



Retirement Income White Paper

Insights Presentation

Alun Stevens
Jack Ding
Nathan Bonarius

RICEWARNER

Insight like no other

Agenda

- Background
- Preliminary projections
- What are the risks?
- What are the possible solutions?

Purpose of presentation is to get feedback

Options are presented in order to generate comment



Background

Introduction

The Actuaries Institute released the Longevity Tsunami report in 2012 which raised issues related to retirement incomes

Rice Warner has now been commissioned by the Institute to produce a white paper on this key issue facing the financial system.

The key research questions we are seeking to answer are:

- What are the relative financial positions of the various cohorts (income/generational) likely to be?
- Contrast the different cohorts to identify risks and potential solutions to achieve adequate levels of retirement benefits whilst ensuring system sustainability.

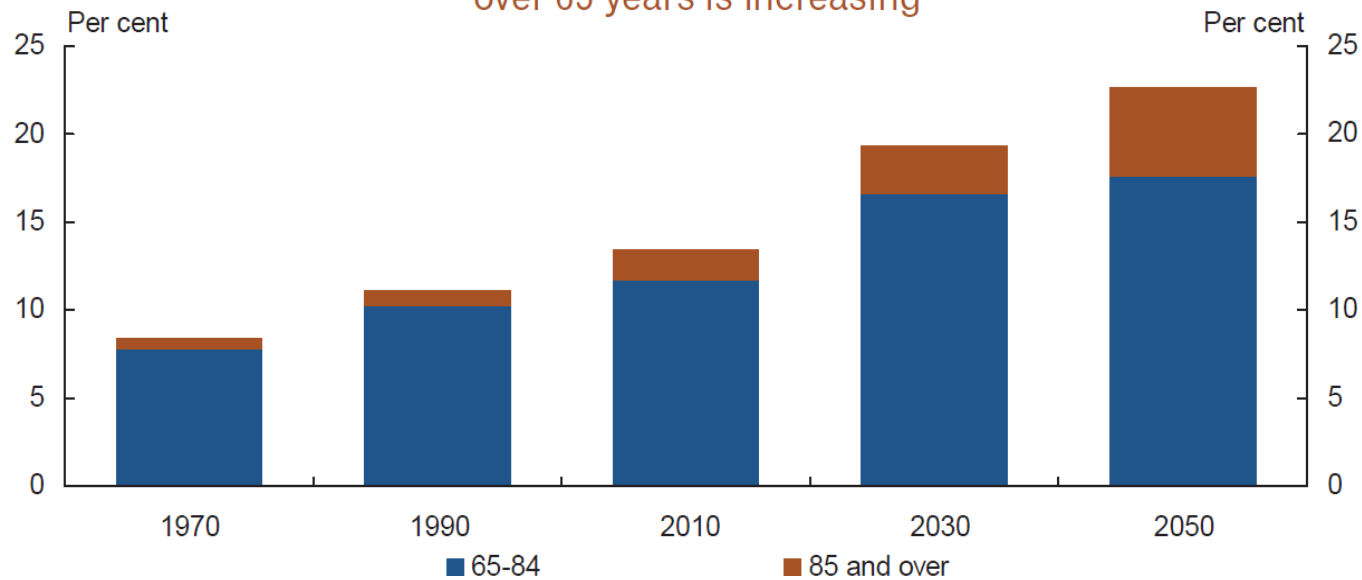
The Institute also nominated additional investigations that could be included in this work:

- How is wealth accumulated across different asset classes by the cohorts?
- What is the impact of factors such as age pension, indexation and pension ages?
- How can people turn assets into income?
- How is each cohort affected by longevity risk
- Can the social security system be modified to reduce costs and improve self-funding

The purpose of today's session is to summarise the issues and facilitate discussions on this topic.

Intergenerational Challenges

Ageing is a challenge for future economic growth — the proportion of the population aged over 65 years is increasing

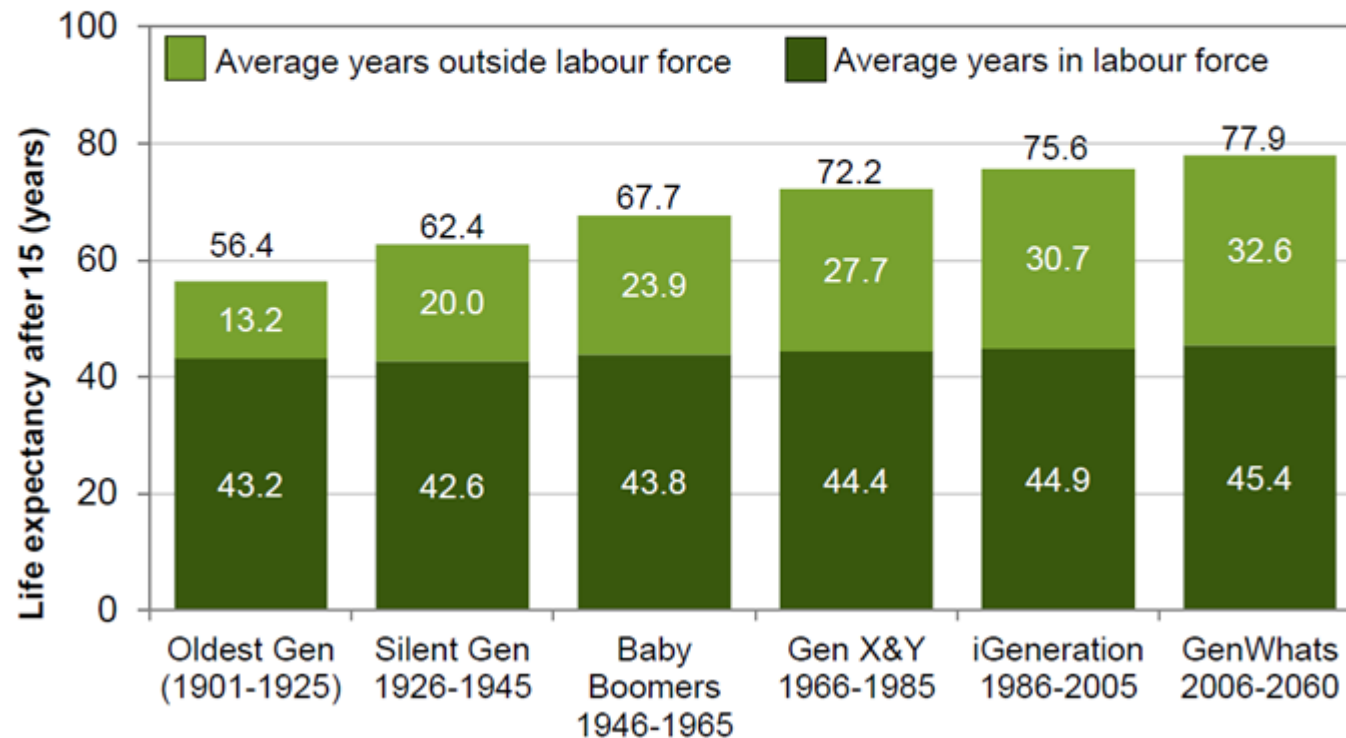


Source: Intergenerational Report 2010

Improved Life expectancy

Succeeding generations will require longer and longer support outside the workforce

Successive male generations 1901 to 2060



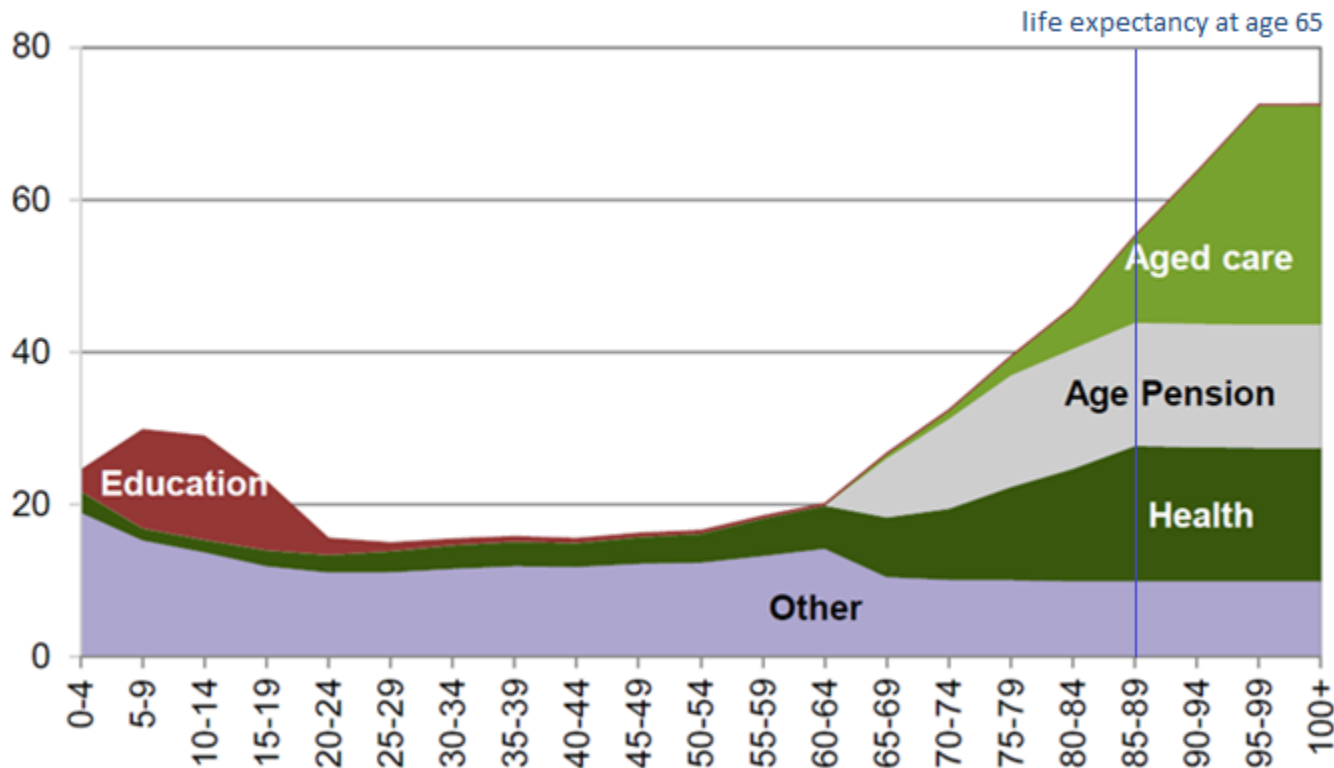
Source: Productivity commission research paper 2013

