

Prepared by:
Milliman

Written by:
Wade Matterson
Practice Leader, Milliman Pty., Sydney

Acknowledgements:
Andrew Fisher, Stephen Chan, and Nick Li

Peer Review:
Joshua Corrigan

July 2008



Risk in retirement: Impact of the market downturn and implications for retirees and product providers





CONTENTS

| | |
|--|-----------|
| EXECUTIVE SUMMARY | 2 |
| INTRODUCTION | 4 |
| RISKS FACING RETIREES | 5 |
| RETIREE SEGMENT NEEDS | 11 |
| INCORPORATING RISKS AS PART OF THE PLANNING PROCESS | 13 |
| IMPLICATIONS FOR PRODUCT PROVIDERS | 14 |
| CONCLUSION | 20 |
| ENDNOTES | 21 |

EXECUTIVE SUMMARY

When it comes to a retirement system that is adequate for the needs of its population and sustainable over the long term across multiple generations, Australia is no exception to much of the rest of the western world. Its Baby Boomer generation is aging rapidly, and market events in the past year have only served to delineate, sometimes starkly, the issues that may be anticipated by those rapidly approaching the retirement “hot zone”—the years immediately before and after retirement.

Facing retirement issues

The first concern for many, of course, centres on the size of the nest egg accumulated over the course of a lifetime of work. Negative performance in an investment portfolio, combined with the need to begin drawing on those funds for income purposes, can create a potentially high-risk scenario from which it may be difficult to recover. But other factors have also emerged as critical considerations for retirees and financial advisors alike, presenting a complex picture that involves many moving parts including:

- living longer than expected
- reduction in expected income due to poor market returns
- loss of real purchasing power
- poor outcomes due to inappropriate retirement planning
- inability to supplement post-retirement income
- failure of financial institutions
- detrimental changes to government policy

Potential solutions

Given these issues, potential solutions to the risks faced by retirees need to consider the impact of those risks across to the range of consumer segments within the Australian market, from the most affluent to the least. Fundamentally, Australian retirees have a number of choices they can make to address the risks above, but ultimately much of that choice is informed by the means they have at their disposal:

- self-insure
- purchase “peace of mind”
- access home equity
- rely on government assistance or family support
- continue working

Addressing retirement gaps with innovation

For financial-product providers, there are significant opportunities to innovate and develop appropriate strategies to target the wide range of customer segments in Australia. Risk-sharing products in particular provide an opportunity to create differentiation in the current landscape, consisting primarily of lifetime annuities, which have decreased in popularity, and account-based pensions. Some of these potential innovations include:

- **Hybrids of annuities and account-based pensions:** These products combine the flexibility and market exposure of account-based products and also provide explicit guarantees (either market, longevity, or both) found in traditional insurance products. Sales of hybrid products in markets such as the United States and Japan have been extraordinary and are now approaching \$1.5 trillion in total assets under management.
- **Integration of risk-management strategies:** There is potential to apply risk management strategies that are usually the domain of major financial institutions at an individual level to provide a “guarantee” as an overlay on an existing account-based accumulation or pension product, ensuring that neither the features nor flexibility offered by the original product are compromised. Such an approach may be attractive within the high-net-worth (HNW) and self-managed super fund (SMSF) sector.

Other factors have also emerged as critical considerations for retirees and financial advisors alike, presenting a complex picture that involves many moving parts.

-
- **Longevity insurance:** Longevity insurance or pooling products have also been developed in a number of markets, operating as a deferred annuity where retirees set aside a portion of their retirement savings (generally 15%–25%), which is invested along with other participants' savings in a longevity pool. Particular annuity features, in light of current trends away from these products, together with providers' ability to overcome this perception, will be critical if they are to be successful.
 - **Reverse mortgages:** Reverse mortgages have typically been viewed as a last-resort strategy, with most retirees feeling uncomfortable about cashing in the family home. But they have become an increasingly popular product in recent times for those already in retirement who are seeing other assets extinguished.

Conclusion

As recent market events have shown, a significant product gap exists in the Australian market when it comes to managing risks faced by Australians approaching retirement. The accumulation mentality, which has served the superannuation industry well since its inception, will need to adapt as increasing numbers transition through to retirement and begin the drawdown of assets.

Product innovation is necessary to develop solutions for these retirees, but consumer education and advisor tools that highlight the issues facing their clients will be vital for the solutions to be successful.

As recent market events have shown, a significant product gap exists in the Australian market when it comes to managing risks faced by Australians approaching retirement.

INTRODUCTION

Like most countries in the western world, Australia faces a range of issues related to the changing demographic composition of its population. Within the financial services industry, substantial focus has been placed on the impending march of the Baby Boomers toward retirement. Due in part to the accumulated wealth at their fingertips, it is also a reflection of the dearth of tools available for near- or new retirees to meet their lifestyle goals and manage the range of risks to which they are exposed.

Market events of the last twelve months bring to light the nature of some of the issues facing potential retirees; investment returns represent one risk factor, but there are others. The performance of financial markets is generally viewed as the dominant factor in retirement planning, and poor returns such as those experienced this year often “crystallise” in the minds of investors with the reality of end-of-financial-year statements. There is an increasing call in the face of recent losses to focus on long-term returns, but it remains difficult for those in and around retirement to revise their plans appropriately.

Sensitivity to investment markets increases around the retirement “hot zone”—the years immediately before and after retirement.

As this report shows, sensitivity to investment markets increases around the retirement “hot zone”—the years immediately before and after retirement. Negative fund performance, combined with the need to withdraw funds for income purposes, can create a toxic environment from which it is difficult to recover,¹ with many in the zone likely to consider going back to work or postponing their retirement.

In addition to investment returns, an awareness of the impact of longevity—the tendency for people to live longer—among other risks can provide retirees with the ability to make more informed decisions. To this extent, financial planning and public education that highlights these issues are critical in order to assess the implications of inflation, healthcare, and living longer than the average—after all, 50% of people do just that.

