

MERCER

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SECURING RETIREMENT INCOMES

Time to act

Risks, challenges and opportunities
with New Zealand's retirement income system



Executive summary

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“Retirement income has become one of the major public policy issues of our times.”¹ However, the provision of a secure, adequate and fair retirement income system is not a straightforward task and an ageing population is adding significant pressure and urgency to this challenge for many governments around the world.

Mercer believes a secure retirement income system should be built on three pillars.

The three pillars are:

- Government-funded age pension
- Savings via the workplace
- Voluntary additional personal savings

New Zealand has a strong first pillar in the form of NZ Super and a developing second pillar in the form of KiwiSaver. However, we query the sustainability of NZ Super, whilst KiwiSaver still has a long way to go to improve the adequacy of New Zealanders' retirement savings.

We believe a holistic and multi-layered solution is needed to improve our retirement income system if we are to increase the likelihood that all New Zealanders will be able to retire with dignity, and a sense of security, and be better prepared for retirement risks in the years ahead.

This report explores New Zealand's existing retirement income system and implications of our ageing population, including associated risks, challenges, and opportunities for individuals, the government, and the private sector. We provide recommendations to improve our system and help people maximise retirement savings during both their accumulation (working) and decumulation (retirement) stages. We also discuss a global blueprint, developed by the World Economic Forum in conjunction with Mercer, of possible solutions to improve our retirement income system. We do not have all of the answers, but we do aim to encourage a considered debate about one of the biggest challenges facing governments the world over.

¹ Retirement income in New Zealand: the historical context, David Preston, Commissioned by the Retirement Commission, December 2008, p5

Executive summary

Challenges of an ageing population

The demographic shifts occurring in our society will amplify in coming years and will put an incredible amount of pressure on the New Zealand government, and by default New Zealand taxpayers, to continue to provide retirement benefits at their current levels via NZ Super.

At present there are about half as many elderly (65 years and older) New Zealanders as children.² By 2051, there are projected to be at least 60 per cent more elderly than children, around one in four people will be over the age of 65.³

The ageing population will put unsustainable pressure on the funding of NZ Super without changes in age entitlement or eligibility or providing a better framework for private provision.

The NZ context

NZ Super

The New Zealand government's public pension scheme, for which almost all New Zealand citizens over the age of 65 are eligible, is known as New Zealand Superannuation (NZ Super). Payments, while subject to tax, are not means tested and are made regardless of whether recipients have retired.

The cost of providing NZ Super is expected to double between now and 2050 from 3.4 per cent of GDP in 2007 to 6.9 per cent in 2050⁴ — in line with our ageing population.

KiwiSaver

KiwiSaver, which commenced in July 2007, provided "...a second major policy plank in retirement living standard provision,"⁵ and has been a good start to developing a strong framework to encourage personal savings for retirement. But there are a number of enhancements that could be made to improve it, such as greater transparency and simplification of choices within KiwiSaver so workers can take ownership of their retirement savings and make informed decisions.

Solutions for New Zealand

A secure retirement income system must provide a framework that spans many decades in an individual's life — both working (accumulation) years and retirement (decumulation) years.

During any individual's working years and retirement years there will be a variety of economic conditions, including periods of both strong economic growth and decline. Any retirement income system needs to be robust and flexible enough to withstand such shocks and still produce adequate retirement incomes.

We believe there are opportunities, in fact a need, to develop new products in New Zealand's annuity and decumulation markets. We will discuss some of the issues related to our annuity market later in the report and outline some solutions for the decumulation stage, including:

- Life annuities
- Variable annuities
- Allocated pensions
- Deferred annuities
- Pooled survival payments
- Long term / indexed linked bonds
- NZ Super Plus

The bottom line

Without some security in respect of retirement incomes, a society is likely to have less cohesion, increased intergenerational problems and a greater likelihood of social unrest. In addition, the absence of a robust national retirement income system is likely to lead to reduced economic output, a lower standard of living and increased poverty amongst the aged. Such outcomes are not desirable within a civilised society.

So now — possibly more than ever before, with an ageing tsunami on our shores and in the wake of a global financial crisis and local recession — New Zealand needs to address the risks, challenges and opportunities to increase New Zealand's economic growth and ensure a secure retirement income system that improves the adequacy of New Zealanders' retirement savings.

2, 3 Statistics New Zealand, *Moving age-sex pyramid*, <http://www.stats.govt.nz/people/population/moving-age-sex-pyramids.htm>

4 <http://www.nzsuperfund.co.nz>

5 *Retirement Income in New Zealand: the historical context*, written by David Preston, Commissioned by the Retirement Commission, December 2008, p2

Mercer's key recommendations to improve New Zealand's retirement income system

Ultimately, the New Zealand government must focus on growing our economy — increasing the size of the pie — to improve the security of our retirement income system.

However, we believe there is also a need for a consolidated government body to address the issue of an ageing population and the challenge of securing our retirement income system. The issue needs to be considered holistically rather than piecemeal by each government department or area separately.

Possible recommendations:

- | | |
|---|---|
| Improve sustainability and protect against longevity risk | <ul style="list-style-type: none">▪ Increase the age of eligibility for NZ Super▪ Fix the NZ Super age of entitlement as a percentage of life expectancy▪ Fund the age pension as a fixed percentage of GDP▪ Create variable annuity and deferred annuity products or provide allocated pensions▪ Introduce means testing for NZ Super▪ Remove disincentives for life annuity products, that is, tax |
| Improve fairness | <ul style="list-style-type: none">▪ Allow people to defer the receipt of NZ Super and remain in the workforce and then receive a one-off increased payment later on▪ Align tax rates within the PIE regime or have a preferred tax rate▪ Improve protection of small account balances |
| Improve adequacy | <ul style="list-style-type: none">▪ Improve financial literacy▪ Introduce target savings via KiwiSaver for higher-income earners▪ Introduce greater incentives for higher employer contributions▪ Possibly adjust default investment options within KiwiSaver▪ Encourage salary sacrificing into KiwiSaver by lowering front-end tax rates on employee contributions with a dollar-based cap set▪ Product innovation and change in policy supported by the government — that is, NZ Super Plus |

A global blueprint

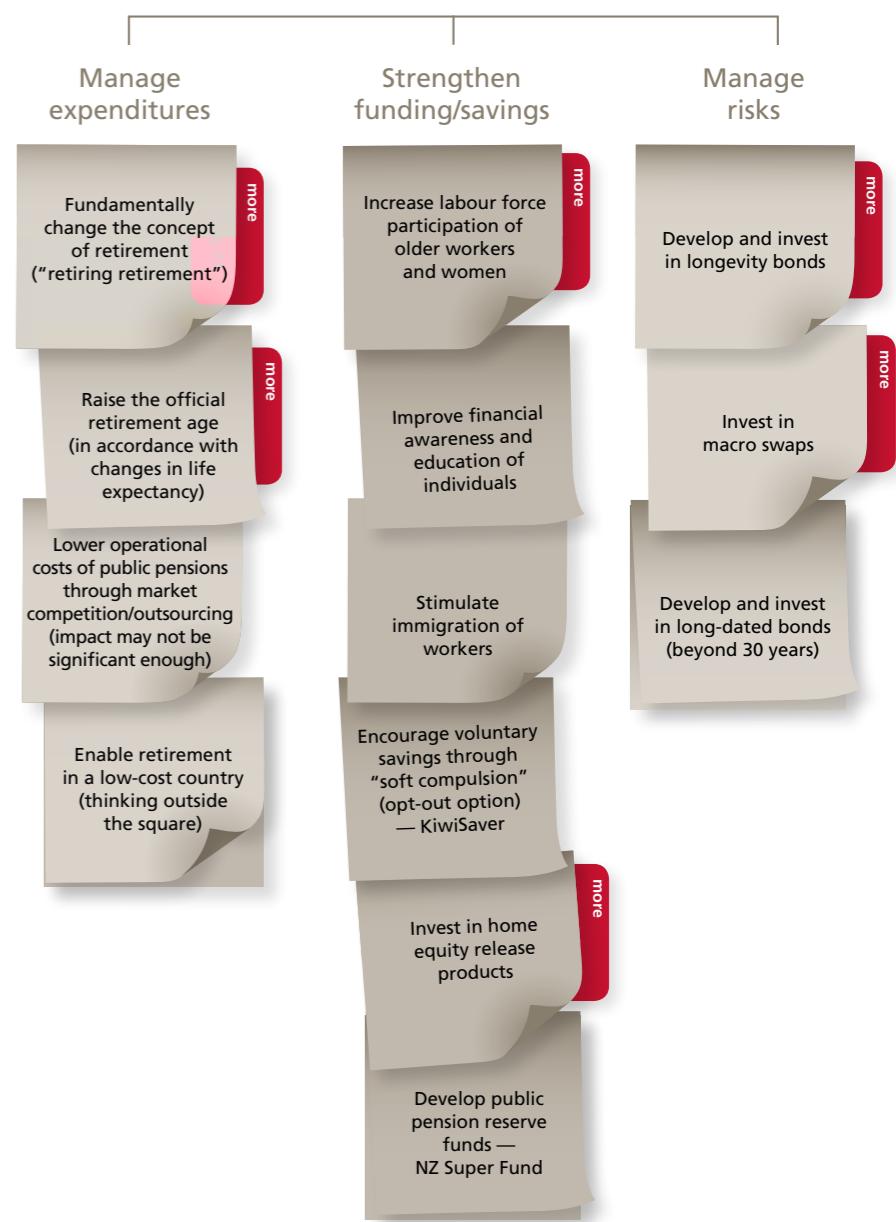
In 2008 Mercer co-authored a report for the World Economic Forum titled *The Future of Pensions and Healthcare in a Rapidly Ageing World — Scenarios to 2030*. The report recognised many of the challenges inherent in any country with an ageing population and discussed some of the mechanisms or options which could be put forward to address these challenges.

We believe that much of the data and solutions are relevant for the New Zealand context. We note that this is a global phenomenon. Some of the brightest minds in the world are applying their collective intelligence to address the challenges we face.

The following chart has been developed by the World Economic Forum in conjunction with Mercer, and used around the world as a blueprint framework of strategic options for improving the financial sustainability of retirement provisioning for the elderly.

We have tailored a version for the New Zealand market and will discuss many of the options throughout the report.