Age-related government spending

Government support of citizens is mainly in their older years

Age-related government spending

All governments, \$'000 per person, 2011-12

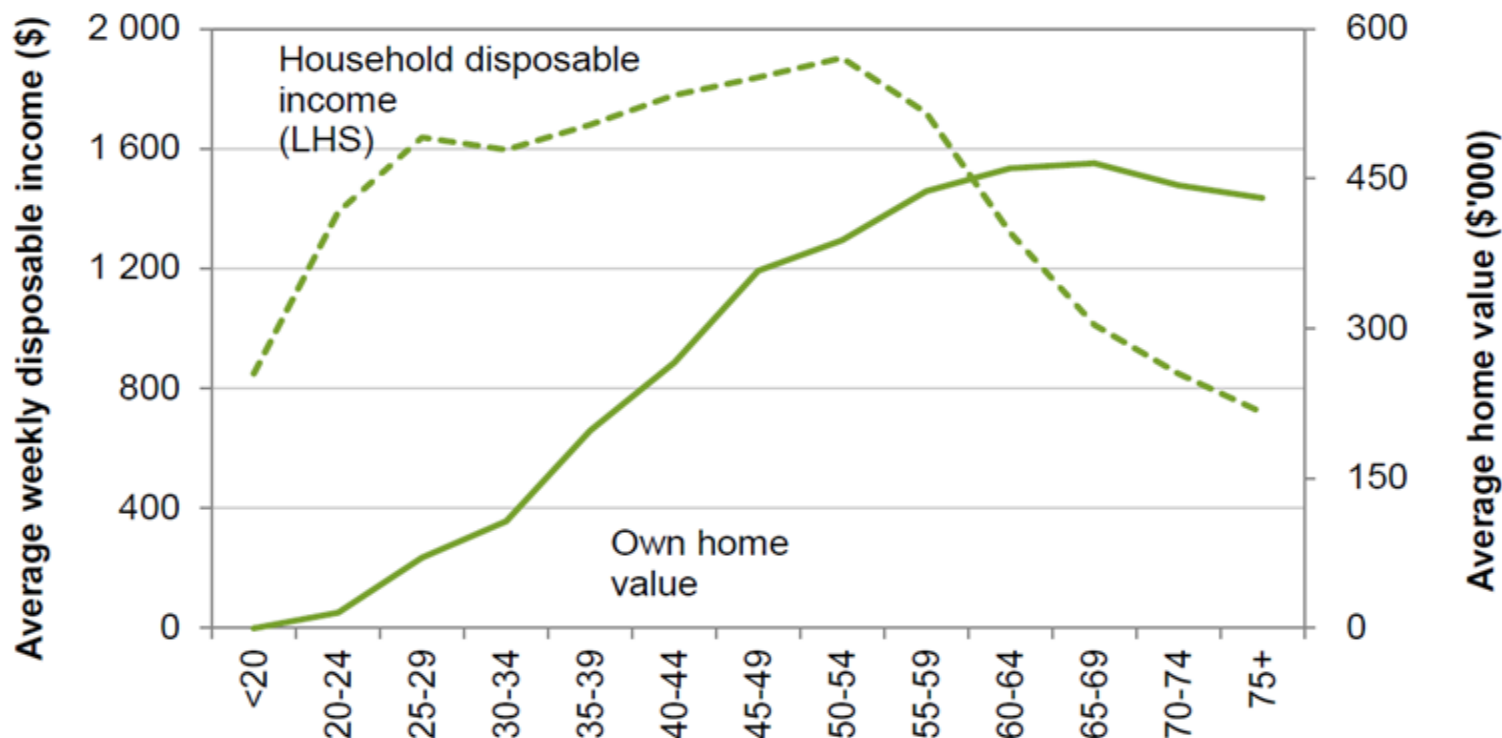


Source: Productivity commission research paper 2013

Productivity Commission Report

Older Australians are often income poor but asset rich

2009-10



Source: Productivity commission research paper 2013

Summary

The key challenge is the ageing of the population which has two major elements:

- The increasing proportion of the population living at advanced ages
- The increasing periods which they live post work

Government expenditure is strongly weighted towards older Australians, and population ageing will increase this weighting.

This will cause substantial fiscal pressure.



Examining the cohorts

Methodology

We have developed a model that subdivides the Australian population by age, gender and net wealth. Sources:

- ABS Household Balance Sheet
- ABS Survey of Income and Housing
- RBA reports on household mortgages
- Rice Warner Superannuation and Personal Investment market projection reports

Wealth is subdivided into:

- Superannuation
- Non-superannuation savings/investments
- Family home

Breakdown to age cohorts and decile socio-economic groups by gender according to the sample demographic of the ABS Survey of Income and Housing

Each asset (superannuation, family home and other investments) is then projected separately to retirement.

Assumptions

Age cohorts

- Quinquennial age groups by gender from age 25 to age 84

Socio-economic groups

- Deciles based on current net wealth + current income x term to age 70

Voluntary superannuation savings.

- Based on ABS survey by age

Non-super savings.

- ABS and RBA research (lower for lower socio-economic groups and vice versa)

Value of owner-occupied property.

- Assumed to be at inflation rate

Repayment of mortgage.

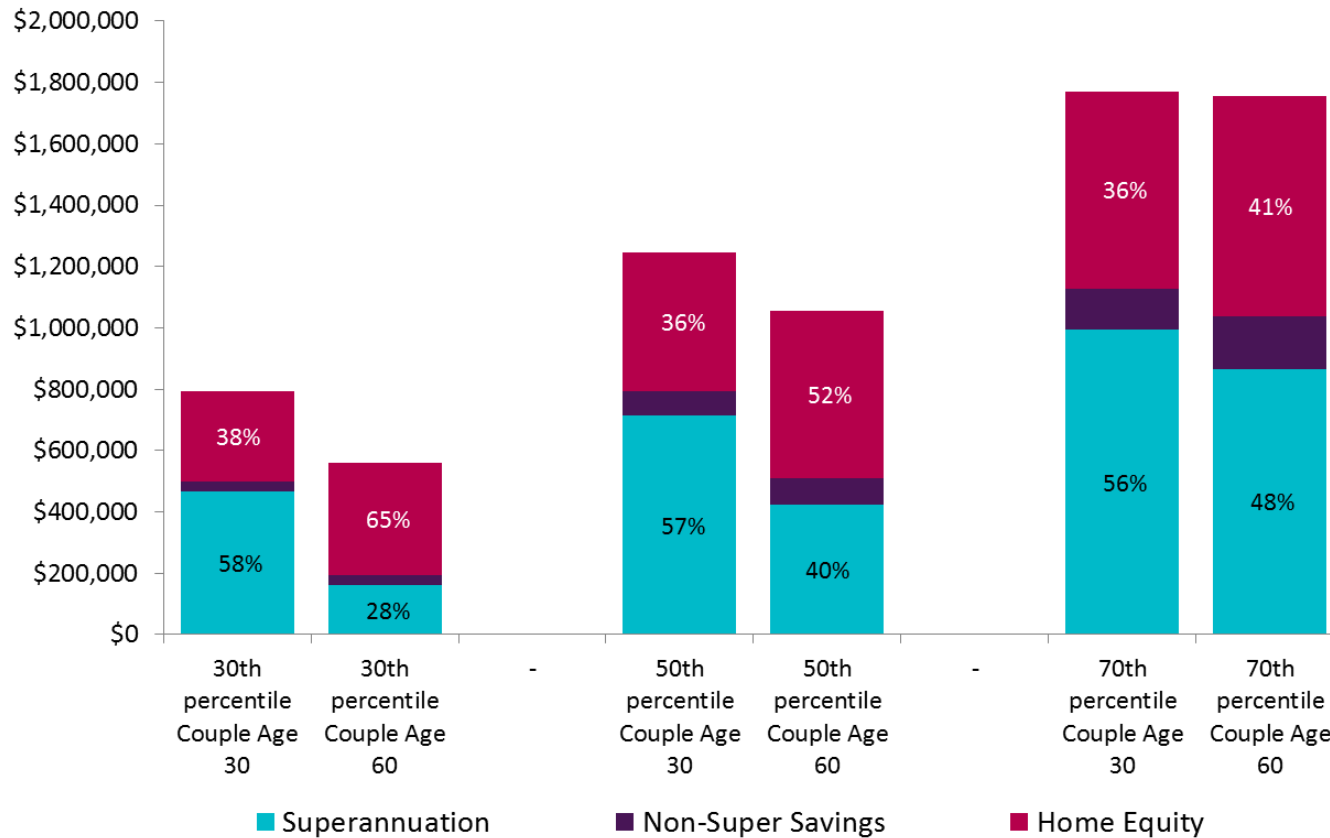
- 65% of non-super savings on average (higher for lower socio-economic groups and vice versa)

Wealth of Couples

- Projections are for individuals who are combined on basis of being in same decile

Projected assets at retirement

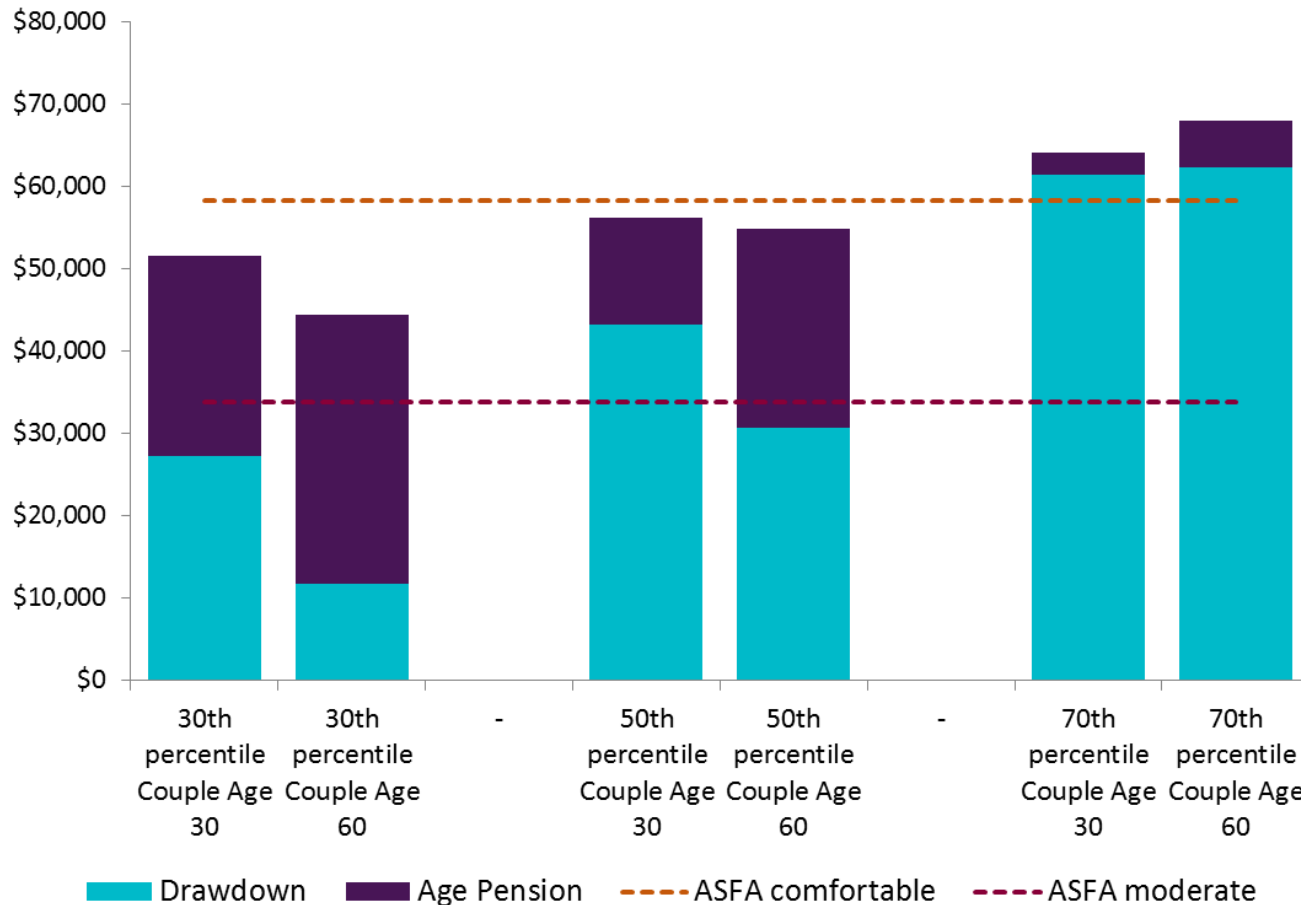
Projected Wealth at Age 65



- Younger cohorts have lower value in their own homes at retirement
- Younger cohorts have more superannuation because of longer participation
- This effect not as marked for wealthier groups due to better super
- Increases in super offset by reduced housing and non-super savings

