



Designing adequate DC pensions

Guarantees

Andrew Boal

November 2010

Australian post retirement market

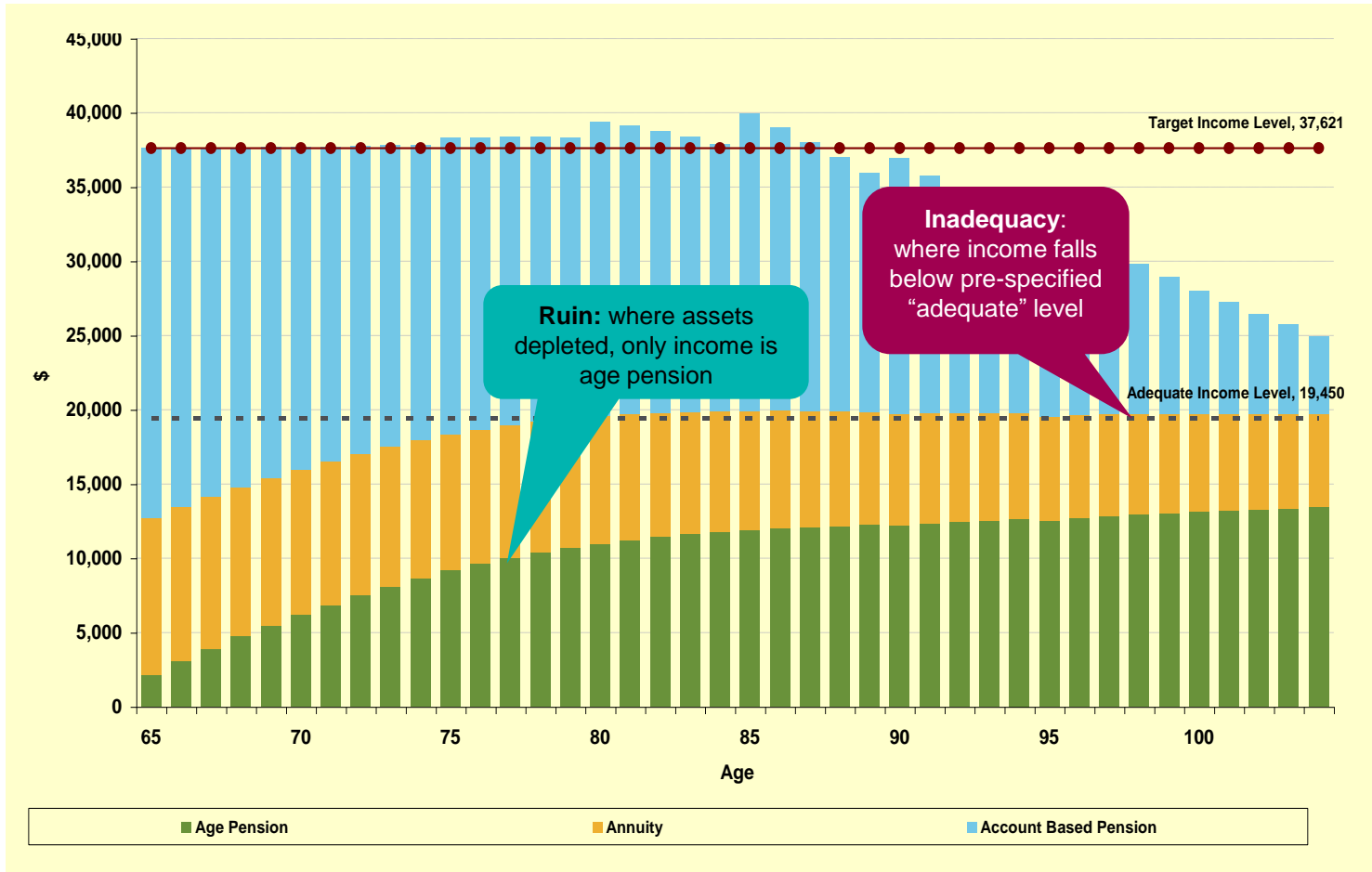
- In September 2007, the Australian government reduced the asset test taper from \$3.00 to \$1.50 for each \$1,000 of assets, significantly increasing access to the age pension
- But also removed the 50% exemption from the asset test for annuities
- As a result, only Commlnsure continued to write lifetime annuities
- The predominant retirement income product in Australia is the allocated (account based) pension

Investment strategy can be impacted by the size of the account balance and the impact of the age pension

Account Balance	Income to age 90	Impact of 35% fall on day 1	Income to age 90
\$0	\$17,500	No impact	\$17,500
\$100,000	\$23,600	9% reduction to	\$21,500
\$200,000	\$27,800	10% reduction to	\$25,000
\$300,000	\$31,500	12% reduction to	\$27,600
\$400,000	\$35,300	15% reduction to	\$30,000
\$500,000	\$39,000	17% reduction to	\$32,500
\$1,000,000	\$62,300	28% reduction to	\$45,000
\$2,000,000	\$122,400	35% reduction to	\$79,500

