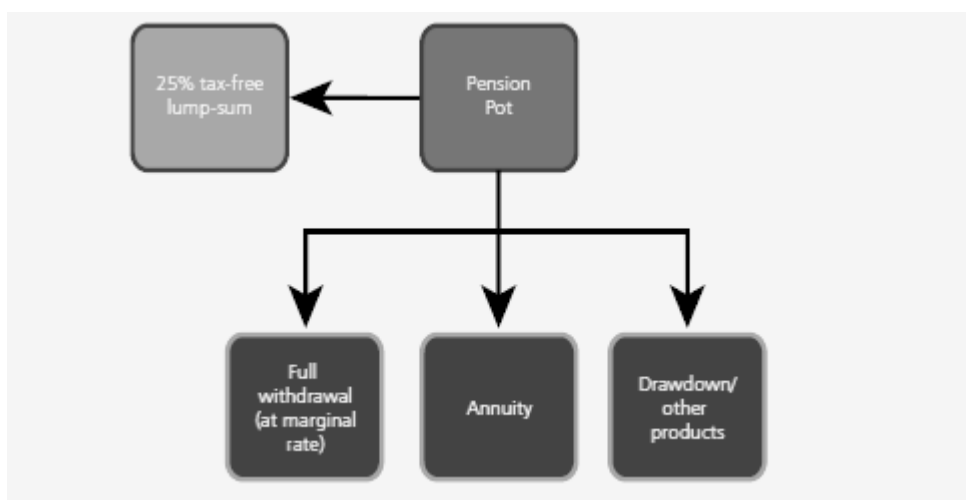
# Appendix B Changes to the system of accessing defined contribution funds

**Figure 3** Pre-April 2015 system of accessing defined contribution pension funds



Source: HM Treasury (2014)

**Figure 4** Post-April 2015 system of accessing defined contribution pension funds



Source: HM Treasury (2014)

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