

Biennial Convention 2007

Adventures in Risk

23-26 September 2007 • Christchurch, New Zealand



Institute of Actuaries of Australia



Innovation in Australian Retirement Incomes

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Agenda

- Why did we write this paper ?
- Key sections :
 - Growth drivers
 - Retiree needs
 - Adviser tools
 - Current product and future product innovations



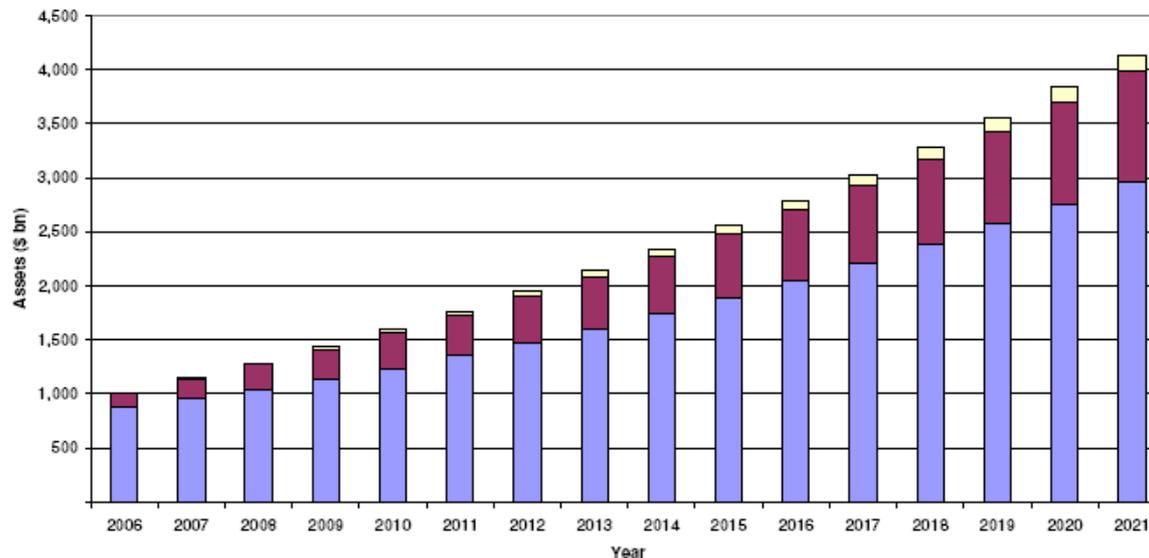
Growth drivers

- Ageing population
- Growth in retiree asset base
- 2006 Budget changes
- Changing needs driven by baby boomer retirements



Post Retirement Superannuation Assets – 23% p.a. CAGR to 2012

Total Superannuation Assets by Year



Pre Retirement Assets Post Retirement Assets Lump Sum Assets

	2006	2007	2008	2009	2010	2011	2012	2016	2021	CAGR (2012)	CAGR (2016)	CAGR (2021)
Pre Retirement Assets (\$bn)	872	953	1,040	1,135	1,239	1,352	1,475	2,051	2,958	9.1%	8.9%	8.6%
Post Retirement Assets (\$bn)	138	192	246	301	357	415	473	736	1,178	22.7%	18.2%	15.3%
- Pension Assets (\$bn)	138	185	231	278	326	376	426	652	1,033			
- Lump Sum Assets (\$bn)		7	15	22	30	38	47	84	145			
TOTAL	1,011	1,145	1,286	1,436	1,596	1,767	1,948	2,787	4,136	11.6%	10.7%	9.8%



And Other Funds

- Housing assets are still the greatest assets
- New budget rules encourage movement of assets to super



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Retiree Needs

- So many decisions...how to best enjoy a nest egg!
- Life stage

Retirement Life Stages



- Many different drivers for retirees
 - Funding position
 - Objectives
 - Home ownership status



Balancing means and desires

- Capital & Income from
 - Investments like super
 - Aged pension
 - Part time work
- Spending
 - All the fun stuff you ever wanted to do
 - Some mundane considerations like health care costs
 - How much to bequeath



Role of the Advisor

- Understanding their client
- Educate their client on what lies ahead
- Help them meet their goals

.....