Example of strategic options for improving the financial sustainability of retirement provisioning for the elderly



1 The New Zealand context

1 in 4
New Zealanders aged 65+ by 2051

20.6 years
Current average life expectancy
for 65-year-old New Zealand woman

18 years
Current average life expectancy
for 65-year-old New Zealand man

541%
Increase in New Zealanders
aged 85+ by 2051

10:2
Ratio of New Zealand workers
to retirees in 1996

10:5
Ratio of New Zealand workers
to retirees in 2051

Challenges of an ageing population

Like that of many other parts of the world, New Zealand's population is ageing and the proportion of people aged 65 or older in the total population is increasing.

Figure 1 below shows how life expectancy has increased over the last 60-odd years — both at birth and at 65.

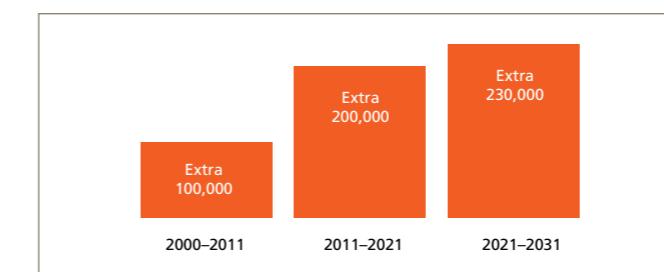
Figure 1: New Zealand life expectancy⁶

Life expectancy based on 1950–52 data		Life expectancy based on 2005–07 data	
		At birth	At 65
M	67.2	12.8	78.0
F	71.3	14.8	82.2
			20.6

M — Male, F — Female

Projections indicate the elderly population, those aged 65 years and over, is growing in numbers and as a proportion of the New Zealand population. Furthermore, the pace of growth will increase over coming decades as shown in Figure 2.⁷

Figure 2: Growth of people aged 65+ in New Zealand population over the next two decades

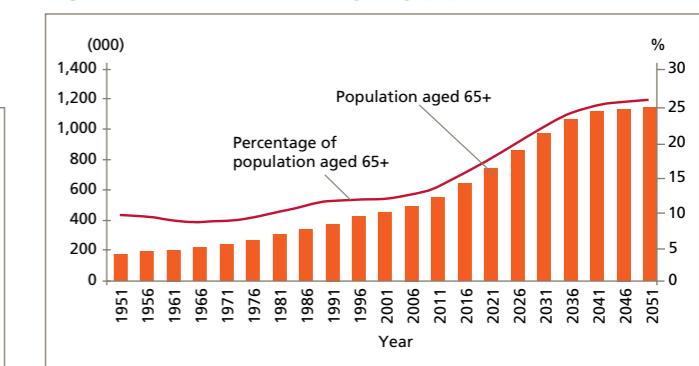


By 2051 over 25 per cent of the New Zealand population (roughly one in four people or more than 1.14 million people) will be over the age of 65.⁸ At present there are about half as many elderly New Zealanders as children; by 2051 there are projected to be at least 60 per cent more elderly than children.

Furthermore, the number of people aged 85 years and over is expected to increase six-fold, from 39,000 to over a quarter of a million by 2051.⁹ This group will then make up 22 per cent of all New Zealanders aged 65 years and over, compared with 9 per cent in 1996.¹⁰

The elderly's share of New Zealand's population has trebled from 4 per cent in 1901 to over 12 per cent in 1999 and this is expected to continue to rise well into the 21st century as shown in Figure 3 below.

Figure 3: New Zealand's ageing population



⁶ Statistics New Zealand, *New Zealand Life Tables 2005–07*, Chapter 2: National trends in longevity and mortality <http://www.stats.govt.nz/analytical-reports/nz-life-tables-2005-07/chapter2.htm>

⁷ Khawaja, Mansoor and Thomas, Nicholas; *Population ageing in New Zealand*, 2000, p7

^{8,9,10} Statistics New Zealand, *Moving age-sex pyramid*, <http://www.stats.govt.nz/people/population/moving-age-sex-pyramids.htm>

The three phases of retirement

Broadly speaking, there are three distinct phases during a person's retirement: an active phase, a passive phase and a frail phase.

The needs of a retiree will depend on which stage they are in and the length of time they expect to spend in each phase. Not all retirees will spend time within every phase and certain phases can be skipped. Here we look at what is involved in each stage.

Active

- Newly retired individuals
- Will have a relatively high level of spending potential
- Likely to still have a good standard of health and undertake new activities, such as travel, drawing down a significant part of their retirement savings
- Recent increases in life expectancy have increased the average length of time spent in the active phase

Passive

- Participation in travel or other active pastimes reduces
- Generally retirees will retain a sense of independence
- Health problems associated with ageing may be increasing
- Spending on non-essentials decreases or ceases
- Need for income generally at its lowest

Frail

- Independence is gradually reduced
- Need for expensive healthcare increases
- May require nursing care and movement into a serviced retirement community
- Available capital may have depleted significantly

Structuring a retirement income to meet the needs in each of the stages can be difficult for individuals as there is a degree of uncertainty involved in the length of time a retiree will spend in each phase as well as the time spent in retirement as a whole. Ensuring flexibility and security in any retirement income system is therefore essential.

Importance of flexibility

Some professions by their nature mean that an employee cannot continue to work past a certain age due to physical demands. Therefore, they may need to start receiving retirement benefits from an earlier age.

Retirement benefits can take many different forms and any single form will never be suitable for all people or capable of providing a universal solution to retirement income and ageing populations. By giving people a choice as to how they structure their benefits they are able to select the features that best meet their circumstances and provide them with the most value.

Need for security

Once a person reaches retirement age they are likely to move from a position of net savings, where income outstrips spending, to one where they begin to draw down on their life savings. As the retirement "pot" reduces, retirees will be anxious to ensure the amount of money saved for retirement does not run out.

The New Zealand system

To balance the many risks associated with ensuring a secure and adequate retirement income for all New Zealanders, we believe a secure retirement income system should be built on three pillars.

The three pillars are:

- Government funded age pension
- Savings via the workplace
- Voluntary additional personal savings

Pillar 1

Almost all New Zealand citizens over the age 65 are eligible for New Zealand's universal pension, NZ Super. Payments, while subject to tax, are not means tested and are made regardless of whether recipients have retired. Although NZ Super is generous, it is unlikely to be enough for most New Zealanders to live the type of life they desire in retirement. It will also be increasingly difficult for the government to continue to fund NZ Super at its current level with no changes in age entitlement or eligibility and without sufficient pre-funding.

Pillar 2

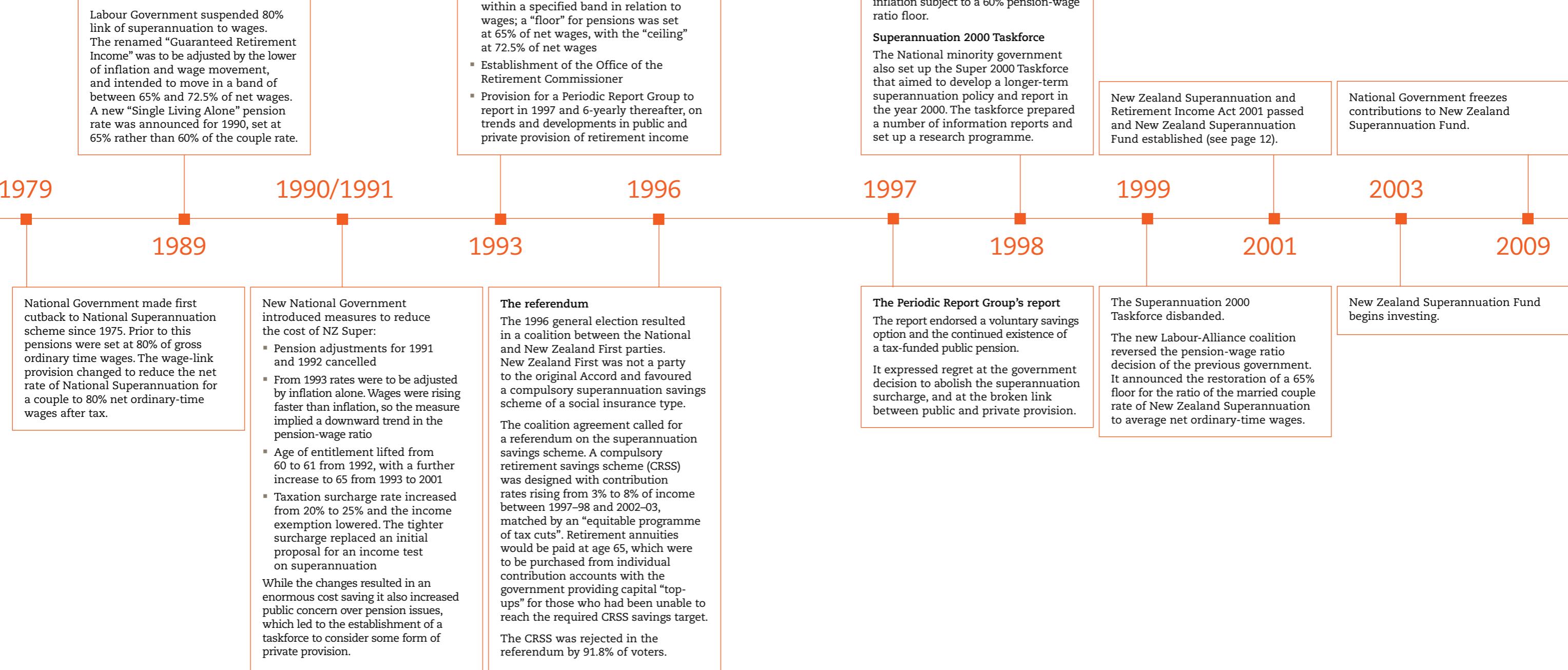
A formal framework to support and encourage New Zealanders to save for retirement — the second pillar — was introduced in 2007 in the form of KiwiSaver. KiwiSaver is a soft-compulsion scheme where New Zealand workers contribute a percentage of their income (matched to a defined percentage by the workers' employers) to a retirement savings account. Although this is a good start to cementing a strong second pillar in our system, we believe there is a long way to go to improve KiwiSaver.

"Now the debate about sustainable pension systems for the future is all about spreading the load over several pillars."