We believe that recent market events represent an opportunity for advisors and “mum and dad” investors to revisit the notion of risk and understand the issues when planning for retirement. For product providers, changing demographics and awareness of risk provides an opportunity to develop innovative and cost-effective solutions designed to create retirement security plans and provide appropriate risk-sharing instruments for those approaching or entering retirement.

As this report demonstrates, the application of some relatively simple tools can present retirees with a more complete picture of the key challenges facing them. Armed with this knowledge, combined with innovative product and risk-management solutions, many retirees can achieve better outcomes.

RISKS FACING RETIREES

There are a number of risks that face those preparing for or about to enter retirement, with most manifesting themselves by causing retirement savings to run out sooner than planned for. This results in significant changes to planned retirement lifestyles. Consideration should be given to:

- living longer than expected
- reduction in expected income due to poor market returns
- loss of real purchasing power
- poor outcomes due to inappropriate retirement planning
- inability to supplement post-retirement income
- failure of financial institutions
- detrimental changes to government policy

Focus should and will be on areas that are within the control of individuals, or where the advisor has the tools available to assist in their management. The following section considers each of these items in turn.

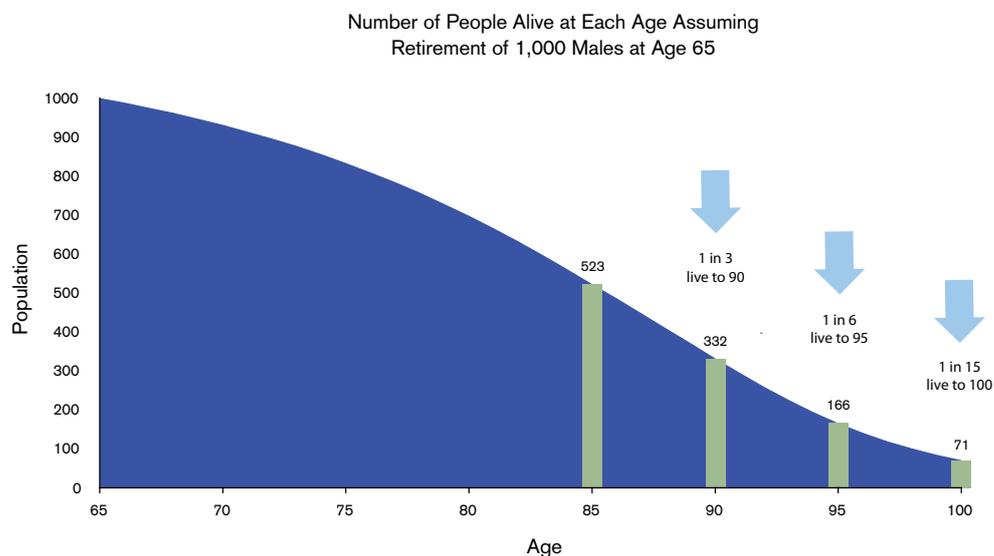
Living longer than expected (longevity risk)

There is evidence that many retirees do not understand the concept of life expectancy and longevity risk. This is demonstrated clearly in the planning process whereby advisors and their clients generally establish a plan based on living to a specific age, often set in reference to average life expectancy or the number of active years where income requirements are expected to be at their highest.

Clearly, such planning approaches will be adequate for 50% of cases (those who unfortunately do not survive to the “average”), but inadequate for the remainder, and particularly, for those who live significantly longer. For many who live beyond their plans, additional resources will be required to maintain their standard of living or they must otherwise rely on the age pension and the extended family network for financial support.

The likelihood of living beyond the average life expectancy is clearly illustrated in Figure 1, where one in three men retiring at age 65 will live to age 90,² with women living three years longer on average. Coming up with assumptions such as these is the domain of actuaries, utilising assessments regarding future improvements in life expectancy due to medical advancements. In the end, individuals need to appreciate the implications for living longer than expected and this type of illustration, combined with their own views regarding their well-being, should serve to assist.

Figure 1³



Eventually, society will evolve to deal with the issue as longevity awareness increases.

Eventually, society will evolve to deal with the issue as longevity awareness increases. Development of retirement strategies will continue to recognise the increasing trend for part-time employment post-retirement. Social policy and debate on raising the preservation age and entitlement to the age pension will also serve to drive the behaviour and retirement planning needs of the Australian public.

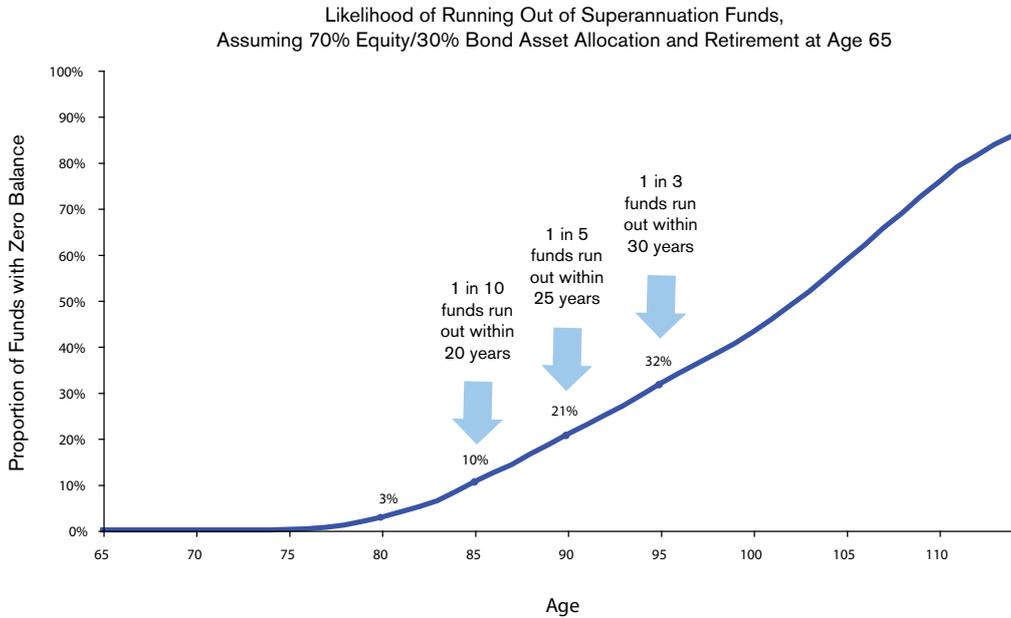
Losses due to poor market returns (investment risk)