- currently not as focussed on post retirement
- tools not support longevity elements
- And not broad enough product/strategy



Adviser tools – need more on longevity & lifestyle risk

A Financial Optimization Process for Retirement

1. Client Needs

The client's lifestyle and estate needs inventoried and grouped in order of importance to the client.
e.g. Target 99.5% Rate of Success, incorporate individual's status, amount of investment available, horizon, inflation assumed, mortgage information)

2. Available Wealth

Identify all wealth and sources of income available to support lifestyle and bequest requirements. E.g. Holding of different investment and its corresponding tax basis; income sources and expected duration

3. Product Universe

Look at types of investments available and their features

4. Risk & Return Analysis

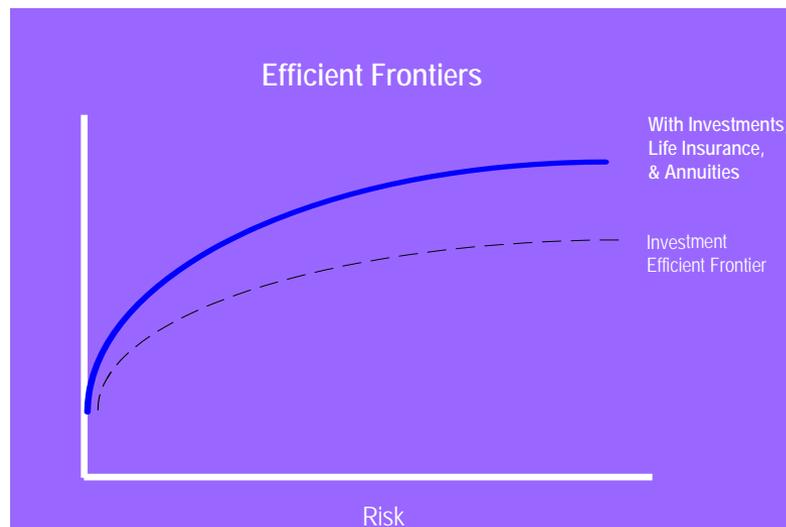
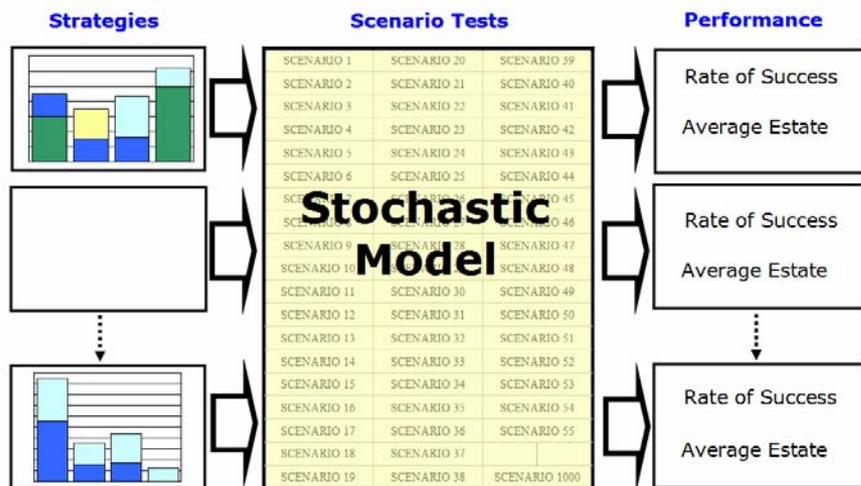
Annual wealth is rolled forward from year to year across each scenario based upon detailed cash flow projections reflecting real world behavior.
Our risk measure ("Rate of Success") not only factors in the number of failed scenarios, but also the probability of surviving to a failure and the severity of the failure.