The Economist, "Scrimp and save", 27 June, 2009

We will outline a short history of both NZ Super and KiwiSaver to understand how these respective retirement income pillars have developed in New Zealand, and subsequently how they have shaped the security of our retirement income system.

Brief history of New Zealand superannuation



Future funding of NZ Super

NZ Super is essentially a pay-as-you-go system, meaning current taxpayers fund current retirees.

The cost of funding NZ Super is expected to double between now and 2050¹¹ in line with our ageing population.

The New Zealand Superannuation Fund was created to reduce the burden on taxpayers of the future cost of funding NZ Super payments. It was established under the New Zealand Superannuation and Retirement Income Act 2001 and accumulates and invests Crown contributions.

The Fund's mandate is to invest the money in a way that maximises returns without undue risk, and to avoid prejudice to New Zealand's reputation as a responsible member of the world community. As the cost of providing NZ Super escalates, the Crown will draw on the Fund to help smooth the impact on its finances.

The Fund began investing in September 2003 with \$2.4 billion in cash. As at 31 May 2009 the Fund's assets totalled \$13.1 billion. It was expected to grow to around \$100 billion by 2025, making it one of the largest funds in Australasia. However, the New Zealand government announced as part of the 2009 Budget that contributions to the Fund would cease until 2020/2021.

When the New Zealand Superannuation Fund was created, the legislation did not stipulate that future governments would be compelled to contribute, but the proposed legislation would require any government which did not do so to explain the reasons for the deviation from the target funding, the implications for future contribution rates and the action it planned to take to return to the required funding levels. It was also proposed that the accumulated assets and income of the fund would not be able to be drawn on until after the year 2020, and then only to fund New Zealand Superannuation payments.

The Fund was expected to begin contributing to NZ Super payments by 2027; this is now expected to be delayed until 2031.

"The government has reviewed all its substantial cash commitments and decided to suspend automatic contributions to the New Zealand Superannuation Fund."

Bill English the Minister of Finance, 2009 Budget Speech

Brief of history KiwiSaver

KiwiSaver Mark III

Announced in the 2007 Budget, roughly three months before the commencement of KiwiSaver, it provided for compulsory employer contributions from 1 April 2008 starting at 1% of gross taxable salary and increasing by 1% each year until 1 April 2011 when the employer contribution would be at 4% of gross taxable salary. It also provided for both member and employer tax credits funded by the government. These equated to a maximum of \$1,043 per member per annum for each of the tax credits.

KiwiSaver Mark I

Announced in the 2005 Budget, it had provisions for private/employee contributions, a \$1,000 kick-start contribution from the government, a \$40 per annum administration fee subsidy from the government and a home deposit subsidy through Housing New Zealand.

2005

2006

2007

2008/2009

KiwiSaver Mark II

Announced in 2006, it allowed for employer contributions, up to 4% of gross taxable salary, to be paid into KiwiSaver with no contributions tax.

KiwiSaver Mark IV

Announced in December 2008 and passed under urgency on 15 December 2008. The changes came into effect from 1 April 2009 (see page 14).

"The biggest change of all for retirement provision has been the 2007 introduction of KiwiSaver... The KiwiSaver contributory cash accumulation schemes assisted by government and employer contributions are a distinct break with the policies of the previous two decades."

Diana Crossan, Retirement Commissioner, Retirement Income in New Zealand: the historical context, December 2008

The changes to KiwiSaver Mark IV — and our assessment of their implications — are outlined in the table below.

Changes introduced (KiwiSaver Mark IV)	Mercer's view
Tax credits Removal of all employer tax credits from 1 April 2009.	Employer tax credits assist in encouraging employers to develop a KiwiSaver strategy and in some cases to contribute either at a higher or accelerated rate towards KiwiSaver. This change, in conjunction with a reduction in the employer contribution rate (see below), may lead employers to rethink their KiwiSaver strategy. Subject to existing employment agreements, they may even reduce the current employer contribution rate if in excess of the minimum to offset the increased cost.
Contribution changes From 1 April 2009, the employer's minimum compulsory contribution rate was capped at 2% of employee's gross salary. The 2% rate also became the default member contribution rate for new employees and existing employees are able to choose to contribute a minimum of 2% of gross taxable salary.	For employers currently contributing at the minimum rate there will be little change. Those who adopted the 4% contribution rate early (before it is enforced from 1 April 2011) must consider the impact on costs and employee morale of reducing contribution rates, as well as any obligations under existing employment agreements.
Tax changes on employer contributions The exemption from Employer's Superannuation Contribution Tax ("ESCT") will only apply on employers' minimum contributions that match an employee's contributions. This policy means that there will be tax on employer contributions in excess of 2% of gross salary even if employee contributions are greater.	Subject to the requirements of any employment agreements, employers may now consider capping employer contributions to KiwiSaver at 2% with no tax incentives. Any additional contributions are likely to go into a non-KiwiSaver scheme or on other employee benefits such as company wide insurance benefits.
Administration fees The administration fee subsidies paid by the government will not apply to any member who joins, or who is automatically enrolled in, KiwiSaver on or after 1 April 2009. KiwiSaver members who joined before 1 April 2009 may be eligible for a further one or two 6-monthly payments of the fee subsidy, depending on when the last fee subsidy (if any) was paid.	This change penalises those with smaller account balances and most likely those individuals least able to afford the removal of the \$40 per annum subsidy.

How Kiwis have responded to KiwiSaver

Following the launch of KiwiSaver in 2007, Mercer undertook a survey to establish working New Zealanders' understanding of, attitudes to, and intended behaviour towards KiwiSaver and where it belongs in their broader retirement strategies. The survey was repeated twice, approximately every 6 months, with the last results released in Mercer's KiwiSaver Sentiment Index in June 2008. The Index is currently being updated with attitudes being revisited 2 years on from the launch of KiwiSaver.

What we know from the latest findings is:

- 71% of respondents continue to believe KiwiSaver will be beneficial in preparing for retirement
- Working New Zealanders are giving increasing consideration to their financial future, with a rise — from 33% in the previous index to 40% in the latest — in the proportion indicating they considered their retirement funding
- Since the first survey (August 2007), there has been a steady decline in the proportion of Kiwis indicating they have given little thought to retirement
- Just over half (53%) have given some thought to, and started planning for, retirement. Not surprisingly only 28% of 18–29-year-olds had given some thought to retirement, compared to 72% of those aged 50+.

2 Risks & challenges

AM

Risks and challenges for individuals and the government

Any retirement system carries a number of risks for all involved. Ensuring the right balance of risk amongst all stakeholders — the government, individuals and the private sector — is essential to increase the likelihood that all New Zealanders will be able to retire with dignity and a sense of security.

We have listed some of the risks below and will go on to offer recommendations on how to best mitigate these risks later in the report.

Funding and adequacy of NZ Super

Based on the current policy, most New Zealanders will expect to start receiving NZ Super from age 65, and to receive the full entitlement regardless of their assets and other income. This presents a funding risk for both the individual and the government for the following reasons:

Adequacy

Increased life expectancy and lifestyle expectations mean NZ Super is unlikely to be sufficient to finance the desired standard of living of most people in retirement. The current level of NZ Super for a married couple is approximately 66 per cent of the average wage on a net of tax basis (33 per cent per individual). We believe this will not be enough for most to maintain the quality of life they desire in retirement. Therefore people need other sources of income in retirement, such as superannuation (for example, KiwiSaver) or other investments.

Funding pressure

NZ Super is funded from general tax revenue rather than via an explicit tax, which essentially makes it a pay-as-you-go system whereby the current working population funds the cost for the retirees at that time. As the population ages, and birth rates fall, there will be fewer taxpayers per retiree and the tax base from which money is collected to fund the cost of NZ Super will shrink, which will seriously affect the government's ability to support NZ Super.

The ratio of retirees to the total NZ population is currently one in four — this is expected to shrink to one in two by 2051.¹² The net cost of funding NZ Super is currently 3.4 per cent of GDP. Projections indicate that by 2030 this cost will be about 5.6 per cent, and by 2050 about 6.9 per cent of GDP¹³, this more than doubles the amount of money required to fund NZ Super.

Structural changes, such as the eligibility criteria and/or eligibility age, or introducing means testing as exists in a number of other countries, will be necessary to manage the costs associated with the provision of NZ Super.

¹² Statistics New Zealand, *Moving age-sex pyramid*, <http://www.stats.govt.nz/people/population/moving-age-sex-pyramids.htm>

¹³ <http://www.nzsuperfund.co.nz>

Longevity risk: out-living retirement savings

Longevity risk is the risk that a retiree will live longer than expected, and their retirement savings will run out before they die.

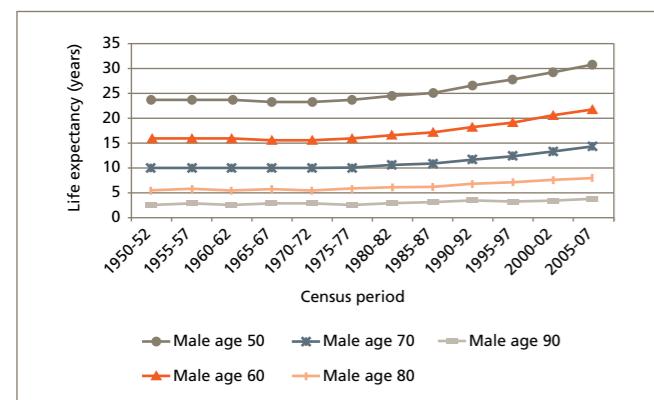
Knowing how long you will live and therefore how quickly you should draw down your retirement savings is impossible. A secure retirement system should therefore provide the right structure and products to help retirees mitigate the risk of retirement savings running out.

We have noted that life expectancy is increasing. Guaranteeing an adequate annual income throughout retirement will be difficult, unless a lifetime annuity has been purchased. We discuss annuities in further detail later in the report.

Other options being initiated overseas include the further development of longevity indices and the issuance of longevity-indexed bonds or "LIBs". However, the cost and sophistication of these new age instruments, as well as the potentially small market size in New Zealand, may mean that these new instruments are not viable options in the New Zealand context.

The matter of increased longevity for the retired population is shown in Figures 4 and 5 which display the life expectancies over the last 60 years at various ages.