Projected incomes at retirement

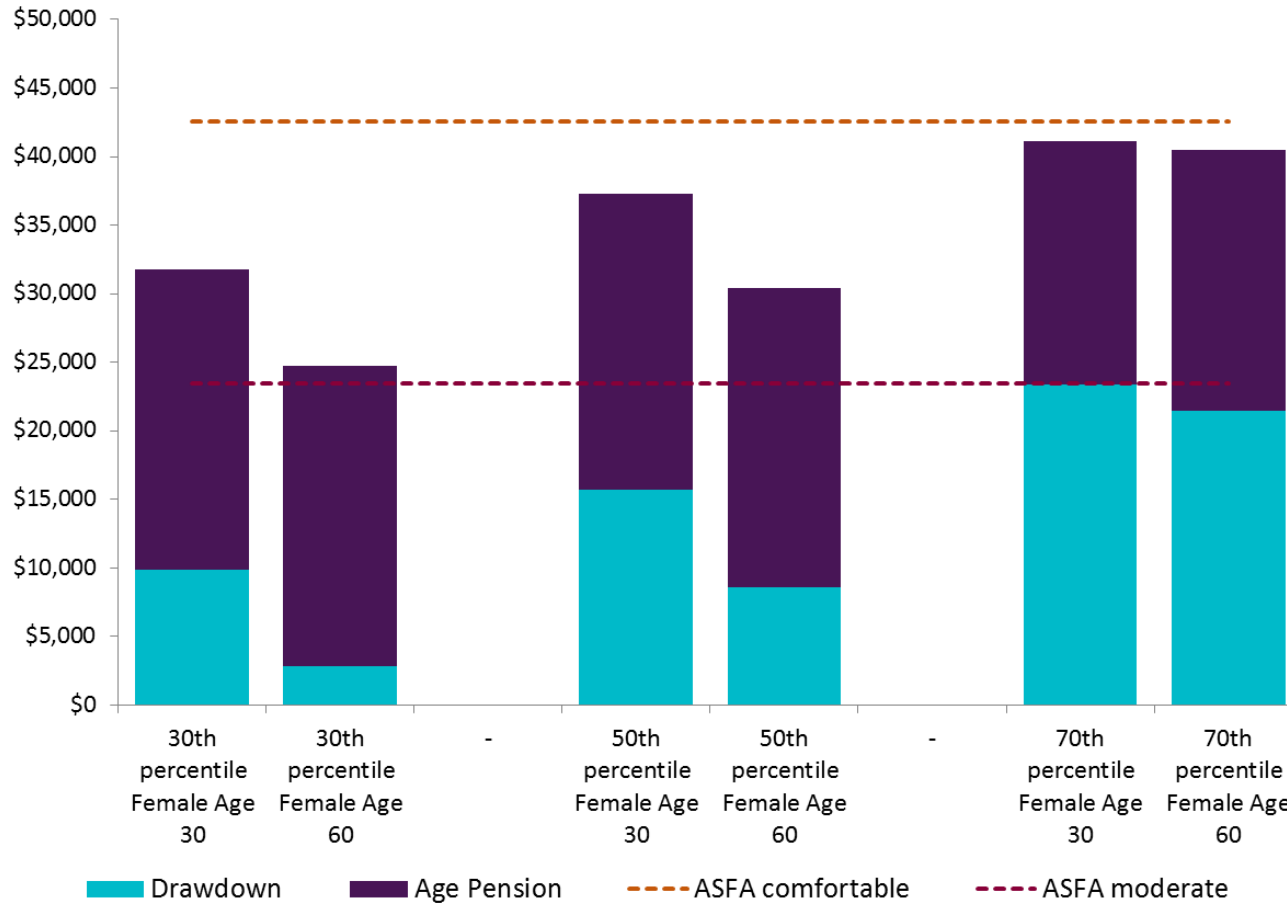
Estimated Annual Income to Life Expectancy - Couple



- Incomes are less affected than assets because of impact of Age Pension
- Most retirees will achieve a modest retirement because of the Age Pension
- Wealth Gap narrowing may be artefact of modelling methodology

Projected incomes at retirement

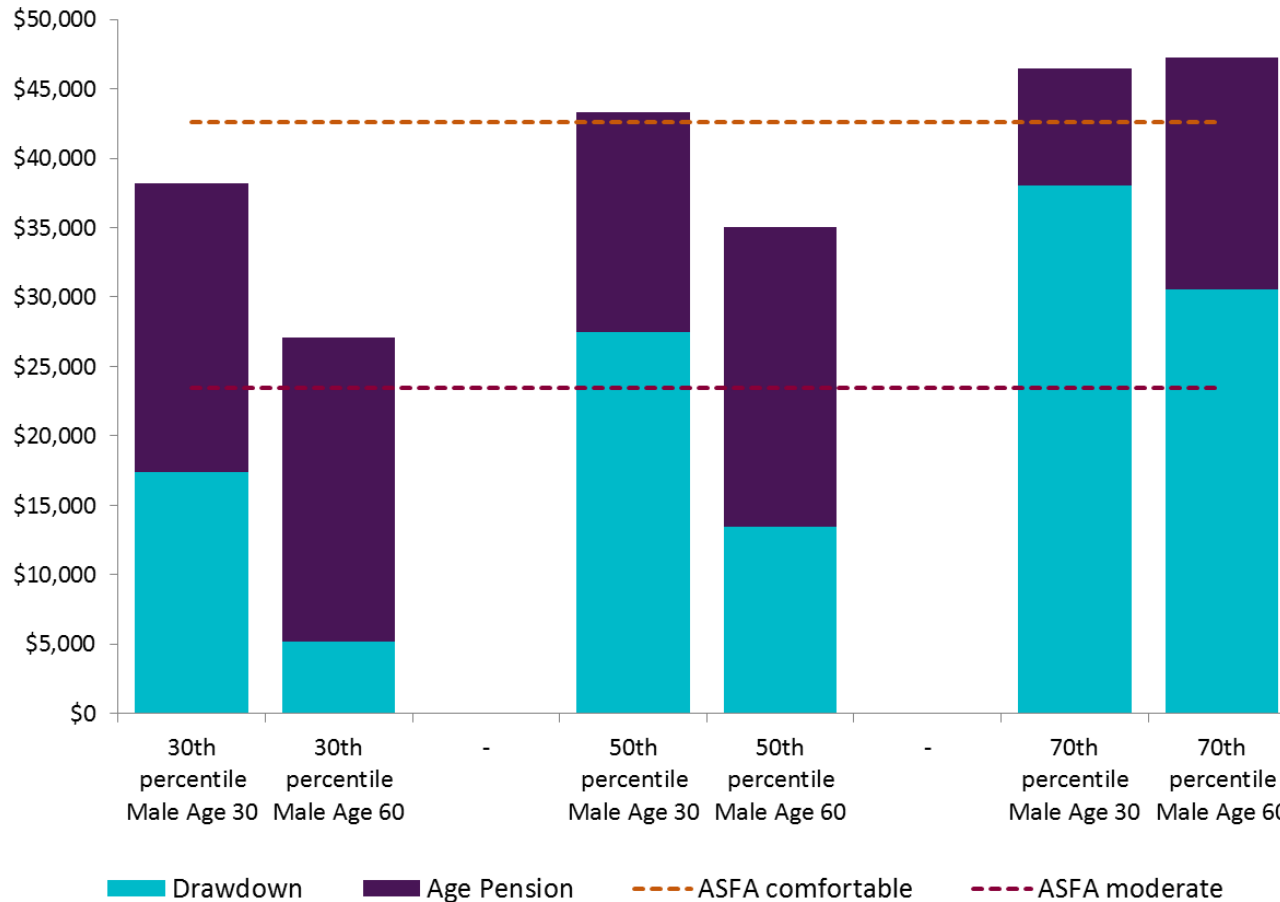
Estimated Annual Income to Life Expectancy - Single Female



- The results for singles are very similar
- Single women fare slightly worse than couples against the ASFA standards

Projected incomes at retirement

Estimated Annual Income to Life Expectancy - Single Male



- Single men fare slightly better than couples against the ASFA standards
- Single men fare better than single women

Summary

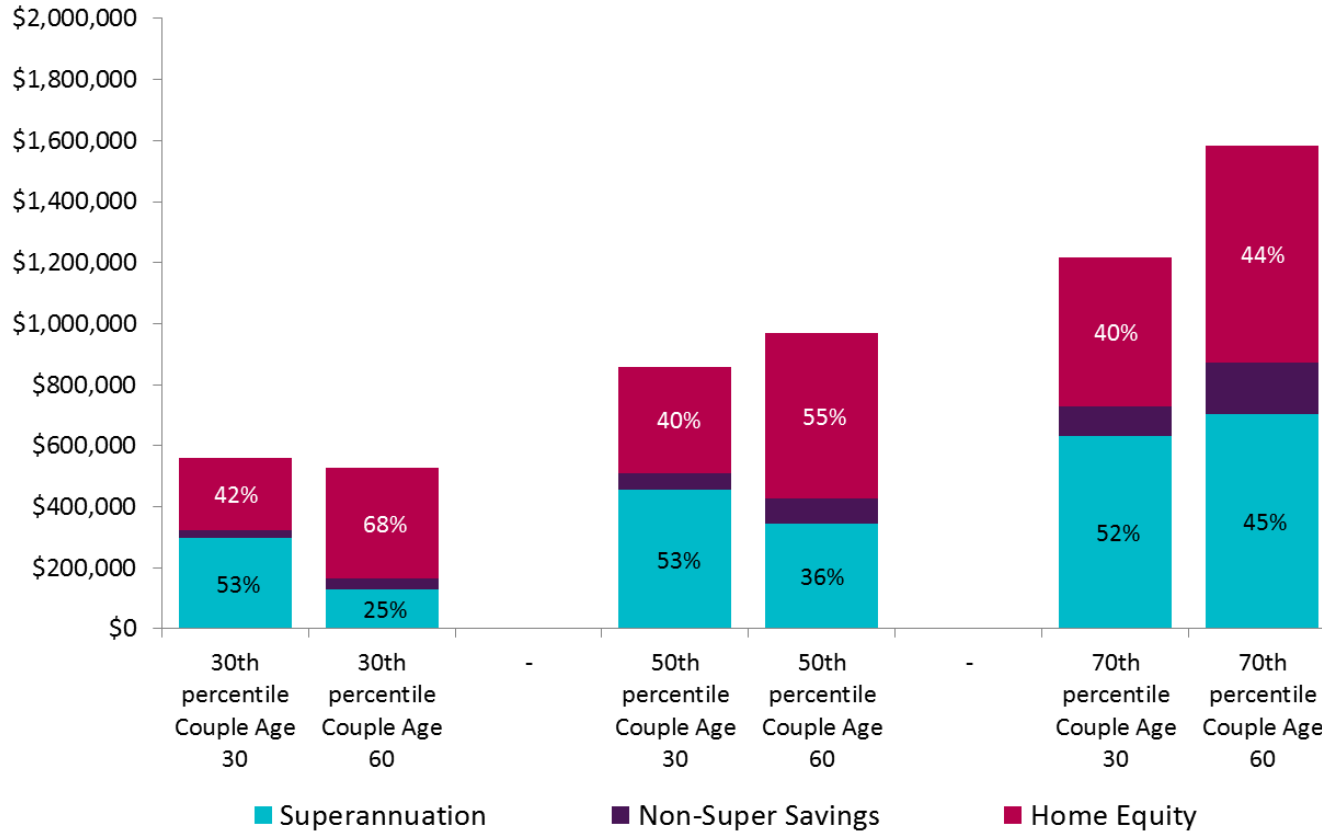
- Households at the 70% socio-economic percentile are expected to have enough savings to maintain the ASFA comfortable living standard until life expectancy.
- Median Couple households are expected to maintain a living standard close to ASFA comfortable. The Median Single households are expected to be able to maintain a living standard half way between ASFA moderate and comfortable.
- The main risk for these groups is the risk of living longer than life expectancy.
- Households at and below the 30% socio-economic percentile are and will continue to be largely reliant on Age Pension payments. The main risk for them is policy risk that the social security payments are cut.
- The older cohorts are asset rich and income poor hence the main question may be how to access home equity for expected consumption past life expectancy.
- Younger generations face the same problem, although they are expected to have higher superannuation savings. They are likely to have less savings outside super and less home equity.