As demonstrated by recent events, financial markets are volatile and negative returns can occur, sometimes spectacularly. For many investors, time is on their side and long-term investment goals can be achieved by retaining exposure to a diversified portfolio of growth assets. However, those in and around the retirement hot zone face a different proposition, where the timing of short-term market returns can have a significant impact on retirement plans.

A long-term view is appropriate when saving for retirement, but needs can change significantly as people transition from accumulation and begin to focus on their future retirement and income requirements. Although a continued allocation to growth assets is desirable due to the longevity issues highlighted above, it presents a timing risk. Sustained declines in markets that coincide with the onset of retirement, combined with the need to draw down assets for income purposes, have a significant impact on the sustainability of an individual's retirement savings.

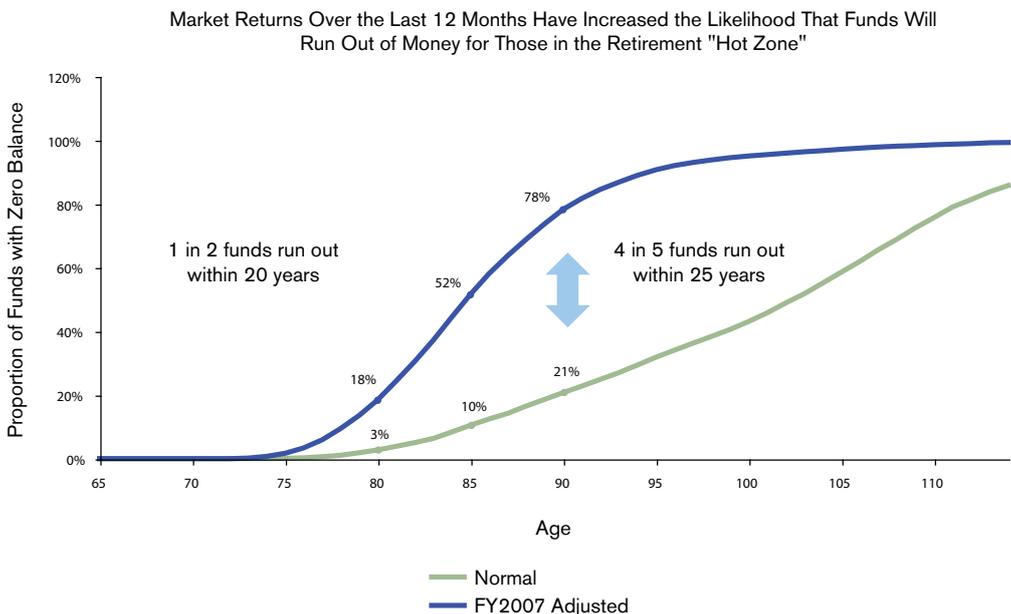
This is illustrated in Figure 2, which shows the proportion of funds that run out of money over time as retirees utilise their accumulated savings to provide retirement income.

Figure 2⁴



However, as Figure 3 shows, the impact of negative returns such as those experienced by most funds over the last year, combined with the need to withdraw an income, can affect the long-term sustainability of retirement savings substantially. It can increase the chances of running out of money sooner, assuming that most retirees are unwilling to alter their spending patterns or to supplement their savings with post-retirement income. In practice, many will revise their plans based on the performance of their funds or return to full- or part-time work.

Figure 3⁵



The habit of constructing retirement plans based on long-term averages or a small range of scenarios ignores the impact that market volatility can have. As illustrated, the development of relatively simple simulation tools can create an improved risk map and provide for improved decision making and use of retirement-planning products.

Loss of real purchasing power (inflation risk)

Simply put, inflation erodes relative spending power, which needs to be maintained in order to maintain a consistent standard of living.

Recent periods of historically benign inflation (2%–3%) and strong investment market returns have overshadowed the impact that inflation can have on real consumption over time.

Recent periods of historically benign inflation (2%–3%) and strong investment market returns have overshadowed the impact that inflation can have on real consumption over time. The effect of inflation over a lengthy time horizon can be significant and is generally used to justify the continued use of equities as a major component of retirement savings. However, there are notable periods where high or rising inflation coincides with bear markets, such as is currently happening globally. Despite this, it is often the case that investors become more conservative over time and decrease their exposure to growth assets in favour of certainty, resulting in higher inflation risk.

The increasing pressure on prices through rising oil prices, rent, and other wage pressures, combined with poor investment market returns, are likely to raise awareness of inflation and boost the demand for investments and products that help manage this risk, or encourage ongoing or increased exposure to growth assets.

Ultimately, Australia's social security system through the age pension provides a minimum income linked to inflation that will help to manage this exposure.

Poor market returns due to inappropriate asset allocation or inappropriate spending patterns (behavioural risk)

As many industry commentators note, general financial awareness is low, and continued investment in consumer education and development of appropriate tools is required to improve the ability of the public to manage retirement savings. According to a recent Australian Bureau of Statistics (ABS)/ Organisation for Economic Co-operation and Development (OECD) study, 46% of Australians are functionally illiterate and 53% are functionally innumerate,⁶ with the poorest results for the young, old, and low-income or low-education levels.⁷

Although advisors largely serve to meet many of these needs, evidence suggests that the majority of people either do not use one or make poor decisions in the face of certain events. The continued growth of the SMSF sector and concerns regarding the quality of some trustees highlights the issue.