Figure 4



Financial literacy

A critical step in retirement planning is determining how much income a person will need to live comfortably in retirement. Without an income target it is very difficult to know the amount of capital that will be required, and therefore the appropriate investment strategy to pursue during the period of accumulation of capital (working years).

Determination of an income target is extremely difficult. Raising awareness and financial literacy is both a critical and challenging priority for most countries.

Financial literacy in New Zealand is low but improving.¹⁴ A lack of education in financial matters can limit people's options, and can therefore jeopardise their future retirement income. For many, especially younger people, financial planning for retirement seems a complex and faraway concern, but it is never too early to start improving financial literacy.

We have been active in providing workplace financial education for years and have seen first hand the positive results of such programs.

We fully support the Retirement Commissioner's drive to improve financial literacy in New Zealand.

Lack of decumulation investment options

Sufficient investment options must be available in any market to meet individuals' needs in both their working and retired life. One such option is a lifetime annuity — that is, a regular annual income, purchased from a life office on retirement and paid until the person dies (which can counter the effects of longevity risk). Currently there is only one provider of lifetime annuities in New Zealand, which severely limits the options available to retirees.

There is a range of products that can combat the key risks faced by retirees, particularly in the decumulation stage. We outline some of these products later in the report, but note that no product or policy in isolation can simultaneously address all the risks faced by retirees. This is a complex area with multiple and non-aligned risks, which means any solution can not be a "one size fits all" simple solution.

Market risk

A significant shock to investment markets is a risk to both individuals and the government. A prolonged share market downturn (either before or after retirement) may erode a retiree's savings to the extent that they will need to rely more heavily on NZ Super which may reduce their retirement income or force them to delay retirement.

If a retiree's income (either from NZ Super or other investments) does not grow in line with inflation, the retiree will experience a loss of purchasing power (that is, their income will purchase relatively less as time passes). The global financial crisis has been a major risk for those retiring over recent years and while inflation remains low at present, it still represents an area of significant uncertainty for retirees.

A period of low interest rates may have a similar effect to the extent that retirees have fixed-interest investments.

Decentralised and non-consolidated governmental management

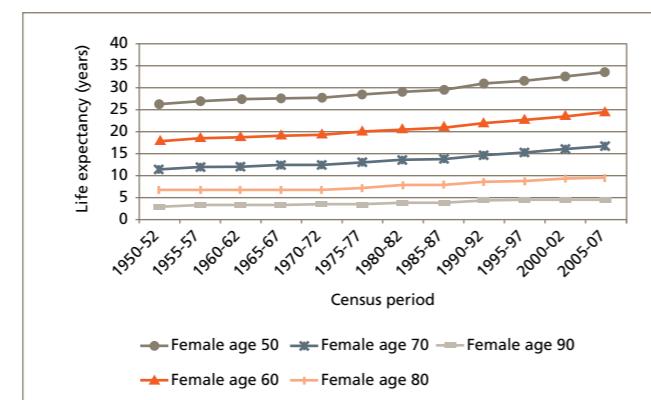
The issue of an ageing population affects many government departments and perhaps all. We believe this is one of the most critical and widespread economic risks facing New Zealand in the 21st century and is one which has the potential to threaten the prosperity of New Zealanders.

Within the New Zealand government and related government departments, or crown related entities, there are numerous areas which will be affected by the ageing population including, but certainly not limited to:

- Commerce
- Finance
- Health
- The Retirement Commissioner
- The Ministry for Economic Development (including the Government Actuary's Department)
- Immigration
- Working for Families
- ACC

Because the issue of ageing is so broad, we believe the government should look at some type of consolidation so that this issue is considered holistically rather than piecemeal by each area separately.

Figure 5



3 Recommendations to improve NZ Super

"Even a cursory glance at the sorry history of superannuation in this country shows it has frequently been treated as a political tug-of-war... For a while it looked as if some sort of truce might finally have been reached. But once again, it seems, the process has been politicised."

New Zealand Herald, "Super: It's time to talk", 12 June, 2009

Recommendations to improve NZ Super

We believe changes are needed to improve not only New Zealanders' awareness of the adequacy of NZ Super, but also the overall security of New Zealand's retirement income system.

Our recommendations include a considering of one or all of the following:

- **Change the NZ Super eligibility age**
- **Fix the NZ Super age of entitlement as a percentage of life expectancy**
- **Introduce means testing for NZ Super**
- **Fund the age pension as a fixed percentage of GDP**
- **Allow people to defer receipt of NZ Super and get an increase later on**

Change NZ Super age

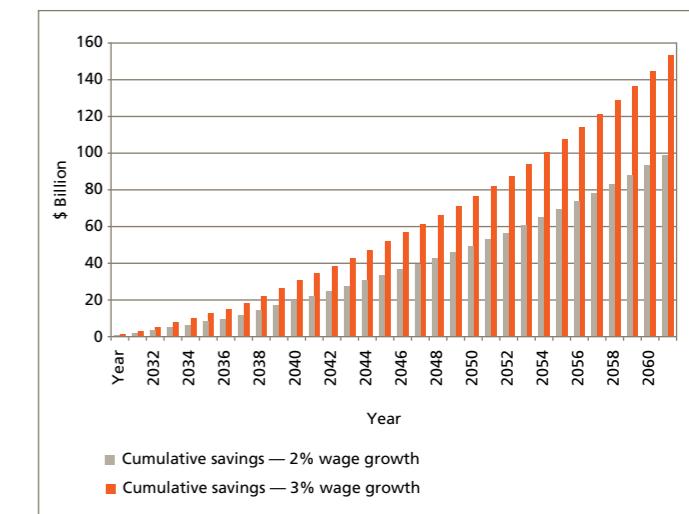
We acknowledge this option is politically sensitive. The prime minister, John Key, is on record as saying he will resign if the age of eligibility is increased.¹⁵ However, we also strongly believe there are two dimensions to the issue; one being political and the second being the need for a fact-based debate about what the best outcome for New Zealand is. Raising the NZ Super eligibility age must be part of any thorough debate on the best possible retirement income system.

Currently New Zealanders become entitled to NZ Super at age 65. Increasing the entitlement age of NZ Super will reduce the period over which NZ Super is paid to retirees, therefore reducing total outlays. Developed countries throughout the world have taken similar measures in recent years in the face of spiralling pension costs — the US and UK are increasing their pension ages to 67 and 68 respectively, whilst Australia recently announced a phased increase in its pension age from 65 to 67 by 1 July 2023 (the first change in Australia's retirement age in 100 years).

There is a precedent for changing the entitlement age in New Zealand. The entitlement age was originally 60, but was lifted from 60 to 61 effective from 1992, with a further phased increase to 65 from 1993 to 2001. The entitlement age has been 65 since 2001.

Figure 6 shows the potential cumulative cost impact (that is, saving) if the age of entitlement for NZ Super was increased to 67 from 2031 — more than 20 years away. We have shown this on two scenarios — one assuming 2 per cent average wage growth over all future time periods ending 2061 and one assuming 3 per cent average wage growth over all future time periods ending 2061.

Figure 6



¹⁵ John Key, Wednesday, 8 October 2008: <http://www.johnkey.co.nz/index.php?archives/498-NEWS-Economic-plan-Superannuitants-get-a-boost.html>

Fix the NZ Super age of entitlement as a percentage of life expectancy

Alternatively, rather than changing the NZ Super entitlement age to a fixed age, the entitlement age could move in line with changes in life expectancies. For example, current life expectancy at birth is 78 years for a male, the entitlement age could be set at somewhere between 83 per cent and 86 per cent of male life expectancy (that is, between 65 and 67). As life expectancy increases, this percentage would remain the same, but the actual entitlement age would increase. Changes could occur every 5 years in line with the publication of the New Zealand Life Tables, or alternatively every 10 years to reduce the number of changes over time.

While we believe this is a sensible and viable option if implemented via a simple model it does raise a number of discussion points that would need to be considered prior to any change. For example, Maori have a lower life expectancy than other New Zealanders.¹⁶ Should Maori therefore have an earlier age of entitlement to NZ Super? If so, will this lead to other groups from within the population putting forward special case considerations for earlier access?

“Being generous to pensioners was affordable in 1980, when in the rich world there were only about 20 people of retirement age for every 100 people of working age. But that ratio has already risen to 25% and by 2050 it will be around 45%, meaning that there will be only about two workers for every pensioner. In some countries things will be much worse... something has to be done.”

The Economist, “Scrimp and save”, June 27, 2009

¹⁶ Statistics New Zealand, New Zealand Life Tables 2005–2007, Chapter 2: “National trends in longevity and mortality”, <http://www.stats.govt.nz/analytical-reports/nz-life-tables-2005-07/chapter2.htm>

Introduce means testing for NZ Super

NZ Super is currently paid at the same rate to all eligible recipients regardless of their financial circumstances. The after-tax amount of NZ Super paid to a married couple is 66 per cent of the after-tax average wage. While a universal superannuation system such as NZ Super has a simple administration system and the structure makes it easier for people to understand — it does raise a number of queries regarding equity.

There is an argument that those who are better able to self-fund their retirement income should receive a lower level of NZ Super. A means-tested NZ Super would go some way towards constraining the future financial burden on governments as long as the administration of the system was not so complex the cost-benefits were eliminated with bureaucracy expenses. An example of how a means-tested system may work could be, the level of NZ Super paid is reduced for each dollar of income earned and/or financial assets owned above a certain amount.

Introducing a means test to NZ Super could also encourage a culture of saving for retirement to supplement NZ Super income where people have the financial capability of doing so during their working lifetime, consequently increasing income and quality of living in retirement.

Defer receipt of NZ Super and get an increase later on

This measure would involve a person continuing to work after age 65 and electing to delay the start date for receipt of NZ Super (for example, until age 70 at the latest). In exchange for this deferral, the person would be entitled to a one-off higher NZ Super payment once payments commence.

The effect on overall pension costs would depend on the level of additional entitlement once NZ Super payments commence. The additional entitlement should only be a proportion of the NZ Super entitlements foregone in the deferral period, given the individual would have had the opportunity to earn employment income in that time.

The proposal may also encourage more New Zealanders to remain in the workforce after age 65, potentially improving productivity and increasing the amount available to use for retirement income outside NZ Super. But, there may be a need for either incentives and/or some compulsion if individuals are reluctant to defer their NZ Super.