What are the risks

Projected assets at retirement – 5% worst case

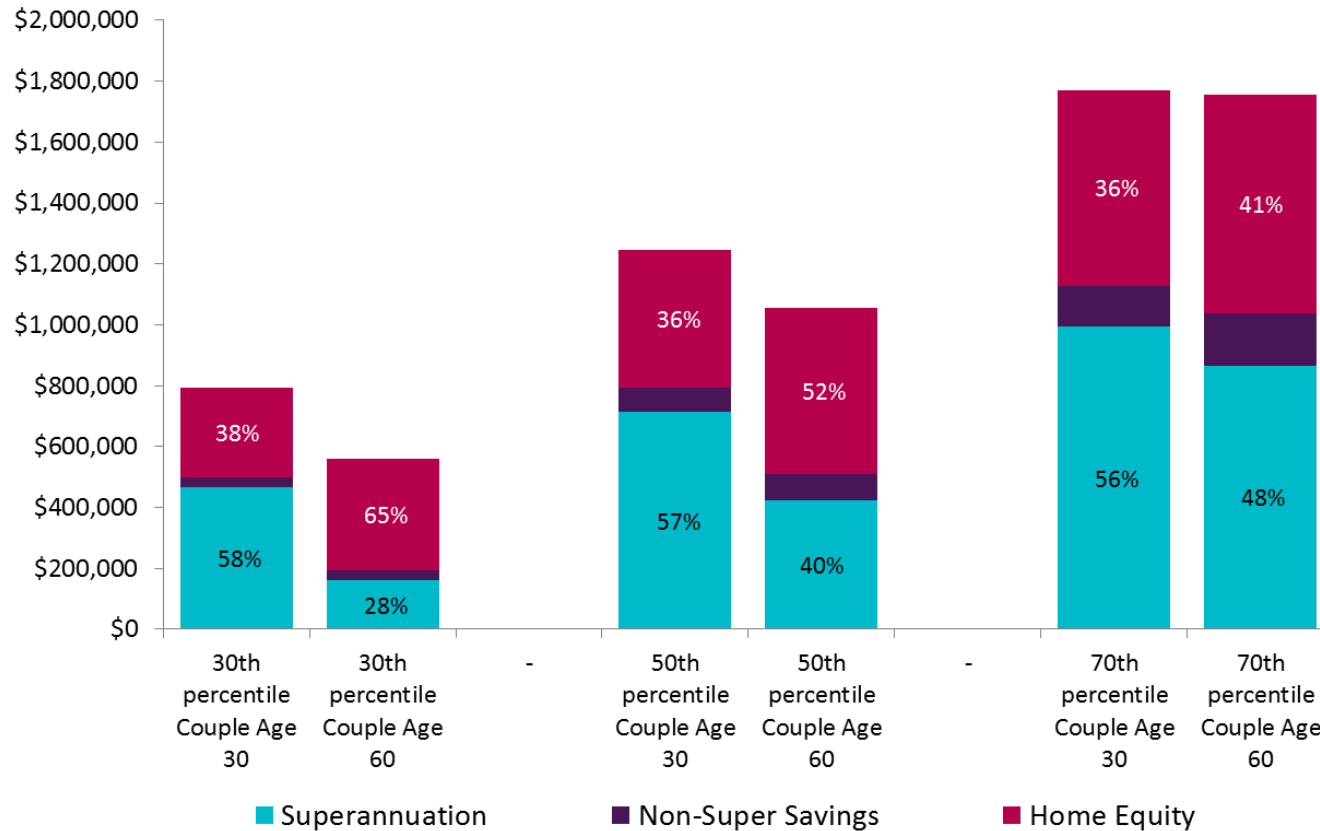
Projected Wealth at Age 65



- The impact of investment outcomes has more impact on the younger cohort because of the longer period to drawdown
- The outcomes for the younger cohort are lower by about 30%

Projected assets at retirement – median for comparison

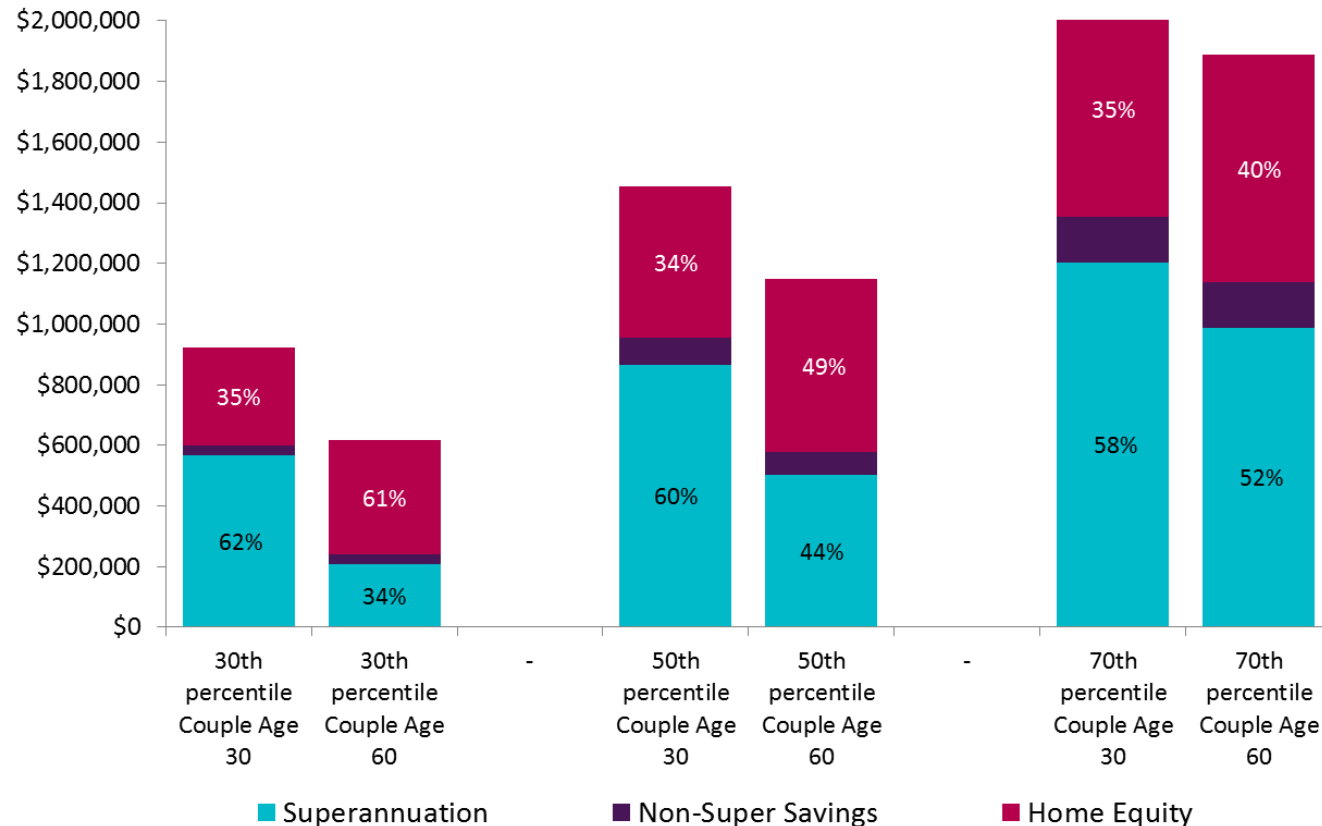
Projected Wealth at Age 65



- The impact of investment outcomes has more impact on the younger cohort because of the longer period to drawdown
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Projected assets at retirement – Retire at age 70 (Median)

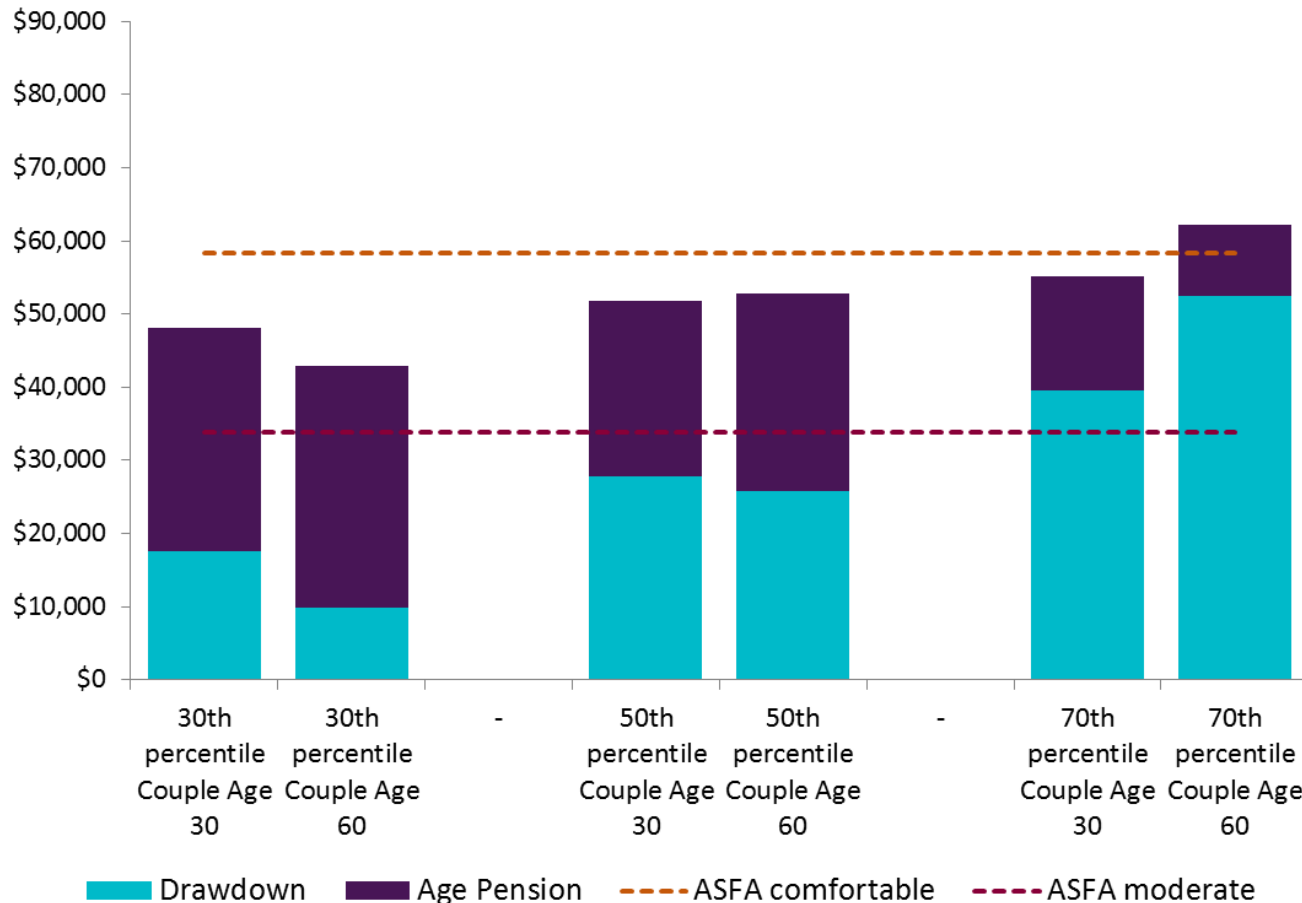
Projected Wealth at Age 70



- Younger cohorts benefit more from delay
- Greater asset accumulation will reduce budget impact