Typical behavioural risks include:

- overly risky or conservative investing
- poor diversification of investments
- bias towards acting on a short-term basis to the detriment of the long term
- excessive spending

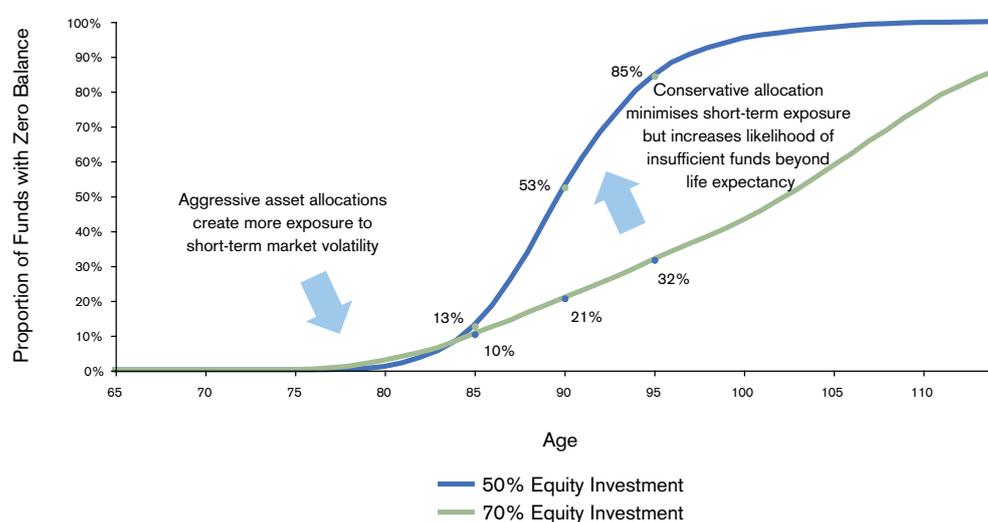
The increased sophistication of reporting and access to fund returns on a daily basis, in many cases over the Internet, can result in poor asset-allocation decisions during periods of market volatility, particularly in the absence of an underlying guarantee or strategy that provides protection against a market downturn.

Increasing emphasis from the industry on the promotion of long-term investment together with further investor education may serve to mitigate some behavioural issues, but we believe risk-sharing products that provide peace of mind should also be part of the solution and will encourage more appropriate product and investment allocations within a holistic financial planning decision-making framework.

As Figure 4 highlights, the increasing tendency to take conservative investment decisions can work against the long-term sustainability of retirement funds as investors lose the benefit of participating in market upside. By increasing the allocation to growth assets, investors actually reduce the likelihood of extinguishing their funds, although short-term volatility and exposure to negative returns is increased. The development of hybrid products in other markets, discussed later in this report, has encouraged higher allocations to growth assets with the comfort of protection against market downturns.

Figure 4⁸

Funds Run Out Faster With More Conservative Asset Allocations Due to Loss of "Market Upside"



Long-term health-care costs⁹

Many financial plans often set expectations of high spending in early retirement years, when retirees are most active, followed by decreasing costs as a sedentary lifestyle becomes dominant. In reality, this reduction in spending is often offset through increases in costs associated with health-related issues or aged care. Government subsidies for aged health care are significant, but it is unclear to what extent these will remain so in the face of increased demand.

Accessing equity in the home (together with social security) will become increasingly important to fund the later years as other sources are depleted and retirees begin to downsize, move into care facilities, or live with family members.

Inability to supplement income with post-retirement employment (transition risk)

Increasingly, retirees expect to supplement their pension with income from part-time work as they utilise a range of transition strategies into retirement. Recent government changes as part of the "better super" initiative have made this proposition more attractive than previously. This is possibly reflected in the increasing preference in the working population for maintaining a paid job (full- or part-time) post-retirement, with 55% indicating that they would look to continue working after retirement, even though only 10% of current retirees actually have a paid job.¹⁰

For those relying on the additional income generated by part-time work, risks involve finding and maintaining employment, particularly in poor economic conditions or where time is required to care for a partner or spouse.

The current state of the US market and media attention to the plight of the banking sector serve as reminders that counterparty risk can be significant at the individual investor level.

Changes to public policy (political risk)

Given the long-term nature of the Australian superannuation system, most prospective retirees will experience a number of government and policy changes throughout their working and retirement lives. The current government has reaffirmed the importance of the age pension and associated superannuation policy, but it is difficult to predict the impact of changes that may occur due to demographic, economic, and political factors.

The political importance of the current cohort of Baby Boomers makes it difficult to foresee any major changes, especially those that might have a negative impact on this cohort. Consequently, there may be greater focus on incentives rather than deterrents (e.g. taxes) or restrictions with respect to retirement benefits in the near future.

Failure of financial institutions (counterparty risk)

Australia is not immune to corporate failures as demonstrated by the collapses of HIH and Westpoint. The current state of the US market and media attention to the plight of the banking sector serve as reminders that counterparty risk can be significant at the individual investor level.

Counterparty exposure may exist in a variety of forms, encouraging investors to seek comfort in "reliable" brands when investing their retirement savings and in the continued adoption of diversified asset allocations.

The rapid growth of the SMSF sector has raised concern that many self-managed funds do not apply sound investment principles, either holding too much in cash or lacking sufficient diversification.

A number of the existing and potential product solutions contain their own counterparty exposure, and potential providers will bear the responsibility to ensure that appropriate structures are put in place that address the concerns of consumers.

RETIREE SEGMENT NEEDS

Given the issues facing retirees, potential solutions to the risks they face need to consider the impact of those risks according to the range of consumer segments within the Australian market,¹¹ their needs, sophistication, and likely sources of advice. Figure 5 shows the distribution of wealth across households in Australia.

Figure 5¹²

Distribution of Households Based on Net Wealth (2005/06)



Upper affluent: advisor team/specialized products

People in the upper end of the wealth curve may have a team of advisors and opportunity to consider a broad variety of income-planning solutions and products, although many will simply be able to live comfortably off their assets.