Fund the age pension as a fixed percentage of GDP

A further initiative that could assist in managing the costs of funding NZ Super is to fund payments via annual contributions equal to a fixed percentage of gross domestic product (GDP). The percentage would be set so that the contributions based on normal years of GDP output would be sufficient to make expected NZ Super payments to retirees (allowing for appropriate indexation of payments).

This measure would bring some level of certainty to the amount required to meet the government's pension costs each year. However, NZ Super entitlements may need to be adjusted to reflect variations in GDP growth. For example, in years of low (or negative) GDP growth, NZ Super entitlements may need to be reduced (or the increase limited to something less than wage inflation). In years of strong GDP growth, payments may be higher.

Any variability in the level of NZ Super is unlikely to be popular with New Zealanders, and relies on strong GDP growth to fund the NZ Super costs of the ageing population, especially if NZ Super levels are to be maintained.

Increase tax take

NZ Super is funded via the tax system. The government does have several options to raise tax to cover the increased cost of NZ Super. For example, increase taxes on consumption, target “cash economy” etc.

Retiring retirement?

The concept of retirement as a period of leisure only really came into being in the middle of the 20th century. Prior to that, and continuing in many third world countries today, people effectively worked until they no longer could, or died. Within the 20th century the concept of retirement has moved from “a short period of rest” to “a period of reward”, to what many now believe is an embedded “right”.

While this “thinking outside the square” has a number of very valid arguments and is worth exploring, we expect the playing field being put forward would simply be too big a leap for many governments to make or for individuals to accept.

4 Recommendations to improve KiwiSaver

Recommendations to improve KiwiSaver

We believe KiwiSaver is a great start as a second pillar in our retirement savings framework. However, we also believe a number of enhancements could be made to assist in delivering on the intended goals of a private provisioned system.

There is, and we believe there always has been, a need for greater transparency and simplification of choices within KiwiSaver so that workers can take ownership of their retirement savings and make informed decisions. This goes hand in hand with the need to improve financial literacy in New Zealand and empower individuals to manage their retirement savings destiny.

Some of our suggested recommendations include:

- **Reform of tax on investment earnings**
- **Targeted compulsion**
- **Greater incentives for higher employer contributions**
- **Improving default investment options**
- **Protection of small-account balances**
- **Salary sacrifice**

Reform of tax on investment earnings

Under the current tax structure, New Zealanders will pay more tax on investment earnings over the term they invest in KiwiSaver than the sum of all government incentives they receive to join and remain in KiwiSaver. After maximising member tax credits, what incentives or rewards are available to New Zealanders for keeping their money in KiwiSaver until they are 65? To better encourage retirement savings via KiwiSaver, we believe there is a need for a “break-even” tax rate — an average rate at which the total investment tax paid by an individual over their life equates to the various incentives paid by the government.

Our modelling, which is based on an individual earning the current national average wage of \$47,324,¹⁷ shows that the break-even tax rate should be in the order of 11.5 per cent assuming an individual is invested in a growth or balanced investment option and 15 per cent assuming an individual is invested in a conservative investment option. Under the current tax regime, the average tax rate for a growth or balanced investment option is around 20 per cent and for a conservative option is around 26 per cent.

Certain aspects of the current tax regime could be maintained, but as a whole, an investment portfolio, regardless of the mix of growth and defensive assets, should ideally have an average tax rate in the break-even range if any government really wants to provide a savings incentive.

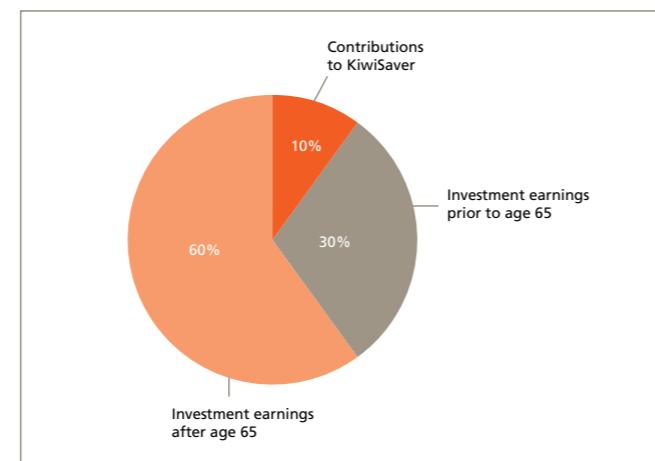
Mercer has called for the introduction of a single/preferential tax rate for investment earnings inside KiwiSaver for some time. Preferential tax on investment earnings inside long-term savings vehicles such as superannuation is common in many countries including Australia, the US and the UK. New Zealand already has some assets which are preferentially taxed such as property and this is a major factor that has influenced the attractiveness of rental property investments and hence house prices in New Zealand.

Alignment of tax rates within the PIE regime or having a preferred tax rate, is important in supporting New Zealanders manage their finances, save for their future retirement and to encourage them to repatriate their capital from overseas back to New Zealand.

Mercer's modelling confirms only a small portion of a person's retirement capital and investment earnings (hence tax) accrue prior to age 65. This represents the capital used in the decumulation phase.

This is demonstrated in Figure 7 for a member who commences in KiwiSaver when they enter the workforce.

Figure 7: Accrual of retirement capital and investment earnings



We believe that a preferential tax rate on investment earnings should be part of a broader tax review. However, from a retirement income perspective a preferential tax rate could:

- Encourage people to transfer savings from non-superannuation assets and traditional superannuation to KiwiSaver
- Simplify investment reporting for fund managers
- Help consumers better understand their KiwiSaver returns — since everyone will be taxed at one rate
- Improve incentives for New Zealanders to repatriate any superannuation back to New Zealand from countries abroad such as Australia
- Remove the issues currently inherent in the PIE tax regime and the need to keep manually re-aligning PIE rates with personal tax rates

Targeted compulsion

We believe the government should consider compulsory KiwiSaver contributions for employees in high-income brackets. The exact income bracket would be dependent on modelling including, but not limited to, factors such as contribution rates, tax on contributions and whether NZ Super was means tested.

We know that the concept of compulsory superannuation is not favoured by many New Zealanders and that few are willing to forgo consumption today for potential benefits tomorrow. However, compulsory savings systems in other parts of the world — such as Australia — have led to increased financial security for retirees, growth of investment funds and a subsequent injection of funds into the wider economy.

KiwiSaver contributions are already around \$40 million a week and total over \$2 billion a year.¹⁸ Increasing this pool of money would make up one of the biggest fund segments in New Zealand and open up an array of long-term investment opportunities. We know not all of this pool would be available for domestic investment, but it would eventually be available for the consumption of New Zealanders and therefore for the benefit of New Zealand's economic development.

Greater incentives for higher employer contributions

We believe that higher employer contributions under KiwiSaver are needed. Whether there should be tax incentives to encourage such behaviour or whether higher contributions are mandated by law should be up for debate.

Since the advent of KiwiSaver a couple of things have happened.

- Some companies have wound up their existing superannuation schemes and now provide for employer-funded superannuation only via KiwiSaver. Employer and employee contributions are now being made at a lower level in many cases.
- Rather than moving through the stepped process with respect to increasing employer contributions under KiwiSaver Mark III, many companies decided to contribute the full 4% of an employee's gross taxable earnings from 1 April 2008 when compulsory employer contributions commenced, and in some cases even before this date.

The removal of the employer tax credits and the contributions tax exemption on any employer contributions above 2 per cent of an employee's gross taxable earnings has led to many companies reviewing their approach.

We believe the government should consider one of two possible approaches.

- Reduce contributions tax to a preferential rate or rates so employees are encouraged to join KiwiSaver and have employer contributions paid into KiwiSaver rather than receiving cash in hand. We strongly support this model because the net of tax differential is too beneficial to ignore.
- Mandate higher employer contributions as per the original KiwiSaver legislation. Such contribution levels will need to be independent of current or future economic circumstances and while this may seem difficult and costly to implement, it will equalise with reductions in other areas of employer expenditure over time.

Increase labour force participation of older workers

One of the biggest business risks in New Zealand in the immediate future is not just economic factors — it is the significant demographic shifts occurring that will threaten the sustainability of many New Zealand businesses. Increased workforce participation has significant benefits for individuals, employers and the government.

According to a research report we released in late 2008 — *Workplace 2012: What does it mean for employers?* — by 2012, one in five workers in New Zealand will be aged 55 or older and employers will have to shift their focus from young to old to maintain a viable workforce between now and then. A phased retirement plan that allows — and encourages — individuals to remain in the workforce beyond the age of 65 is an important part of any sustainable retirement income system.

While the current economic recession has changed the dynamics of New Zealand's labour force with increased supply and reduced demand, in the longer-term we believe there will be continued pressure for labour, particularly skilled labour. This trend, teamed with an ageing labour force, will mean employers will need to encourage older workers to remain in the workforce.

Salary sacrifice

If the government were to adopt a model with lower front-end tax rates on employer contributions and, by association, salary sacrifice available for member contributions, it would encourage members to contribute more towards their retirement savings.

On the other hand, to ensure high-income earners are not overly advantaged by such a regime, the government could look at dollar-based caps so employer contributions plus a member's own salary sacrifice contributions do not exceed certain amounts.

In Australia, employer contributions to superannuation and any member salary sacrifice contributions, to a limit, are taxed at 15 per cent (compared to the upper personal tax rates of 40 and 45 per cent). In the 2009 Federal Budget, the cap for employer contributions plus the member's own salary sacrifice contributions was reduced from \$50,000 to \$25,000 per annum for those under the age of 50 and from \$100,000 reduced to \$50,000 per annum for people over 50 years.

Our recommendation for the New Zealand government is to pursue a similar model in relation to KiwiSaver or complying superannuation funds to encourage employees to forgo short term consumption and save more money to improve the adequacy of their retirement income.

Default investment options

Many KiwiSaver schemes, and in particular the six default schemes selected by the government, including Mercer, have a conservative default investment strategy. This applies if a member makes no election in respect of their investment options. Under the requirements set for default investment options, 75 per cent (and no more than 85 per cent) must be invested in what have traditionally been called defensive asset classes (fixed interest and cash) and the remainder in growth assets (shares and property).

KiwiSaver is a long-term savings vehicle; it does not make sense for many people, particularly younger people, to invest in such a conservative manner as this is likely to lead to poorer long-term investment outcomes.