Projected incomes at retirement – 5% worst case

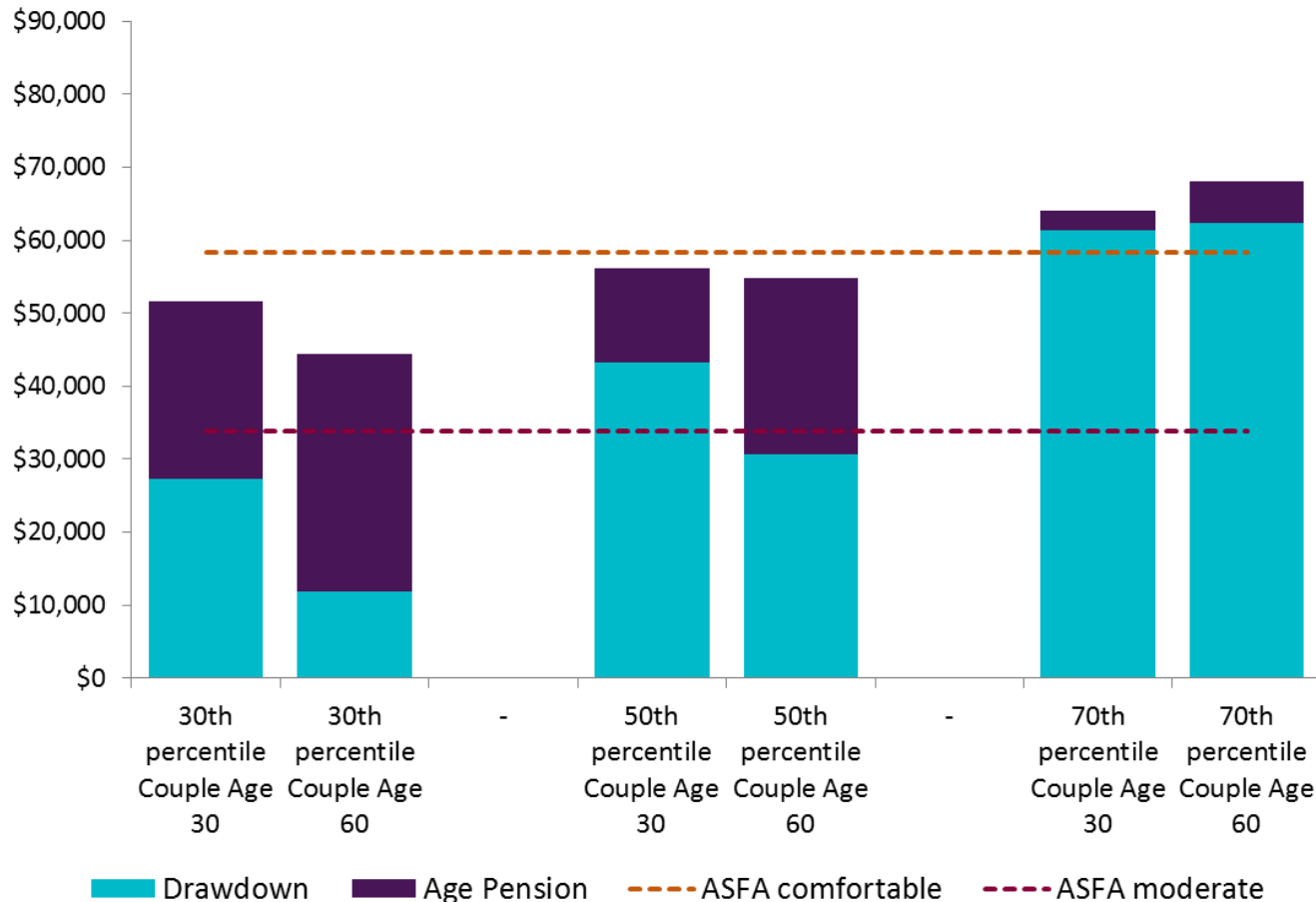
Estimated Annual Income to Life Expectancy - Couple



- Results for the younger cohort are again more affected
- The impact is reduced by the compensating effect of the Age Pension
- The wealthy cohort is more impacted because the Age Pension entitlement is smaller

Projected incomes at retirement – median for comparison

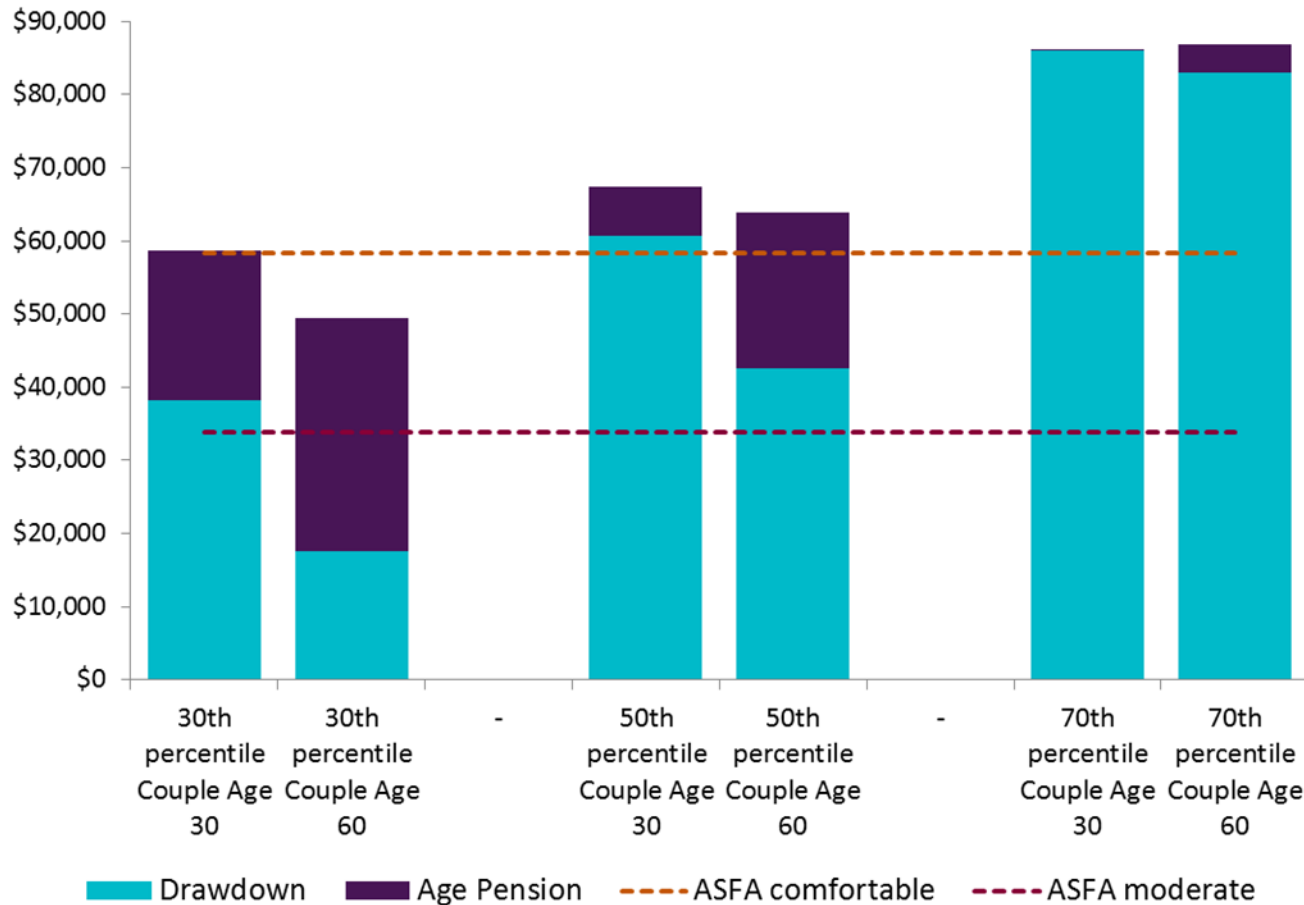
Estimated Annual Income to Life Expectancy - Couple



- Results for the younger cohort are again more affected
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Projected incomes at retirement – Retire at age 70 (median)

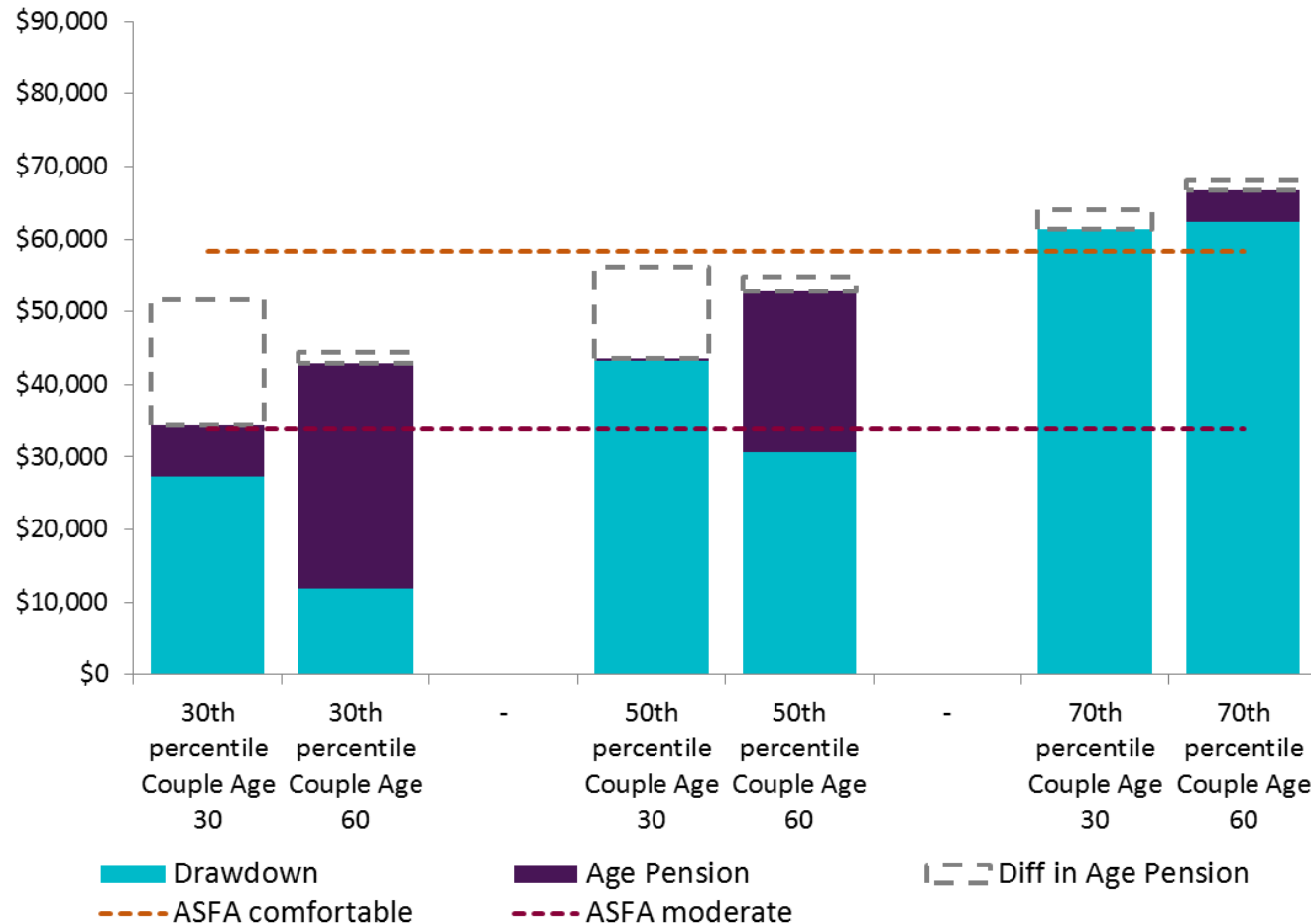
Estimated Annual Income to Life Expectancy - Couple



- All cohorts benefit from delay
- Younger cohorts will be able to support a comfortable income
- Age Pension component reduces

Projected incomes at retirement – Age Pension Indexed to CPI (Median

Estimated Annual Income to Life Expectancy - Couple



- Retirement at 65
- Value of Age Pension reduced by lower indexation
- Eligibility reduced because of lower indexation of Means Test thresholds
- Younger cohorts with below median wealth will be materially impacted
- Many will struggle to maintain a Moderate income

Potential Risks: Age cohorts

- There is a significant increase in the superannuation balance among younger cohorts. In fact, the higher asset level among the younger cohort is mainly due to the higher super balance
- Overall, Boomers (currently about age 58 - 69) have significant value in homes and money in and out of super. Lower socio-economic cohorts are heavily dependent on the Age Pension because of short period in super. Risk of tighter means testing for pension and health and age care.
- Gen X: will have more Super but fewer will own homes. Potential public policy risk of higher tax to support the boomers while enjoying less social security benefit when they retire.
- Gen Y: more Super but facing big hurdles in buying houses in capital cities. Higher Superannuation means less mortgage repayment. Similar public policy risk to Gen X.