The lower end of this segment will typically utilise the services of financial advisors to develop and manage a retirement plan. They are more likely to value a retirement-income guarantee, the value of which, we believe, will increase in line with reductions in assets and income.

Households in this segment will consider self-managing risk via single-purpose products or risk-management strategies. Estate preservation will also be a significant element, as well as ongoing management of retirement assets and non-financial risks.

Lower affluent: single primary advisor/flexible products

It is likely that households in this segment will rely upon a single advisor. The less wealthy end of this segment may not have enough retirement assets to do more than maintain a desired standard of living. They are likely to consult an advisor but will have less complex income-planning needs.

Subsequently, lifetime income and asset-protection products and strategies may help to supplement any additional sources of income such as the age pension.

Lower/middle mass market: limited advice/simple product

The decision process for this group will be relatively straightforward. Given insufficient assets to replace their pre-retirement income, many of these households will turn to either part-time or full-time work to supplement their income.

In many cases, assets will be insufficient to generate a significant lifetime income and these households will focus instead on protecting existing assets with equity exposure over a fixed term and social security providing an income underpin.

INCORPORATING RISKS AS PART OF THE PLANNING PROCESS

The shift of risks from financial institutions, combined with improvements in health and longevity, has resulted in a significant product gap within the Australian retirement-savings market. Fundamentally, Australian retirees have a number of choices they can make to address the risks above:¹³

- **Self-insure**

Retirees with sufficient assets may be in a position to set aside funds to provide a buffer in the event of poor market returns, increased longevity, or unanticipated expenses. This is unlikely to be a realistic option for many.

- **Purchase peace of mind**

Existing products such as annuities provide retirees with the ability to purchase lifetime income. However, for various reasons, these products are generally neglected in the trend toward account-based pensions. Innovative hybrid products that provide annuity-style features, while at the same time retaining the flexibility offered by existing account-based pension structures, may be an alternative way of providing a similar degree of comfort and negating some of the behavioural issues identified earlier in this report.

- **Access home equity**

With large numbers of retirees owning their homes, tapping into the equity it contains may be a way of supplementing retirement income. Reverse-mortgage products are becoming increasingly popular, but we believe there is significant scope for development of alternative structures, and that many retirees currently view this as a last resort.

- **Rely on government assistance or family support**

The age pension represents a safety net for the majority of retirees, although sole reliance on this for income purposes is likely to result in an undesirable reduction in the standard of living.

- **Work Longer**

Retirees can supplement their income through part-time employment. While this may not be a desirable outcome, for those late to the game it will be the only practical option available to them to afford protection against retirement risks

IMPLICATIONS FOR PRODUCT PROVIDERS

There are significant opportunities for organisations prepared to innovate and develop appropriate products targeting the range of customer segments identified above. Risk-sharing products in particular provide an opportunity to create differentiation in the current landscape of Australian retirement products, consisting primarily of lifetime annuities, which have decreased in popularity, and account-based pensions.

Traditional lifetime annuities have seen a steady decrease in popularity across most international markets, including Australia.

Lifetime annuities

Traditional lifetime annuities have seen a steady decrease in popularity across most international markets, including Australia.¹⁴ The UK represents the largest traditional annuity market globally, but this is mainly supported by the compulsory purchase nature of the market. However, historically low interest rates combined with light mortality have made the product proposition less attractive, affecting sales in the non-compulsory market.

This global trend can be attributed to a range of factors including:

- global trends towards defined-contribution systems and the removal of compulsory annuity purchase rules and other incentives
- low-interest-rate environments and improvements in mortality, resulting in unattractive returns
- estate planning and flexibility issues
- the proliferation of alternative income products and solutions
- poor publicity due to corporate mismanagement

Regulatory capital requirements in many countries, including Australia, have also contributed, increasing the cost of manufacturing annuity business.

Account-based pensions

The rise of defined-contribution plans in many markets has resulted in a shift towards account-based pensions as the primary income product, encouraging long-term equity participation throughout the retirement years. This is in direct contrast to the proposition offered by lifetime annuities. The key messages that have been successful in the development of account-based pensions focus on the themes of:

- **Flexibility and liquidity:** Retirees retain access and control over their assets, addressing estate planning concerns amongst others.
- **High return potential:** Retirees retain the ability to maintain exposure to equities and other growth assets.
- **Government incentives:** Usually these take the form of reduced rates of tax or tax-deferred status.

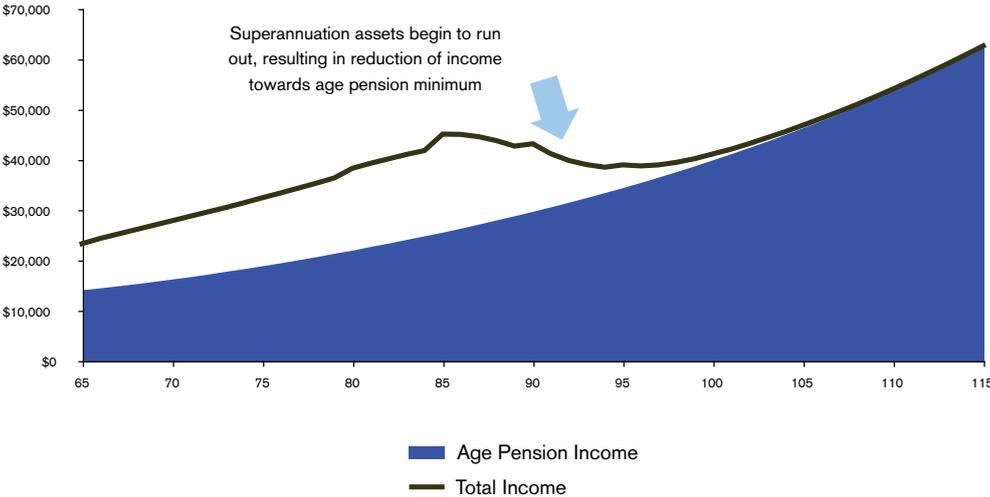
However, as discussed above, consumers retain exposure to a variety of risks, including longevity, interest rate, and market volatility.