We are aware that the government is looking at other possibilities and that this has been an area of widespread concern. Mercer would welcome a change in this area towards a more appropriate growth strategy or strategies for default investment options within the default KiwiSaver schemes.

Protection of small account balances

One of the original KiwiSaver subsidies was the annual administration fee subsidy of \$40 per annum for each KiwiSaver member. The current national government removed this subsidy with effect from 1 April 2009. It is worthwhile to consider just how significant the impact of this change may be. In particular for:

Children under the age of 18: Many providers pushed strongly for those under 18, or parents of those under 18, to set up KiwiSaver accounts on the premise that for a small contribution members would effectively receive \$1,000 from the government's kick-start.

An annual administration fee of \$40 on a small balance of \$1,001, as per the example above, would now equate to a fee of 4 per cent of the member's account.

People close to 65: People in this group were also, in many cases, encouraged by providers to put in a small lump sum to receive \$1,000 from the government on the basis that they could access this either at 65 or in 5 years time (whichever is later).

If no further contributions are coming into the accounts (and indeed with recent market volatility, these accounts may have gone backwards) an administration fee of \$40, or more, could be significant or unaffordable for some.

Protecting small accounts — Australian lessons

In Australia, small accounts are more prevalent than in New Zealand, partly because all workers have superannuation and many workers have multiple accounts. In 1994 the Australian government passed a law with the view of protecting small account balances below AUD\$1,000. The law dictates that providers, in most circumstances, cannot charge administration fees which exceed investment earnings allocated to small account balances. There are some exceptions, but this law applies in most cases. Note that the cost of the subsidy is met by other members in the superannuation plan.

We feel this is a very sensible piece of legislation and could well be considered for New Zealand. It protects members with small accounts (that is, children, those close to 65, casuals and those people on maternity or paternity leave) while at the same time having no cost to the government.

5 New Zealand solutions

New Zealand solutions

The next step to help New Zealand's ageing population secure an adequate and sustainable retirement income is to create a viable and efficient market in retirement income products.

The New Zealand annuity market

The knee-jerk reaction in New Zealand to the challenge above is to suggest we look to develop a viable annuity market. While traditional annuities do have significant benefits and address some of the risks facing retirees (which are addressed earlier in this report), there are a number of significant demand and supply issues with annuities in New Zealand.

As annuities are one of the few possible options already in existence, we do think it is of value to examine the historical issues and context.

Annuities can remove much of the uncertainty surrounding the variability in life expectancy and can also remove or reduce investment return risks and inflation risks. Consequently, it would seem there are benefits for New Zealand in developing a strong annuity market, as was historically the case in overseas markets, such as the UK. However, in New Zealand the annuity provider market now consists of only one medium-sized New Zealand life insurance company, following the withdrawal of all other providers over the past 5 to 10 years. In addition, traditional annuity markets have been in constant decline in most markets where they were traditionally found.

The very limited market is due to both demand and supply issues. The reasons for this are discussed overleaf.

What is a life annuity?

A life annuity is a product provided by a life insurance company where, in return for a lump sum payment, a pensioner is provided with a regular income stream for the remainder of their life.

The amount of income payable is dependent on the remaining life expectancy of the annuitant at the start of the contract, the initial lump sum amount and the specific features of the pension benefit.

The optional features that can be incorporated into an annuity include the following:

- An attaching spouse's annuity. If the primary annuitant dies then an annuity of some form is paid to the spouse until they die. Often this is 50% or 60% of the original annuity.
- Minimum term guarantee. If the annuitant dies within the guarantee period the outstanding payments until the end of the term are paid to their estate.
- Increasing/decreasing payments. Payments increase (or decrease) over time in line with an index or in a pre-determined manner. For example, annuities generally track the consumer price index ("CPI") or they may have a fixed rate of increase each year.

The pricing of the annuity — that is, the amount of pension payable per \$1 of capital — will also depend on prevailing economic factors at the outset, primarily long-term interest rates and mortality rates. Life insurance companies use these long-term interest rates (typically based on government bond yields) to calculate the amount of the annuity, as they typically invest the purchase price of an annuity into government bonds.

New Zealand annuity market: Demand issues

1 Lack of an annuity culture

Consumer awareness and understanding of annuity products is very low. Reasons for this include:

- The retirement savings environment has not included any requirement for compulsory purchase of annuities from retirement savings. There have been virtually no tax reasons for savers to agree to lockup their savings.
- New Zealanders have developed a natural preference for lump sums and DIY investment management of these sums. Continued control of the lump sum does allow for flexibility in spending decisions and New Zealanders value this above a locked-in type of investment, despite the fact that we believe significant risks remain and are introduced by such an approach.
- Historically, it has been the norm to try to leave something for the “children”.
- A state pension — NZ Super — exists providing an income that is viewed as reasonably generous.

2 No government incentives

Currently there are no government-provided incentives for consumers to invest in annuities. One argument for justifying a government incentive is that any additional income in retirement may reduce the individual's dependence on state benefits which are far more likely to materialise if lump sums are taken, ill invested or spent without sufficient provision for longevity risks.

Below is a list of some of the reasons restricting the purchase of annuities:

- There is no compulsion or tax break for annuities
- There are tax breaks for alternative investments such as property
- Work and Income New Zealand (WINZ) policies require the inclusion of annuity income when considering eligibility for obtaining income-tested state benefits
- There is no guarantee of financial security of the annuity provider
- There is no facility for reinsurance of investment or other risks by the state
- State-sponsored schemes such as the Government Superannuation Fund (GSF) have been replaced with lump sum defined contribution schemes and now in many cases KiwiSaver

3 Annuities are seen as expensive

There are still registered superannuation schemes in New Zealand that provide defined benefits linked to salary prior to retirement. We believe there are defined benefit pension schemes that sponsors would like to wind up and instead offer simplified replacement benefits, but the sponsors can't afford to do so as this would involve the purchase of annuities. Many would-be purchasers of annuities are subject to income tax at or about 20 per cent but investment income on annuities is taxed at the corporate tax rate of 30 per cent in the hands of the life office, reducing the attractiveness of the after-tax return in comparison with other options.

New Zealand annuity market: Supply issues

1 Prohibitive costs

A company wishing to sell annuities must update and re-register a prospectus on a regular basis. It must also provide an investment statement for the product. Without much demand, the costs of updating the prospectus and investment statement often exceed any possible profit.

2 No spread of risk

The very small size of the market means there are too few cases to obtain any proper pooling of mortality risk.

This leads to the potential for adverse selection against the life office, that is, where only individuals with “above average” life expectancy are interested in purchasing an annuity. What this means is that if the life office prices its annuities based on average life expectancy and those who purchase such annuities live longer than average — the prices charged for the annuities will be insufficient relative to the costs of the benefits paid by the life insurance company.

Uncertain risks lead to building in high contingency margins to try and compensate for the additional risk, which increases the purchase price.

3 Capital requirements

There is a high requirement for capital to ensure sufficient reserves are available to maintain solvency and a sound long-term business.

The increased capital adequacy solvency requirements (the amount of money life insurance companies need to hold on their balance sheet per \$1 of annuities they provide) means that annuity business for life insurance companies is a low margin and very high risk area. It is primarily for this reason that in New Zealand, and in a number of countries around the world, annuity providers are in decline and we believe will continue to decline in the absence of government action in the area of taxation or compulsion.

Insurers throughout the world face significant uncertainties for long-term risks associated with annuities. As life expectancy continues to improve, insurers have continuously been left under-pricing annuities sold.

4 Lack of matched investments

There is a lack of suitable assets (for investment of the purchase price) to match the annuity liabilities. In New Zealand there are no very long-term bonds available and there are few inflation-proof bonds. This is another reason for higher mismatching reserves being set up (than might otherwise be needed) leading to a further increased price.

5 Tax impost

Annuities may not be seen to be appropriate products to market to lower income earners as annuities are taxed at a corporate rate of 30 per cent.

Decumulation — options and products to manage the risks

While it sounds like a strange academic or economic term, the decumulation phase of retirement is the utilisation or drawdown of a retiree's accumulated capital once they permanently cease contributing to their retirement savings and access their retirement savings for the sole purpose of funding their retirement needs — or how a person spends their savings in retirement.

From 1 July 2012, the first KiwiSavers will be able to access their accrued retirement savings. The risk for both individuals and the government is that we don't currently have any formal opportunities for them to manage and maximise these savings during their retired life. Without a clear end goal or framework available for retirees to invest and draw-down their savings appropriately to fund their retirement, we believe KiwiSaver is likely to fall well short of its potential to address some of the significant challenges we have in New Zealand, such as our ageing population and the need for people to make greater private provision to address the risks of an inadequate retirement income.

The table overleaf outlines our recommendations for potential investment products for the decumulation phase of one's retirement savings, including:

- Life annuities
- NZ Super Plus
- Variable annuities / allocated pensions
- Deferred annuities
- Pooled survival payments
- Long term / indexed linked bonds

Invest in home equity release products

Reverse mortgages (sometimes referred to as home equity release loans, lifetime loans or reverse annuity mortgages) are usually purchased or targeted to people in, or near, retirement. At retirement, or late in retirement, retirees may run too short of income for these products.

They allow homeowners to access equity in their homes, without servicing the loan from income. The interest on the loan is added to the loan balance and paid when the property is eventually sold. Retirees can realise the equity in their home over time rather than being forced to sell their home. These types of products have been developed and are growing both in New Zealand and around the world.

Research released by Statistics New Zealand and the Retirement Commission in 2002 revealed that more than 95 per cent of single home owners go into retirement with a debt-free home. For couples the figure is more than 90 per cent. Collectively, the above figures indicate that home equity release could appeal to the vast majority of the retired population in New Zealand.

It should be noted that another way to manage retirement income, and potentially relieve pressure on the Government pension, is home equity release products. Although these are not technically a decumulation solution, they are a viable investment option.

There are of course risks with these products. In particular, the lack of transparency coupled with the low level of financial literacy has the potential to expose those entering into such agreements to costs and/or risks they were not expecting. In a number of countries lack of regulation around advisors, fee disclosures and product structure has led to a number of unsavoury practices and these products coming into ill repute.