Potential Risks: Socio-economic Groups

- Above Median households are expected to have savings that can provide comfortable income until life expectancy. The main risk for them is dealing with longevity, health and other personal risks.
 - How can they secure their retirement income past life expectancy?
 - How can they deal with investment risks?
 - How can they deal with health shocks?
- The below Median groups are heavily reliant on Age Pension and other social security benefits. The main risk for them is policy uncertainty and other systemic risks such as housing affordability.
 - Is the Age pension system sustainable?
 - How to improve the efficiency of government's tax and concessions policies?
- Lower indexation of Age Pension and Means Tests will have significant impact on younger cohorts with lower incomes

Other considerations

- People in the low income / low wealth group have lower saving rates which make it very difficult for them to advance themselves out of dependency on the social security system.
- The majority of personal savings goes to residential property/investment property.
- How significant will be the offsetting of savings inside and outside super with increases in SG?
- Inflation. Inflation risk may not be as significant as historically, as the central banks around the world have gained experiences in the last 30 years and most have well established inflation targets and manage this well.
- Investment return risk, how to deliver higher long term return while managing short term volatility? (older members are myopic and short term risk averse)
- Public policy risk. The tightening of means tests for accessing public funding could have significant impact on median wealth cohorts.



What are the possible solutions

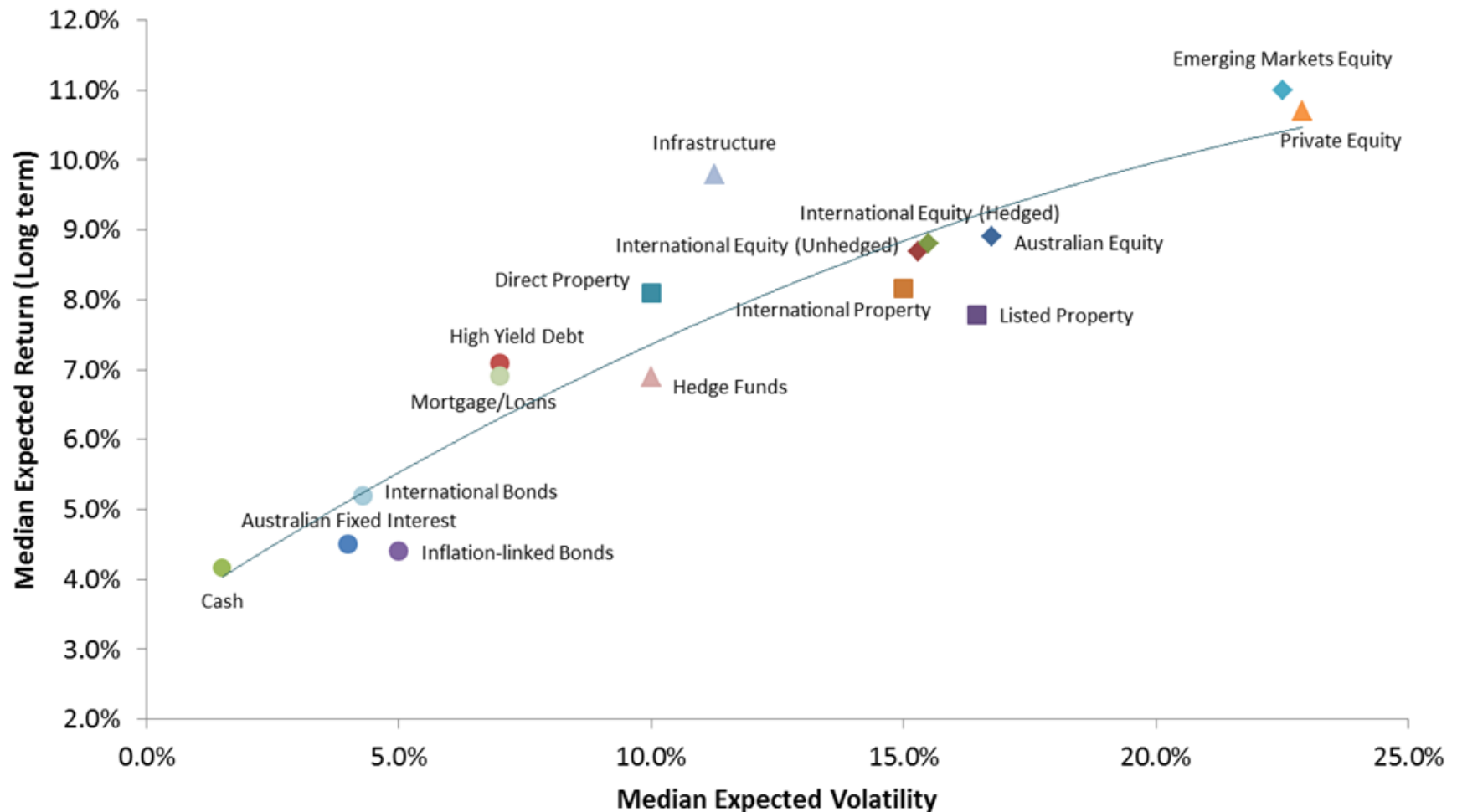
Themes for development

Whatever the solutions, there are some themes that can be explored:

- There need to be default pension products with greater emphasis on growth assets in retirement if incomes are to last long enough
- There is then a need to manage stable incomes from these assets
- Retirees need access to mortality pooling at affordable prices
- Housing assets are part of the solution:
 - Older cohorts (Baby Boomers) need equity release
 - Younger cohorts need to build assets
- The overall system must be sustainable.

Is everyone supportive of exploring the above themes?

Long term investment assumptions





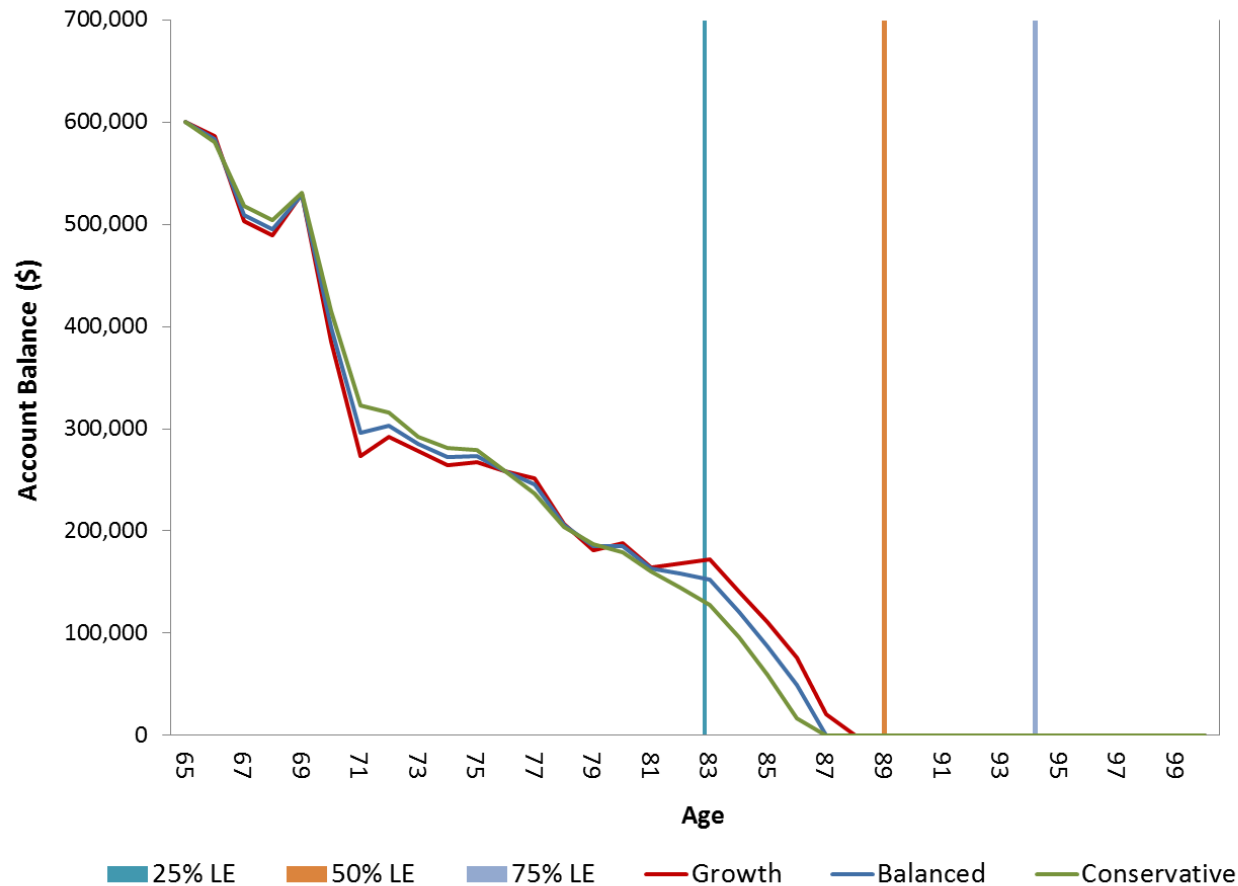
Default pension product

Account based pensions

Consider a couple entering into retirement

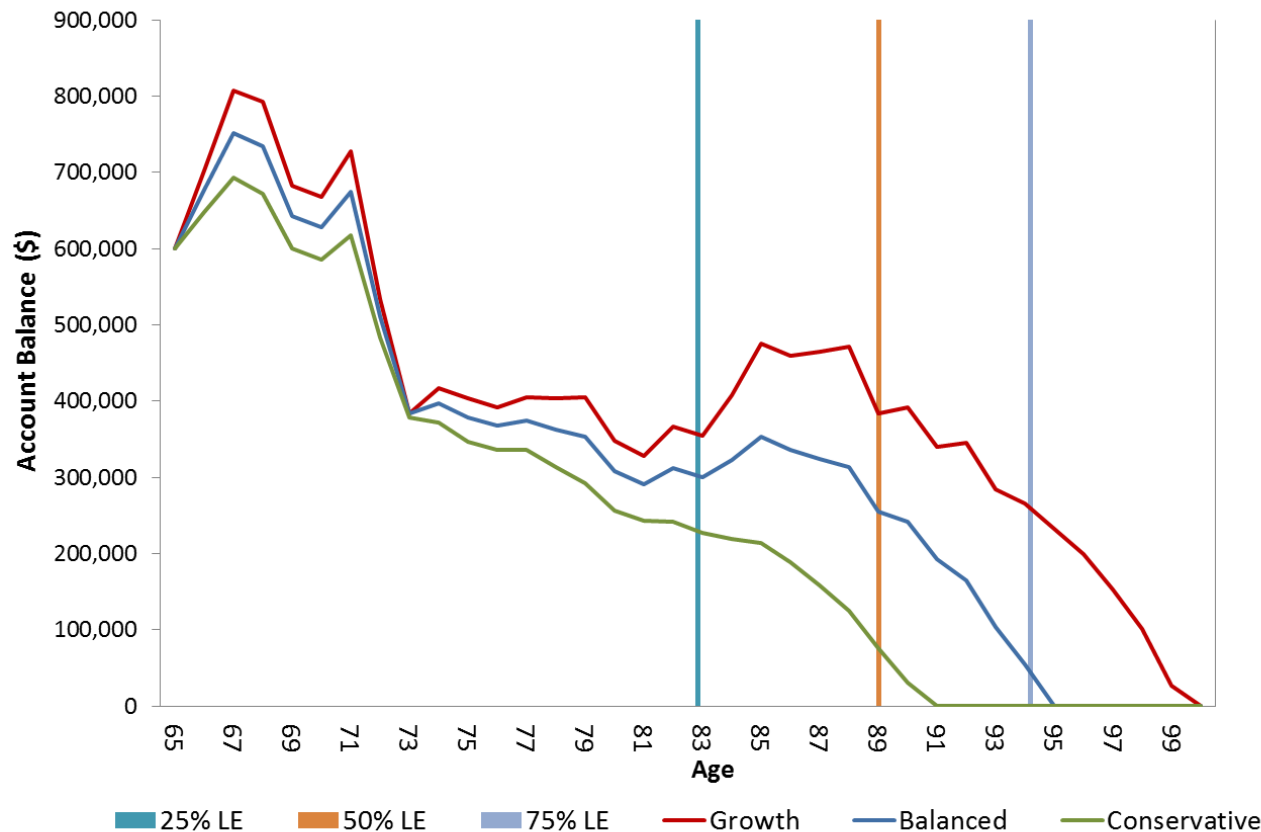
- Both aged 65 and just retired
- Homeowners
- \$600,000 in superannuation
- Target expenditure of \$58,128 indexed to CPI
 - Note part of this expenditure is funded by the Age Pension.
- The couple can invest in three investment options.
 - Conservative (~35% growth assets)
 - Balanced (~55% growth assets)
 - Growth (~75% growth assets)
- Consider historic investment scenarios rather than stochastic results to see impact of asset allocations