As mentioned, the trend towards these products has been substantial, and the transition of Baby Boomers into retirement will continue to drive fund flows into allocated pensions and income products. Although the majority of funding continues to reside in the accumulation phase, sales of income products are projected to rise rapidly.¹⁵

As Figure 6 shows, it is important to demonstrate the contribution and importance of the age pension when assessing income. Over time, income levels will approach the age pension minimum for many in the absence of alternative products or income from other sources.

Figure 6¹⁶

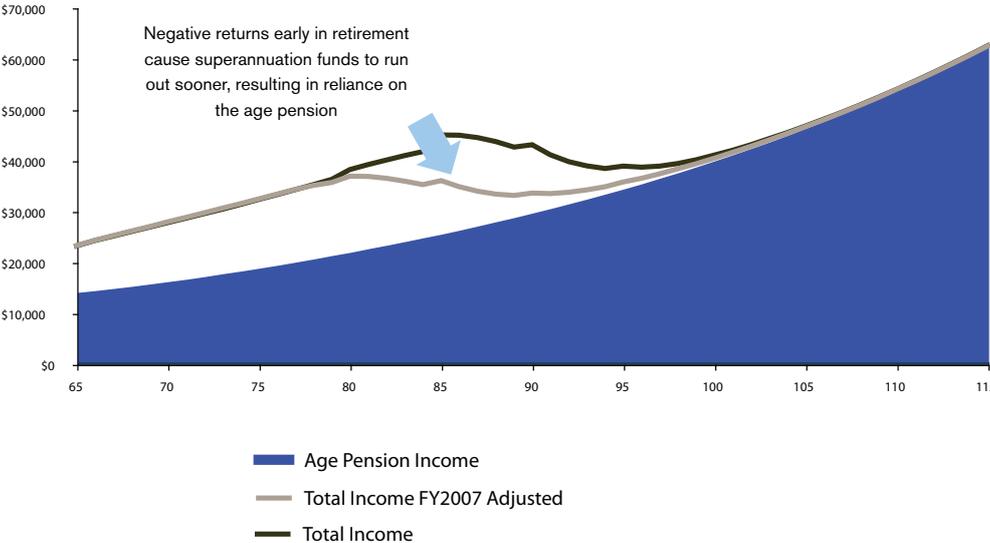
Illustrating the Interaction Between the Age Pension and Income Derived Via Superannuation Highlights Some of the Issues



As we have already highlighted, the impact of returns early in retirement can be significant as illustrated by Figure 7.

Figure 7¹⁷

The Impact of Returns for FY 2007 Results in Funds Running Out Sooner Than Expected Under "Standard" Illustrations



We anticipate that the increased importance of income products will result in product innovation, as providers seek to create solutions specific to their membership base, and in a reintroduction of pooling principles to manage risk and create efficient pricing structures.

Potential innovations

A number of markets internationally have seen considerable development in alternative products and innovations, some of which have begun to enter the Australian market. A summary of the key developments are:

Hybrid products

Due to the differences between lifetime annuities and account-based pensions, product manufacturers have sought to close the gap through the development of hybrid products. These products combine the flexibility and market exposure of account-based products, providing explicit guarantees (either market, longevity, or both) found in traditional insurance products. Sales of hybrid products in markets such as the United States and Japan have been extraordinary, and are now approaching \$1.5 trillion¹⁸ in assets under management.

These products are often designed in an unbundled fashion in order to provide potential investors with the ability to select from a range of options in order to customise them to fit individual needs. The guarantees usually operate as an overlay on existing account-based accumulations or pension products, ensuring that none of the features or flexibility offered by the original product are compromised. They generally offer the following options:

- capital protection
- guaranteed minimum rates of return
- guaranteed minimum income levels over a specified period or for life

The guarantees are often designed for a particular target market and have an explicit price (usually expressed in basis points of account value (AV) and generally less than 1% per annum). The separation of the guarantee and its cost to customers is seen as critical in ensuring transparency of costs and fair treatment of consumers.

Markets have seen sizeable developments internationally in this space, but Australia has so far been slower to adopt this trend. One reason may be the risk-management and hedging capabilities required to manage sophisticated guarantees such as these. The increasing interest by major multinationals in the Australian superannuation market (AXA North is the first such product within the Australian market) and reinsurers, together with specialist-hedging and risk-management firms, may assist the development of these products as local companies look to compete and follow with product developments of their own.

Guarantee types

As discussed above, the guarantees available come in a range of types and can be highly customised. At their core, they are designed to provide for retirement security in either the accumulation or drawdown phases according to the following rationales:

- **Accumulation:** To remain exposed to risky yet rewarding assets, but with some form of downside protection, particularly as the drawdown period is approached
- **Drawdown:** To obtain a flexible yet guaranteed income source, maintaining a desired standard of living with the ability to transfer longevity risk

The guarantees are usually defined by reference to the amount invested at the time the guarantee is selected. A variety of different benefits can increase the guaranteed amount to provide policyholders with additional value. Examples commonly used include:

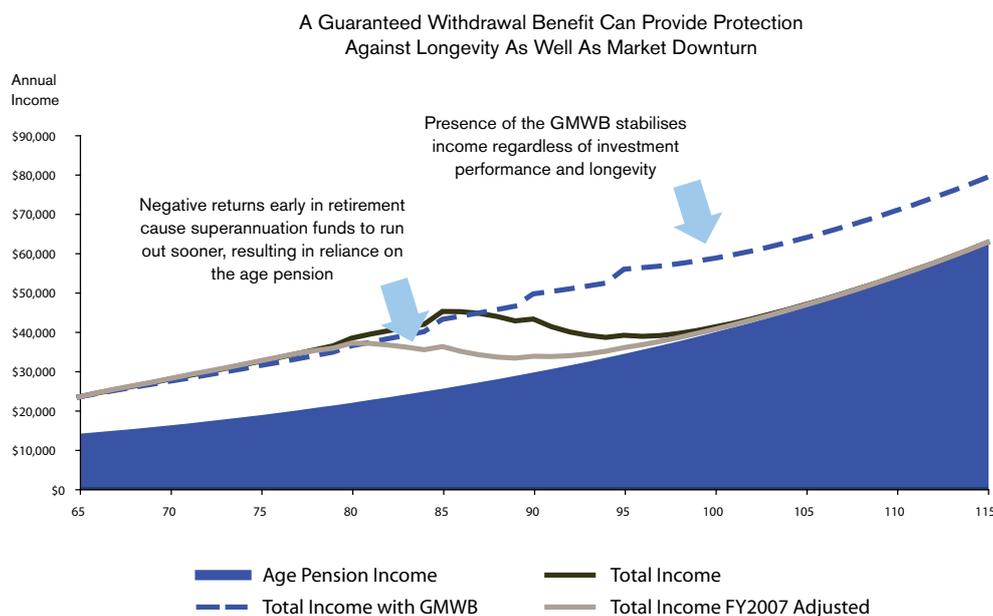
Guarantees are designed to provide for retirement security in either the accumulation or drawdown phases.

- **Ratchets:** A ratchet resets the guaranteed amount to the current value of the investment on specified policy anniversaries. This allows members to “lock in” positive investment returns, maintaining the relevance of the guarantee in relation to the value of the underlying investment over time. Typical ratchet frequencies are annual and tri-annual.
- **Roll-ups:** A roll-up increases the guaranteed amount at a specific rate (e.g. 3%) on an annual basis. Roll-ups are generally used to provide a guaranteed minimum return and are often used as an approximation for an inflation-linked guarantee.
- **Bonuses or step-ups:** A bonus or step-up increases the guaranteed amount at a specific anniversary by a defined amount, conditional on some pre-defined withdrawal behaviour. For example, a 20% increase on the fifth anniversary if no withdrawals have taken place to date.

The most popular design in the North American market is currently a lifetime guaranteed minimum withdrawal benefit (GMWB) that provides retirees with a certain income for life, together with complete flexibility and control over their assets. As Figure 8 shows, the presence of a guaranteed minimum withdrawal benefit insulates retirees from poor market performance, sustaining their income and ensuring that a buffer is maintained over and above the age pension. The chart illustrates the impact of returns for the 2007 financial year on an account-based pension as the gray line.

The most popular design in the North American market is currently a lifetime guaranteed minimum withdrawal benefit (GMWB) that provides retirees with a certain income for life, together with complete flexibility and control over their assets.

Figure 8¹⁹



GUARANTEED MINIMUM WITHDRAWAL BENEFIT

(GMWB): DEFINITIONS

The basic guarantee

A guaranteed regular minimum withdrawal amount, either for a fixed period or for life, even if the account value is depleted.

The policyholder benefit

Either a return of capital invested through regular withdrawals, or income for life through the ability to keep making withdrawals until the policyholder dies.

Variations

The duration can be for a fixed term or for life. The amount of the withdrawal benefit can be increased through a fixed compound-interest rate (roll-up), bonuses or step-ups at certain anniversaries, or through ratchets. Deferral periods, before the GMWBs are exercised, allow for greater withdrawal guarantee benefits for the same cost. These products can be issued to an individual or on a joint-life basis.

Applications

- **Income drawdown:** A floor on income received in adverse conditions.
- **Estate planning:** If the policyholder wishes to live off the managed fund through withdrawals, residual funds pass to the estate on death.

Issues

The exceptional success of this product is leading to intense competition in the United States and Japan through innovation of benefit designs, with increasing competition in the UK and European markets.

GUARANTEED MINIMUM ACCUMULATION BENEFIT

(GMAB): DEFINITIONS

The basic guarantee

A guaranteed minimum investment return for a fixed period.

The policyholder benefit

The greater of the account value and guaranteed benefit at the end of the fixed term.

Variations

The simplest is a 0% roll-up, which translates into a guaranteed return of capital invested. Positive investment returns are more expensive to hedge but could be possible depending on the risk-free rate. Ratchets are also very attractive.

Applications

GMABs are suitable for many investment purposes. They are the simplest and most obvious guarantee.

Issues

High cost relative to other guarantees; it's hard to provide attractive accumulation rates when interest rates are low.

Integration of risk-management strategies

With the advances of technology, it is now possible to employ the same risk-management approaches used by financial institutions at an individual level. With the increasing importance of platforms and the self-managed super fund (SMSF) sector, it is possible that providers will make sophisticated hedging and risk-management overlays available to enhance their offering. Applied at the individual level, such strategies would potentially avoid the increased costs and profit margins of financial institutions, although a degree of risk would be retained by investors.

Longevity insurance

Longevity insurance or pooling products have also been developed in a number of markets, but so far have lacked the commercial success of the hybrid products discussed above. This may be a result of their similarity to annuities and the associated estate-planning issues.

Longevity insurance operates as a deferred annuity. Retirees set aside a portion of their retirement savings (generally 15%–25%), which is invested along with other participants in a longevity pool.

During the establishment phase, usually 20 years or so, retirees derive income from their accumulated retirement savings together with any social security entitlements. Meanwhile, the longevity pool is invested in a range of investment options, chosen by the participant. Funds are retained within the pool on the death of the policyholder and redistributed to surviving members at the end of the establishment phase, often termed a “mortality boost”—generally marketed as providing an additional 1%–2% per annum return on the pool assets before any additional fees for administration.