We believe the possibility of negative equity, where home equity release products exist, should be removed. This would protect retirees from the position whereby the loan (or equity released to them) effectively outweighs the value of their home and they, or their estate, end up owing money after the home is sold or vacated.

Home equity release products could also be linked with annuity products so when an individual reaches retirement and owns their home, but has insufficient income to live on for the longer term, they could:

- Effect a home equity release, realise the value of their home but still live in their home until they die; and at the same time
- Take the proceeds from the home equity release and purchase an annuity so that the retiree will have income until they die.

Decumulation options

NZ Super Plus

“NZ Super Plus” is a proposed product that would allow individuals to purchase additional NZ Super from the government. For a lump sum the government acts as the insurer, and provides an enhanced pension for life.

Longevity risk

As per life annuities

Investment risk and flexibility

Government carries risk. No liquidity — unless there is the ability to exit and receive a lump sum due to reasons such as hardship

Purchasing power

As NZ Super is linked to average wages and wages are linked to inflation, this effectively protects against inflation. However, we recognise while price and wage inflation are closely correlated, they may also at times diverge.

Flexible drawdown

No

Life annuity

In return for a lump sum payment, a life insurance company will provide a regular income stream for the remainder of their life.

Payable until death. Can reduce risk of dying before full value received with minimum guaranteed periods

Customisation

As NZ Super is paid to the individual with no customisation available we recommend that NZ Super Plus operates in the same way, that is, payable only to the individual until their death.

Yes, potential customisations include:

- minimum guaranteed periods, that is, number of payments
- indexation of pension amounts
- possible spouse pension payable on the death of the original member

Stable cash flow management

As per life annuities

Yes, guaranteed by the product design

Market risk at purchase

Individuals still exposed to changes in basis government uses to price NZ Super. The government should price NZ Super at a margin above current life expectancies as insurance companies do, but with no profit or further contingency margins.

Yes, as annuity prices are linked to government bond yields, if a retiree's assets are invested in growth assets near to retirement and these assets fall in value, there may be insufficient funds to purchase the desired annuity.

Financial literacy and complexity

By attaching the benefit on to an established programme, many individuals should be able to understand the product easily, although care would be needed to ensure that the two benefits are individually identifiable.

The fundamentals behind it are fairly simple to understand although it could be argued that due to contingency margins in the pricing basis, the annual pension per \$100,000 of capital would appear small to some.

Government implications

Assists in raising capital administration system already in place.
We believe the government may need to make it compulsory for a portion of each individual's KiwiSaver savings to be used to purchase NZ Super Plus, despite the potential unpopularity of such a move.

There are a number of supply and demand issues as noted earlier. We do not consider life annuities as a preferred option.

Variable annuity

An accumulated investment account is used to purchase an annuity but rather than receiving a regular dollar amount, the annuitant receives the value each pay period of a fixed number of units inside an investment fund. The regular annuity payments may fluctuate based on the investment fund's returns.

Longevity risk

As per life annuities

Investment risk and flexibility

Volatility may be reduced by switching accounts out of growth funds and into stable funds and the use of minimum income and withdrawal guarantees can help mitigate these risks. However, there are associated costs incurred when taking these options.

Purchasing power

Protection against inflation not guaranteed — depends entirely on the ability of the investments chosen to generate performance which at a minimum keeps pace with inflation

Flexible drawdown

As per life annuities

Allocated pension

Income is drawn down from an accumulated investment account, whilst the balance still attracts investment returns.

Not protected against. On death, however, the balance of the capital is paid to the retiree's nominated beneficiary or their estate.

Exposure to investment markets.
More liquid than life annuities.
As per variable annuity

As per variable annuity

Yes, sometimes with certain limits

Yes, retirees have the flexibility to choose an investment strategy.

Customisation

As per life annuities with the additional flexibility to choose an investment strategy to which payments are linked. Retirees can also select:

- Guaranteed minimum income benefits
- Guaranteed minimum withdrawal benefits

Stable cash flow management

Not guaranteed — depends on the investment returns of the portfolio chosen

Not guaranteed — depends on investment returns and perhaps more importantly whether retirees invest their capital and not have this run out while they are still alive.

Market risk at purchase

As per life annuities

None. As the retiree will invest the money they have accumulated over a long period of time

Financial literacy and complexity

We believe there should be a standard product structure with a standard fee disclosure to improve transparency and assist with improving financial literacy

Extra choice usually brings additional complexity

Government implications

An appropriate policy framework will encourage individuals to spread retirement income over a lifetime — relying less on government-funded support

Deferred annuities

Delays payment of an income until the annuitant elects to receive it and can be either variable or fixed.

Longevity risk	As per life annuities
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Investment risk and flexibility	As per life annuities
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Purchasing power	As per life annuities with the additional issue of what happens during the deferment period
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Flexible drawdown	Freedom to choose retirement date. May be permitted but could incur penalties
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Customisation	As per life annuities with additional customisation possibly available in regard to the deferment period
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Stable cash flow management	As per life annuities
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Market risk at purchase	As per life annuities
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Financial literacy and complexity	Not generally well understood
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Government implications	—
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Pooled survival payments

Groups assets of multiple investors and makes payments to them based on their longevity. All investors make an equal lump sum payment into the scheme. Investment returns are credited to the account and distributions are split proportionately among the surviving members of the scheme at various points in time.

Somewhat protected. It will depend on how many others in the pool survive. However, if you survive you know what the minimum share of the payments will be and that is where the protection/safety net lies.

Exposed to the market

As per variable annuities

No, not once the product has been purchased. However, it could have different product options at the outset which have different payment schedules.

Yes, retirees have the flexibility to choose an investment strategy and possibly a payment schedule

Not guaranteed — this will depend on investment returns, the number of surviving people.

Importantly, retirees will know the minimum share of the payments.

None. As the retiree will invest the money they have accumulated over a long period of time, there is no market risk at the time of purchase

Benefits easy to understand but actual payments difficult to predict

Would require the development of potential rules around payment schedules

Long term bonds

Provide regular, known coupon payments and a lump sum payment at expiry of the investment.

No, only protection is for the term of the bond. You also need a far bigger lump sum to generate the same income as an annuity would unless capital is redeemed over time rather than when the bond matures.

Longevity risk

Government bonds are secure and low yielding whereas corporate bonds generally give a greater return but for increased risk of default.
Most liquid asset class after cash.

Purchasing power

As per life annuities. However, payments may be indexed if the bonds issued are inflation linked.

Flexible drawdown

As per life annuities

Customisation

As per life annuities

Stable cash flow management

As per life annuities. Payments may be indexed if the bonds issued are inflation linked.

Market risk at purchase

Purchase price can fluctuate according to interest rates, solvency of issuer, and attractiveness of bonds compared to other investment options.

Financial literacy and complexity

Complex for the average retiree if they look to redeem the bonds early. They need to understand bond pricing, duration, etc.

Government implications

In July 2008, the New Zealand government set up the Capital Markets Development Taskforce. The taskforce aims to:

- Identify key constraints and key opportunities for the development of New Zealand's financial system
- Identify and debate options to improve the performance of New Zealand's financial system
- Develop a blue print for the development of New Zealand's financial system

We hope the taskforce will take on board a number of the recommendations and discussion points contained in this report.

More detailed analysis of each product, including an example of how it could work, is provided in the Appendix.

Invest in macro swaps

If the government were to issue longevity bonds, it would then face a longevity risk of its own if the effect of increasing life expectancy is more than the longevity premium it includes in the pricing of the bonds.

To guard against this risk, a macro swap could be entered into. A macro swap is designed to provide a hedge for longevity risk based on the mortality experience of a broad population. The hedge would be set up to match the sensitivity of the actual liabilities in the portfolio of bonds to changes in life expectancy rates. It would act in the same way as reinsurance of an insurer's claims liabilities.

Conclusion

An ageing population has pushed the issue of ensuring a secure retirement income system to the top of the agenda the world over, but has New Zealand done enough to really manage the risks that this brings?

Exceptional take-up rates of KiwiSaver and increasing media attention over the last couple of years have put retirement planning well and truly on the social agenda in New Zealand — however, we believe there are still some gaps in the system that put New Zealanders at risk of not having adequate retirement savings.

The number of New Zealanders aged 65 or older, who will become completely dependent on NZ Super in retirement is increasing — arguably at an unsustainable

rate from a funding perspective. This brings risks for individuals, the government, and the private sector — but with risks come opportunities.

New Zealand's retirement income system is primarily based on our government pension with a personal workplace savings scheme still in its infancy. The challenge, and indeed the opportunity, for our government is to create a system that takes pressure and dependency off the first pillar (government pension), and increases participation in the second and third pillar (KiwiSaver and additional voluntary savings), and ultimately increases the amount of funds in the wider economy, which will benefit all New Zealanders.

Pension deficits are not like market crashes (although their severity can obviously be exacerbated by them); rather, their malign evolution is something of a slow-burner. To put it another way, banking and property crises are short term. But an underfunded pensions system is an issue of a lifetime.

Ensuring a secure, adequate and fair retirement income system is not a straightforward task, but it is one that requires a well-informed, fact based debate.

It's time for politicians to put aside the politics and to heed the call for leadership, clarity and certainty around superannuation.



Appendix

examples of how decumulation products could work

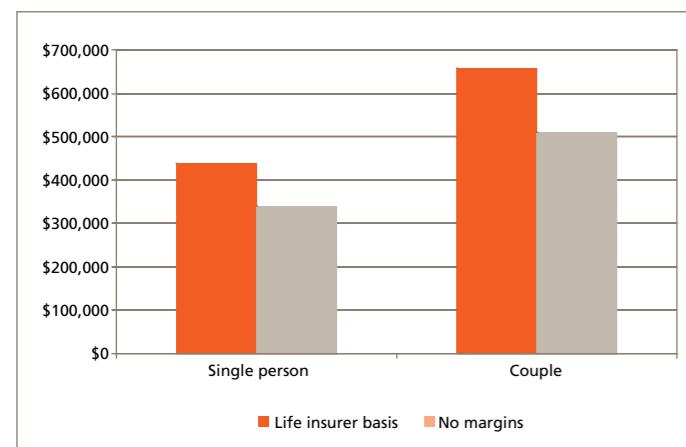
Decumulation investment product options

NZ Super Plus

An example

Figure 8 compares the cost of purchasing an amount of NZ Super Plus, equal to the current standard rate of \$18,954 p.a. for a single person and \$28,458 for a couple, with a private life annuity. It assumes that the national average wage, and hence NZ Super, will increase at 3.5 per cent p.a. and a gross of tax investment return of 5 per cent p.a. The life insurer basis uses the mortality assumption currently used in the pricing basis of New Zealand's only life insurer to sell annuities. This is compared to the cost using the New Zealand Life Tables 2005–2007, which reflect the current life expectancy in New Zealand, as an estimate of the mortality with no margins.