Retired in 1969



- This was the worst period to retire
- Performance of all three portfolios is similar
- 'De-risking' via asset allocation had little impact
- Higher Growth falls more in bad periods
- Higher Growth gains more in good periods

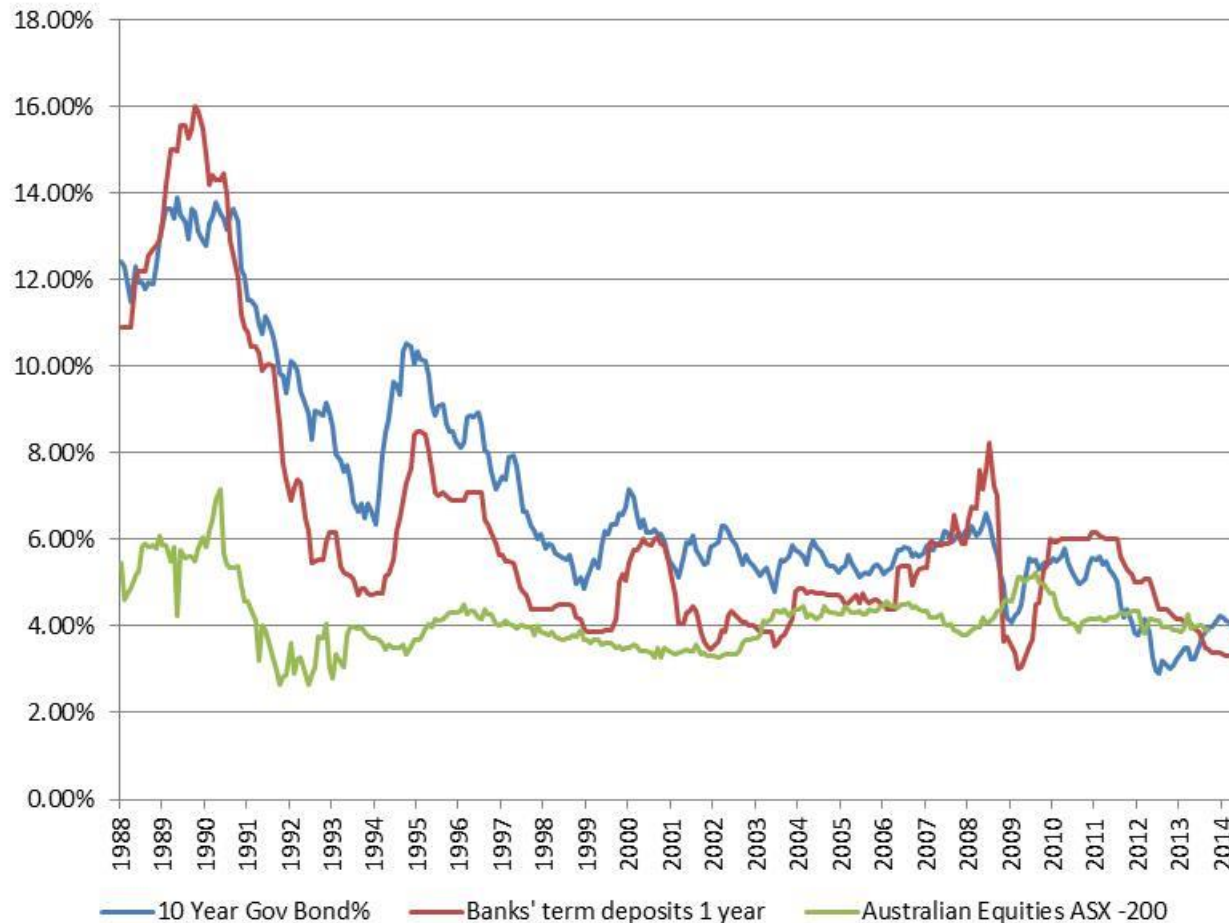
Retired in 1967



- Asset value growth prior to fall
- All three reach same value at age 73
- Growth then draws ahead
- 'De-risking' by asset allocation had little impact, but reduced long term return

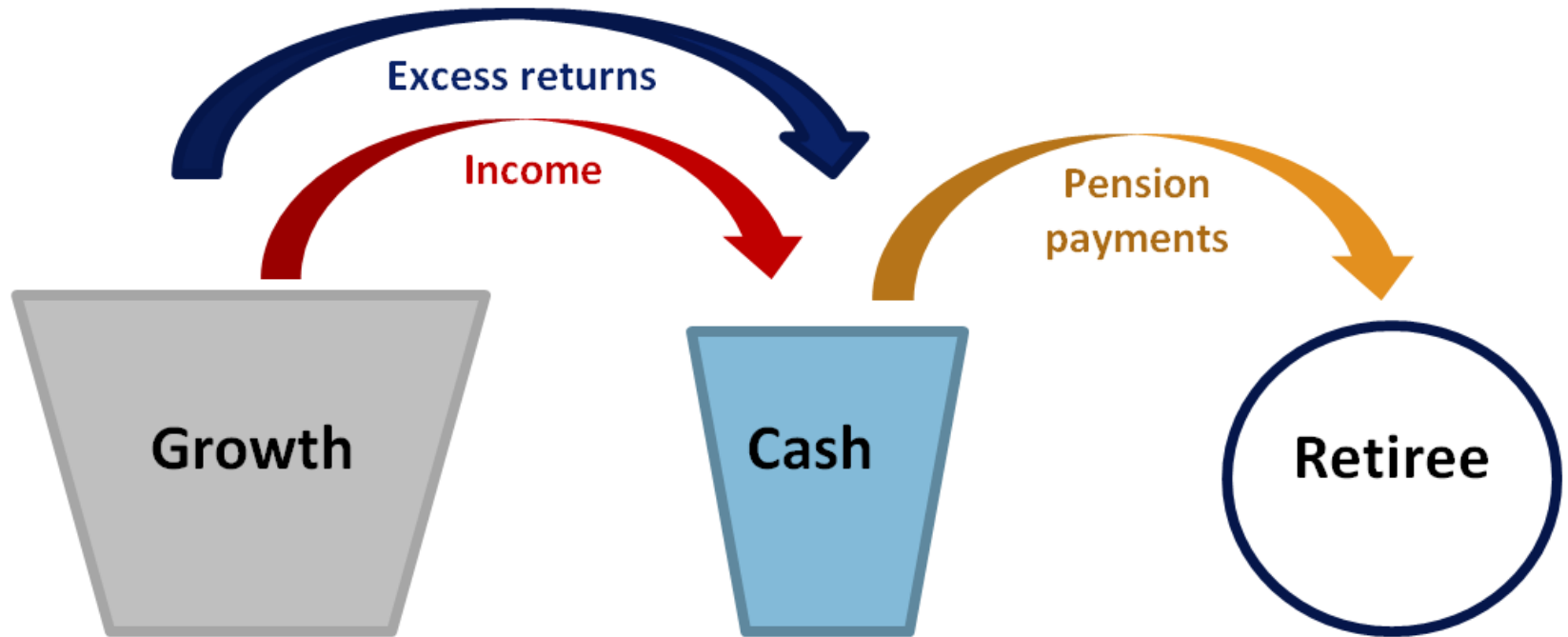
Reducing Risk 1: Focus on income

Income yields since 1988



- Dividend yields on equities are relatively stable
- Dividend yields are similar to FI yields