The first Australian product, released by Asteron, has so far had limited success. Sales of similar products in other markets have been slower than expected, particularly when compared to the hybrid products above. We believe this is due to a number of reasons including:

- failure to manage investment risk
- lack of willingness to annuitise and associated estate planning issues
- little value for retirees with low fund balances
- ability for advisors to construct similar outcomes via alternative means
- behavioural biases including the regret of dying too soon, inability to judge longevity risk, and the low utility derived from long-term returns

Many issuers of longevity insurance products have begun to adopt elements of guaranteed-withdrawal product designs in order to create a better value proposition for the customer and to address the investment risk issue. It is currently unclear how successful the redesign of these products will be.

Reverse mortgages

In the absence of products that help to manage the issues highlighted above, retirees are often left with the last resort of accessing the value within other assets such as the family home.

Reverse mortgages have become an increasingly popular product in recent times for those already in retirement who are seeing other assets extinguished. It may also be a matter of timing as most retirees eventually move into more manageable accommodations or care facilities and naturally release large portions of equity stored in the family home. Reverse mortgages are typically viewed as a last-resort strategy, with most retirees feeling uncomfortable about cashing in the family home and leaving no buffer of funds for future unforeseen circumstances or bequests. It is unclear how the credit issues within financial markets will affect this developing market. Products such as these may also be viewed negatively by manufacturers²⁰ in the face of the depreciation in the residential property market, the likes of which have been observed in the United States and the UK, as well as a number of other markets.

Longevity insurance operates as a deferred annuity. Retirees set aside a portion of their retirement savings (generally 15%–25%), which is invested along with other participants in a longevity pool.

Local considerations

Any new product developments will need to conform to local market and regulatory requirements in order to be integrated with the existing superannuation system. As we have observed in other markets, there is also likely to be a degree of regulatory attention and oversight as new products enter the market. Policy changes may also serve to encourage the development of sustainable products as the needs of the population change and evolve.

There are significant challenges in the development of new products to meet the changing needs of an Australian approaching retirement. With the first wave of new products beginning to enter the market, we anticipate that more will follow.

CONCLUSION

The transition of funds into retirement or drawdown is expected to reach \$1.2 trillion, or 39% of total superannuation assets, over the next 15 years.

The transition of funds into retirement or drawdown is expected to reach \$1.2 trillion, or 39% of total superannuation assets, over the next 15 years.²¹ An increasing focus of wealth management organisations will be on servicing the needs and issues of this segment.

As recent market events have shown, there is a significant product gap in the Australian market when it comes to managing risks faced by Australians approaching retirement. The accumulation mentality that has served the superannuation industry well since its inception will need to adapt as increasing numbers transition through to retirement and the drawdown of assets.

Product innovation is necessary to develop solutions for retirees, but consumer education and advisor tools that highlight the issues facing their clients will be vital for the solutions to be successful.

ENDNOTES

1. The average balanced fund lost 6.4% for the year as of 30 June 2008 (source: Superratings). Combined with the need to draw down a minimum of, say, 4%, that amounts to a total decrease in superannuation funds of 10.4% for the year.
2. Based on Australian Government Life Table (ALT04-06 males), allowing for 1.5% per annum improvement.
3. Based on Australian Government Life Table (ALT04-06 males), allowing for 1.5% per annum improvement.
4. Net expected return 7.8% per annum. Maximum annual withdrawal equal to 6% of initial investment (increased for positive market performance) and the amount corresponding to the minimum Pension Valuation Factor (PVF).
5. Asset allocation as per figure 2, net expected return 7.8% per annum with return in year 1 of -11.8% for 2007FY adjustment.
6. Functional illiteracy and functional innumeracy are defined as not meeting the minimum level required for individuals to adequately address the complex demands of everyday life and work in the emerging knowledge-based economy.
7. Australian Bureau of Statistics, Adult Literacy and Life Skills Survey: Summary Results, Cat. No. 4228.0., 2006m.
8. Net expected return 7.8% per annum (70/30) versus 7.00% per annum (50/50).
9. Ageing and Health Care Costs—Smeeding, ACERH Policy Forum—Brisbane, Feb. 22, 2008.
10. AXA Retirement Scope—2008.
11. We have segregated the population into three main categories, similarly to Milliman's 2006 U.S. report titled "Target Marketing: The Watchwords for Capturing Retirement Income Opportunities," which we believe is comparable with the basic structure of the Australian market.
12. ABS - 65540DO001 Household Wealth and Wealth Distribution, Australia, 2005-06.
13. Blight & Longden—Next Generation Retirement Income Streams.
14. Lifetime annuities represented only 0.1% of new business sales for the 12 months to 31 December 2007. Source: APRA.
15. As of 31 March 2007, total funds under management in retirement income-stream products was \$80 billion, with sales in the preceding 12 months of \$16 billion. Source: Blight & Longden.
16. Assumes 50% equity, 50% fixed interest allocation, \$150,000 initial investment, annual inflation of 3% and annual net return of 7%.
17. Basis as per Figure 6 with illustration of Australian equity returns for the 2007 financial year (-7%).
18. NAVA 2007 Annuity Factbook.
19. Basis as per figures 5 and 6 with allowance for lifetime GMWB.
20. Recent withdrawal from the Australian reverse-mortgage market of the Over Fifty Group, Bluestone, Macquarie Group and Australian Senior Finance serve to highlight the issues in the current financial climate: Source AFR 16th June 2008.
21. Rice Warner 2007 Superannuation Projections Report.



Milliman, whose corporate offices are in Seattle, serves the full spectrum of business, financial, government, and union organizations. Founded in 1947 as Milliman & Robertson, the company has 48 offices in principal cities in the United States and worldwide. Milliman employs more than 2,100 people, including a professional staff of more than 1,000 qualified consultants and actuaries. The firm has consulting practices in employee benefits, healthcare, life insurance/financial services, and property and casualty insurance. Milliman's employee benefits practice is a member of Abelica Global, an international organization of independent consulting firms serving clients around the globe. For further information visit www.milliman.com.

Wade Matterson
wade.matterson@milliman.com

**Level 5, 32 Walker Street
North Sydney, NSW 2060
Australia
+61 2 9959 2232**

www.milliman.com