Figure 8



If the government offers individuals the opportunity to purchase additional multiples of NZ Super using a pricing basis with no margins (a best-estimate basis) retirees would be able to secure a higher pension than if they were to purchase an annuity from an insurer.

The cost to a single New Zealander of increasing their NZ Super by 100 per cent, that is, purchasing one multiple of NZ Super Plus, is approximately \$340,000 using the basis with no margins. If the equivalent annuity was to be purchased from the life insurer instead, the approximate cost increases to \$440,000. It should be noted that life insurers are always likely to price in potential improvements in future mortality and contingency and profit margins. While a government-funded benefit could eliminate contingency and profit margins, potential improvements in mortality should be taken into account to some extent. The NZ Super Plus shown in the graph, for illustration purposes, does not make any allowance for mortality improvements and is based on current New Zealand life tables.

If two multiples of NZ Super Plus are purchased to provide a single person with a total benefit of \$56,862 p.a., the costs (and savings) are doubled. So an individual using their \$340,000 at retirement to purchase a multiple of one times NZ Super will get \$18,954 times two which is equal to \$37,908 which is their standard/normal NZ Super plus (hence the name) an additional amount purchased with their capital.

It would also mean, from an individual's point of view, that all their income comes from one source is known and investment risks are removed entirely.

Life annuities

An example

Consider an average 65-year-old male in New Zealand, using reasonable current market assumptions, \$100,000 might purchase an annual net pension of \$6,540 for the remainder of his life. For a 70-year-old, \$100,000 would purchase a pension of \$7,860 p.a.*

The table below shows how the amount of pension for a 65-year-old male would change if he opted to alter the terms of the annuity.

Figure 9

Type of pension	Guarantee period	Spouse's pension	Pension increases	Annual net amount of pension*
Single life pension	Nil	Nil	Nil	\$6,540 ^a
With guarantee	10 years	Nil	Nil	\$6,430 ^b
With pension increases	Nil	Nil	2% pa	\$5,230 ^c
With attaching spouse's pension	Nil	50% of member's pension payable on their death for the remaining lifetime of the spouse	Nil	\$5,800 ^d

*Figures correct as at 31 May 2009

Notes:

- If we were to base the annuity price on the New Zealand Life Tables 2005–2007, which reflect the current life expectancy in New Zealand, the annuity amount becomes \$7,870. This highlights the future mortality improvement used by insurance companies for pricing purposes.
- There is only a small impact from applying a 10-year guarantee to the annuity because there is only a small chance of a 65-year-old annuitant dying before age 75.
- There is a large effect on the level of the annuity when allowing for pension increases, due to the compounding effect leading to a much higher income level in later years.
- This assumes a female spouse, 3 years younger than the primary annuitant. In practice, the younger the spouse is, the greater the impact on the amount received from attaching a spouse's annuity.

Variable annuities

An example

Consider an average 65-year-old male in New Zealand — using reasonable current market assumptions, \$100,000 might purchase an annual pension of 5,000 units each year. The \$100,000 is invested into a growth investment option and the unit price is \$1 at the time of purchase. If at the next payment date, the investment returns have been positive and the unit price is \$1.05, then the amount paid to the annuitant will be \$5,250 (= 5,000 units x \$1.05 per unit).

Allocated pensions

An example

The chart below looks at the progression of an allocated pensions account worth \$250,000 at the retirement date of a 65-year-old under three scenarios:

\$20,000 is withdrawn at the start of each year and the account earns returns of 5 per cent p.a.

- \$20,000 is withdrawn at the start of each year and the account earns returns of 3 per cent p.a.
- \$18,000 is withdrawn at the start of each year and the account earns returns of 5 per cent p.a.

Figure 10



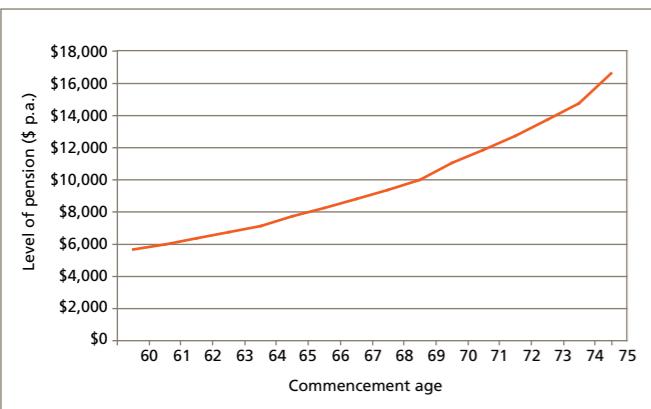
In this example, by opting to take a \$2,000 reduction in payments each year, the period over which an income is received is extended by more than 3 years (assuming 5 per cent p.a. returns). Also, if returns are lower than expected the term over which an income is received is significantly reduced.

Deferred annuities

An example

Figure 11 shows the annual pension provided by purchasing a deferred annuity for a purchase price of \$100,000 at age 60 depending on the age at which the income stage commences. So a member at 60, say, can elect an immediate annuity of \$5,680 per annum for the rest of their life or purchase a deferred annuity with payments starting at age 75 and receive \$16,620 per annum for the rest of their life.

Figure 11



The chart above assumes that annuity terms offered at the age at which the accumulated account is converted into an income are:

- a gross of tax investment return of 5% per annum
- no increases to pensions once in payment
- the mortality assumption currently used in the pricing basis of New Zealand's only life insurer to sell annuities
- A single life pension with no minimum term guarantees

Furthermore, interest is credited at a 5% per annum (gross of tax) in the deferral period from age 60. If death occurs prior to the income commencement age, the balance of the accumulation account is returned to the estate of the member.

Pooled survival payments

An example

Consider a scheme into which 100 people all commit \$200,000 at age 65 and all wish to have their investments invested in a moderate investment option (one which has 50 per cent in growth assets and 50 per cent in defensive assets) with an assumed net of tax and fees return of 5 per cent per annum.

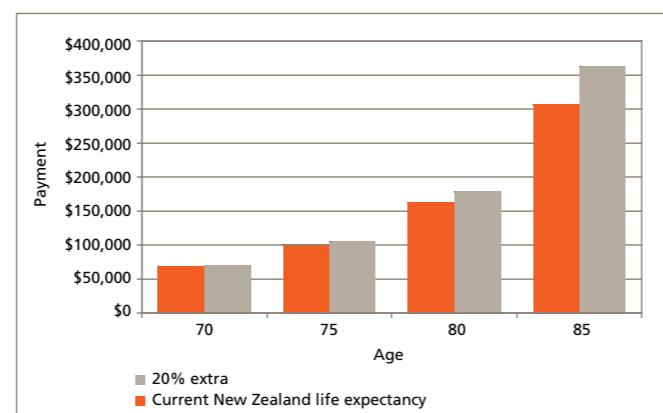
The payout schedule of the scheme is as follows, noting that payment is only made to surviving members:

- In 5 years time 25% of the accumulated fund will paid out
- In 10 years, 33% of the remaining amount is paid
- In 15 years 50% of the remaining fund is paid and the residual amount is distributed after 20 years

Figure 12 shows the expected payments that will be made to each surviving member of the scheme at each age assuming mortality follows the current estimate of New Zealand life expectancy. A comparison of the amounts if the death rates for this group of lives were 20 per cent higher is also given.

In the situation where mortality is higher, payments are greater for the surviving members as there are fewer claimants to share the distributions. Clearly this raises an ethical issue as some people will profit from the death of their peers, meaning that policies need to be secretive and the names of those insured need to be protected.

Figure 12



An interesting story...

Many people may not be aware of this, but one of the earliest insurance arrangements or insurance pools was Lloyd's of London. This market began in Edward Lloyd's coffeehouse around 1688 in Tower Street, London. His establishment was a popular place for sailors, merchants and shipowners and Lloyd catered to them with reliable shipping news. The shipping industry community frequented the place to discuss insurance deals among themselves. The first insurance pools or insurance deals (which are one of the earliest cases of death insurance) involved sailors who were going out to sea. Each sailor would put in a coin into a pool, and Edward Lloyd would hold the pool and charge a small fee. When the ship returned, the families of those sailors who did not return split the pot.

While this was effectively death insurance in a true pooled form and did not necessitate any reserving by Edward Lloyd, since the benefits paid out reflected exactly the capital invested by the sailors less a small fee, the same concept can be applied to survival insurance, that is, to protect against the risk that you survive and outlive your own capital.

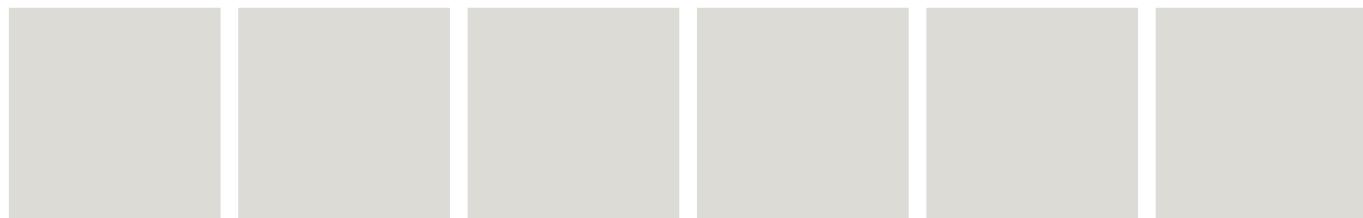
Long-term or index-linked bonds

An example

If an investor purchases a \$1 million nominal of a government issued bond with an annual interest rate of 5.5 per cent, yearly coupons and an expiry date 10 years in the future, then the payments received are as follows:

- \$55,000 at each annual coupon date, that is, 10 payments in total
- \$1,000,000 at the expiry date, in addition to the coupon paid at this date. In reality, coupons may be paid more frequently than annually

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