Reducing Risk 2: 'Buckets' Strategy



Matching assets to liabilities by timing and type

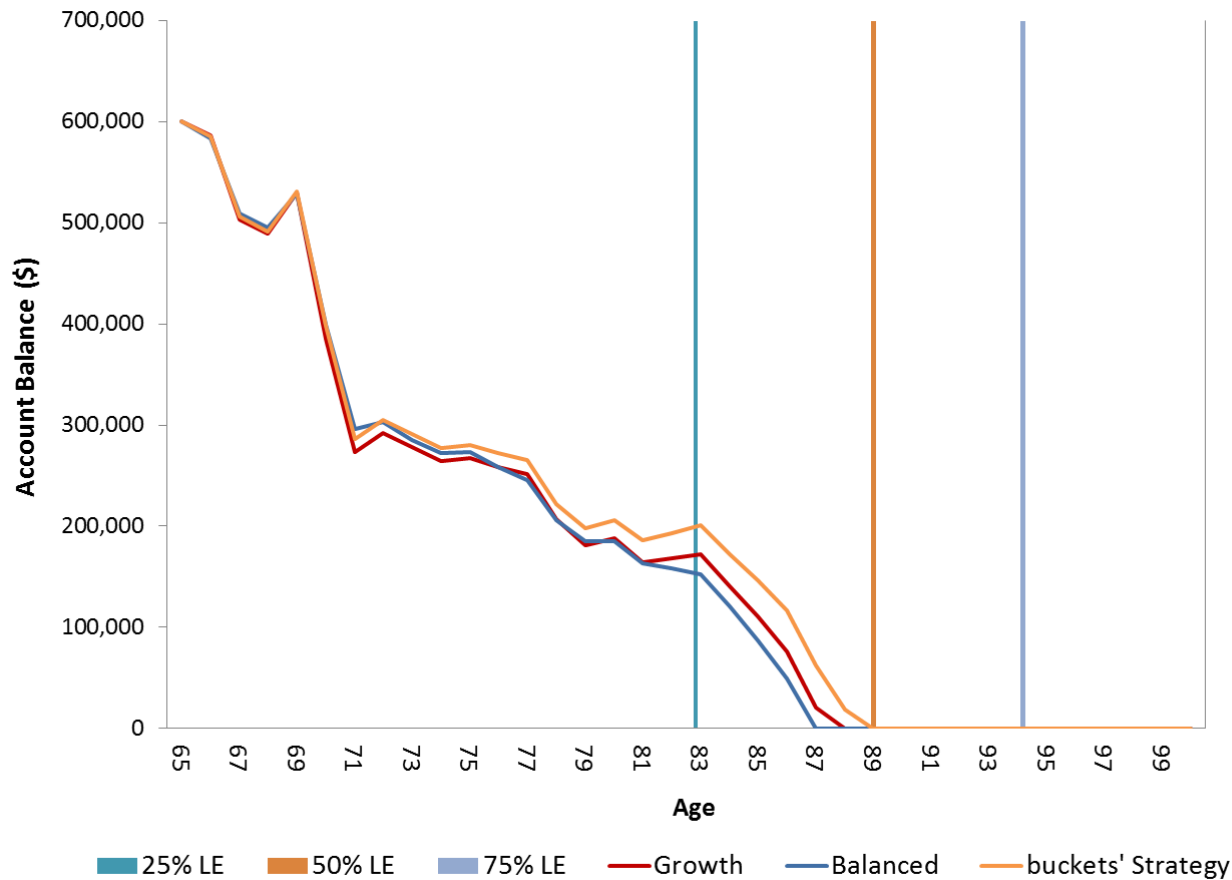
'Buckets' Strategy

There are many methods for managing the cash flows

Our model as an example

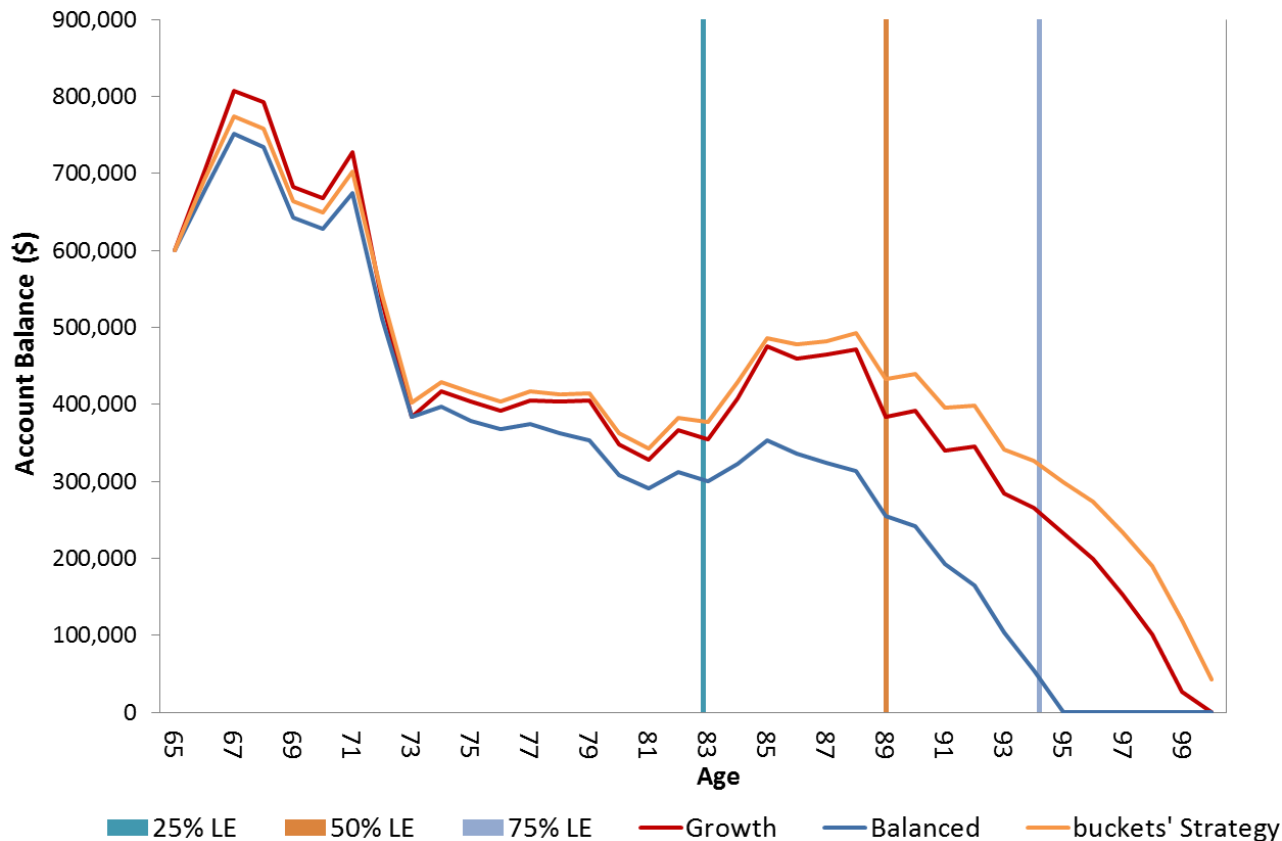
- The cash account holds 2 years' worth of drawdown initially
- All pension payments are made from the cash account first, assets in the Growth option will only be sold to make the payment if the balance in cash is not enough.
- The Growth option distributes all dividends, interest, rent to the cash account.
- All positive gains from the Growth option are transferred to Cash if return greater than $CPI+2\%$.
- A maximum is applied to the cash bucket such that it does not hold more than 3 years' worth of drawdown.

Retired in 1969



- Omitted Conservative portfolio for simplicity
- Bucketing reduces downside from market falls
- Limits sale of assets at depressed values

Retired in 1967



- Omitted Conservative portfolio for simplicity
- Bucketing reduces downside from market falls
- Limits sale of assets at depressed values

Conclusions

Significant negative events cannot be dealt with by changing asset allocations

Defensive asset allocations do not work

- The volatility de-risking is not sufficient when faced with a significant market fall
- The reduction in earnings capacity by moving significant proportions to defensive assets results in significant long-term underperformance
- In summary, the risk premium paid is too high for the protection provided

A Growth portfolio with managed cash flow is a better solution

- It provides an improvement in a negative investment scenario
- It does not materially affect outcomes in a positive investment scenario
- The risk premium is better value for money

Real downside protection requires some form of insurance

Implications

- Retirees need greater exposure to growth assets.
- ‘De-growing’ after retirement intensifies sequencing risk
- The challenge is to invest in growth assets but overcome members’ fear of short-term volatilities.
- An important message is to focus on income.
- ‘Buckets’ strategy provides many selling points that can appeal to members. But asset allocation alone would not prevent the very bad market outcomes.
- Real downside protection requires some form of insurance

Comments and opinions?



Mortality pooling

Annuities

FSI has recommended innovation to improve the value of annuities

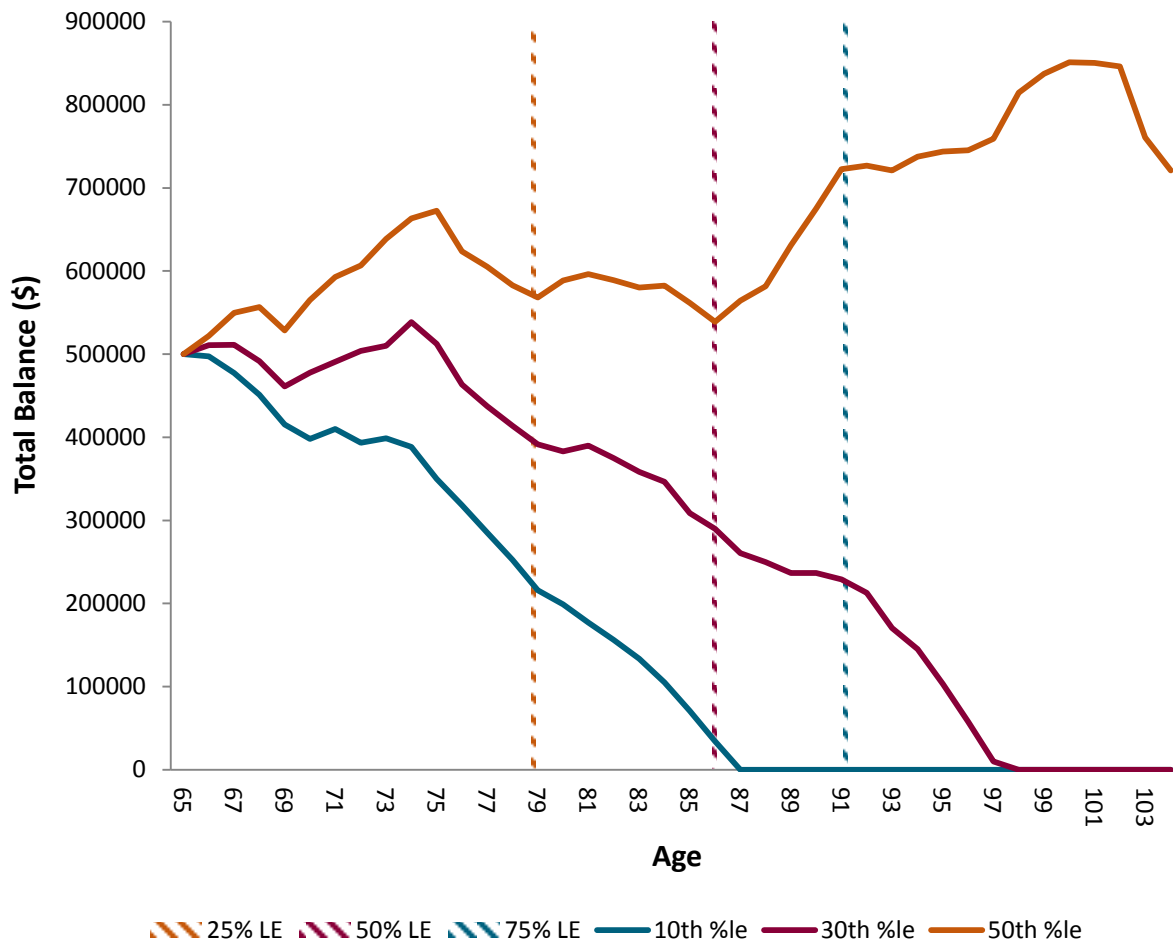
Consider example

- Male aged 65 with \$500,000
- Purchases best annuity in market which yields \$22,235 (4.447%) CPI linked
- Capital returned up to age 80

Compare to ABP invested in Growth with bucketing delivering same income

How long will the money last?

How long will the income last



- 90% of outcomes will allow annuity income to be drawn for life expectancy (10% line exceeds 50%LE)
- ~70% of outcomes will allow the annuity income to be drawn until age 100.
- The median case provides the annuity income for life AND preserves the capital for life.

Group Self-Annuitisation

The concept is to share longevity risk within a group of people.

Issues for implementation include:

- Ensuring a sufficiently large actuarial pool of lives
- Managing capital return to support behavioural finance requirements
 - Withdrawal rules need to be carefully constructed
 - Death benefit rules need to be carefully constructed
- Adverse-selection will cause only people who expect to live longer than average to join the group.
- The risk of systematic longevity improvement, investment risks and inflation risks.

Example: Mercer LifetimePlus

- Clever construction and good rules
- Investment expectation very low

What other alternatives?



Housing and other things

Home Equity release

Reverse mortgages of which there are two types

- A loan to the household that is paid back on death. (a typical reverse mortgage)
- Sell a share of the future sale proceeds of the house (e.g. Bendigo bank Homesafe wealth release)
- Pricing looks expensive

Fractional property sale (DomaCom)

- Property is unitised via an MIS
- Service provides open market to buy and sell units
- Property can be sold down in units
- Rent paid on portion sold

Comments and opinions

Housing affordability

Owning their own home is a significant advantage for retirees as it reduces compulsory outgoings

Projections indicate that younger cohorts will not enjoy the same levels as current and prospective retirees

How to assist?

- Divert some superannuation contributions
- Allow some superannuation savings to be used
- Mechanisms to facilitate equity release from parents to children or grandchildren
- Focus policy on owner occupied housing instead of investment property
 - Remove/scale back negative gearing
 - Remove LRB within superannuation funds

Comments?

Other thoughts?

Aged Care and Long Term Care

Should the retirement incomes system include provisions for Aged Care and Long Term Care?

Should these just be expenditure items for which superannuation benefits are used?

Possible developments:

- Long term care insurance (poor track record to date)?
- Age Care insurance similar to funeral bonds?

Other thoughts?

Public Policy

FSI wants agreement on the purpose of the superannuation system

Purpose is to provide adequate retirement incomes while trying to keep the system financially sustainable. Possible solutions for consideration include:

- Reform the age pension (e.g. remove income test and have an asset test only.)
- The asset test to include family home in some way.
- Reform the tax treatment of contributions and earnings (e.g. a lifetime concessional contributions cap, instead of annual caps; tax rebates against marginal rates rather than concessions, basically higher super tax for people with higher income).
- Tax investment income post-retirement and reduce the overall rate below 15%.
- Increase retirement age.

Further thoughts and suggestions?

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SYDNEY

Level 1
2 Martin Place
Sydney NSW 2000
T +61 2 9293 3700
F +61 2 9233 5847

MELBOURNE

Level 20
303 Collins Street
Melbourne VIC 3000
T +61 3 8621 4100
F +61 3 8621 4111

ABN 35 003 186 883

AFSL 239 191

www.ricewarner.com