5. Optimization

6. Analytics



Adviser tools – simulation based using longevity and all products





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Products

- Primarily Annuities (allocated and lifetime)
- Limited Evolvment of :
 - Equity release (reverse mortgage, home reversion)
 - Longevity / protection products
- ...Further innovation to emerge in areas of longevity pooling, variable annuities, longevity hedging and risk insurance



Allocated Annuities Most Popular...But Have Limitations

Types Of Annuity

Description of Key Features

Allocated Annuity

The current product offering of retiree specific investment management products in Australia is dominated by allocated pensions (and similar drawdown style products such as TAPs). Allocated pensions provide unit linked investment vehicle with flexible drawdown (minimum set by government).

Allocated pensions have a number of positive features including flexible investment options allowing the retiree to tailor their asset allocation, simplicity and transparency.

A weakness of allocated pensions is the inability to manage longevity risk, without taking on high levels of investment risk or continually reducing spending.

Lifetime Annuity

Lifetime annuities provide a fixed income stream (potentially indexed) for the life of the retiree. They are generally guaranteed which offers risk protection, however this comes at a cost in terms of pricing (value for money) and lack of access to funds. Providers also require considerable capital charges to maintain such portfolios.



Longevity Pooling Products

- Pooling products have already arrived
 - linked asset allocation with survivorship pool being distributed to remaining policyholders
- Good to provide a protection element in latter years
- Market growth yet to be confirmed
 - Ease of understanding for advisers and clients?
 - Time horizon for benefits and risk coverage/option?



Future Annuity Products

- Variable Annuities
 - Plain version is that it is like a Lifetime Annuity but customer receives units rather than dollars
 - Customer can choose and adjust their asset allocation over time
- Have taken off in overseas markets
 - Designs have proliferated to meet customer desires
 - Require complex hedging programs if the market takes that route



With-Profit Annuities

- Designed so that:
 - Initial annuity is lower than for a lifetime annuity
 - While there is a buffer the pool can invest in more growth assets
 - If all goes to plan, bonuses increment the annual income and customers are better off
- Useful for customers not wanting to do their own investments, but the with profit concept will need re-introducing to Australia



Each Has Its Merits

Feature	Allocated Pensions	Lifetime Annuities	Longevity Pool	Variable Annuities	With-Profit Annuities
Access to funds	Flexible withdrawals	Locked in income stream at purchase	Restricted	Locked in at purchase	Locked in income stream at purchase
Investment Options	Choice of asset class and manager, ability to change over time	Not required as company guarantees earning rate	Dependent on design	Choice of asset class and manager, ability to change over time	Company determines the appropriate investment allocation
Investment Return Profile	Depends on investor choice and fee levels	Individual return based on longevity, fund assets often in fixed interest	Depends on option chosen	Depends on investor choice, fee levels and individual longevity	Individual return based on longevity and fund performance
Longevity Insurance	None offered	Completely insured	Covers individual but not systemic risk	Completely insured	Completely insured
Investment guarantees	Based on investments chosen, generally not guaranteed	Backed by life company, requires capital	Not guaranteed	Based on investments chosen, but elaborate guarantees are often offered	Existing income level plus reversionary bonuses are guaranteed.
Easy to understand?	Transparent and well understood	Simple promise	Simple concept, although benefits may not yet be fully understood	Contracts are often complex, underlying concept is not too complex	May be complex for Australian market given loss of familiarity with 'with-profit' contracts



Equity Release Products

- Main types
 - Reverse mortgages (currently dominant in Australia)
 - Home reversion schemes
 - Shared appreciation mortgages (not formally offered)
- Nascent market that is growing quickly



Other Potential Products

- Insurance offerings :
 - Private health insurance?
 - General insurance products?
 - Life insurance (Long term care; extended standard products) ?
 - Hedging of longevity risk / longevity index ?
- Superannuation “ATM” accounts?

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