Means tested age pension provides a buffer against poor investment performance for lower balances

“Ruin” and “Inadequacy”



The potential market for longevity products

Age	Population at 30/6/09	Assumed balance	Estimated pool of savings	If 30% invested in "annuities"
Up to 24	7.26 million			
25-44	6.21 million			
45-64	5.48 million	\$250,000	\$1,370 billion	\$400+ billion
65-84	2.53 million	\$25,000	\$63 billion	\$20 billion
85 plus	0.38 million			

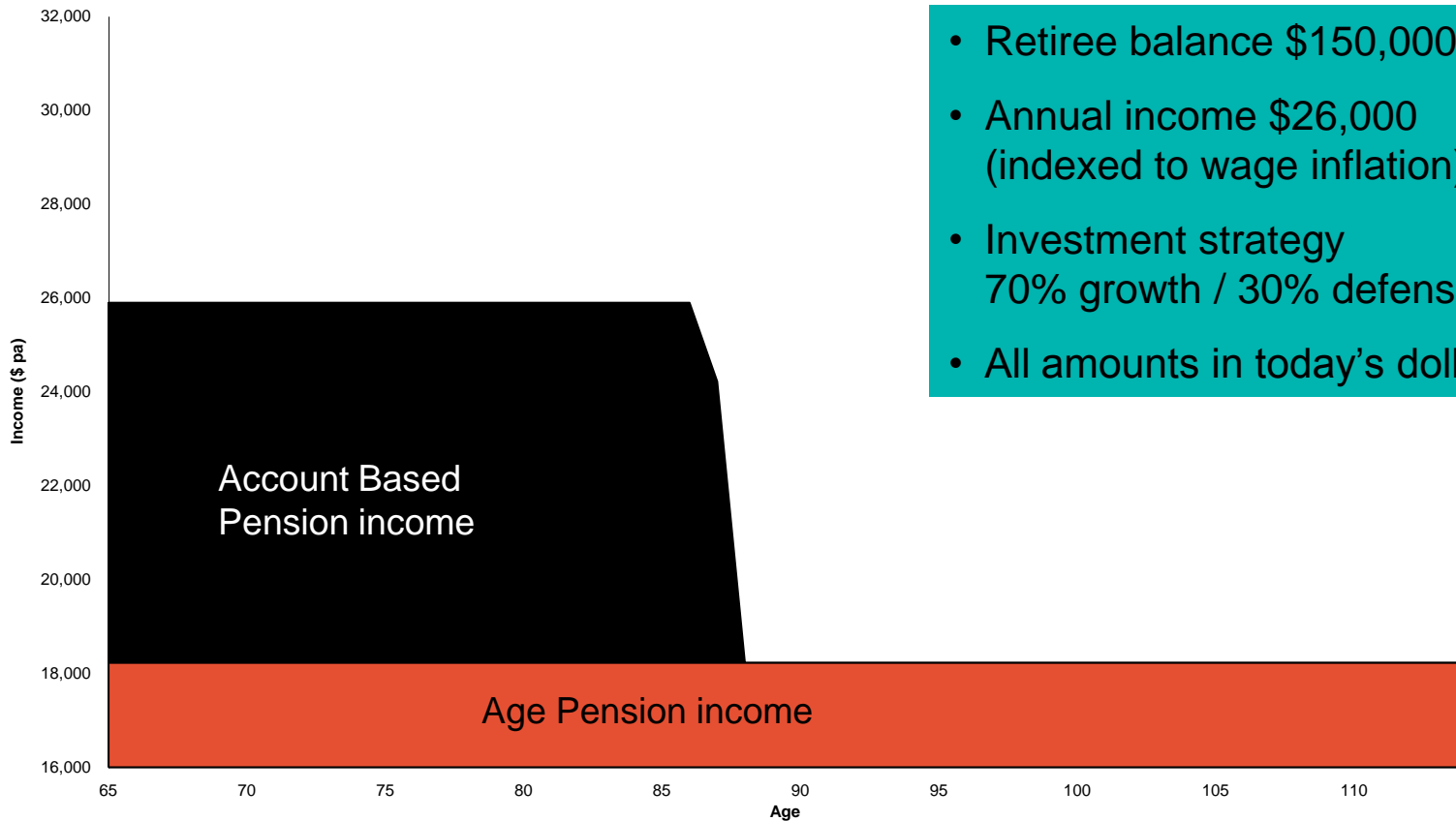
The last 20 years

The next 20 years

In 2010, the average superannuation payment is expected to be \$155,000 for men / \$73,000 for women

Account Based Pension Scenario – Retiree Income

MEDIAN OUTCOME

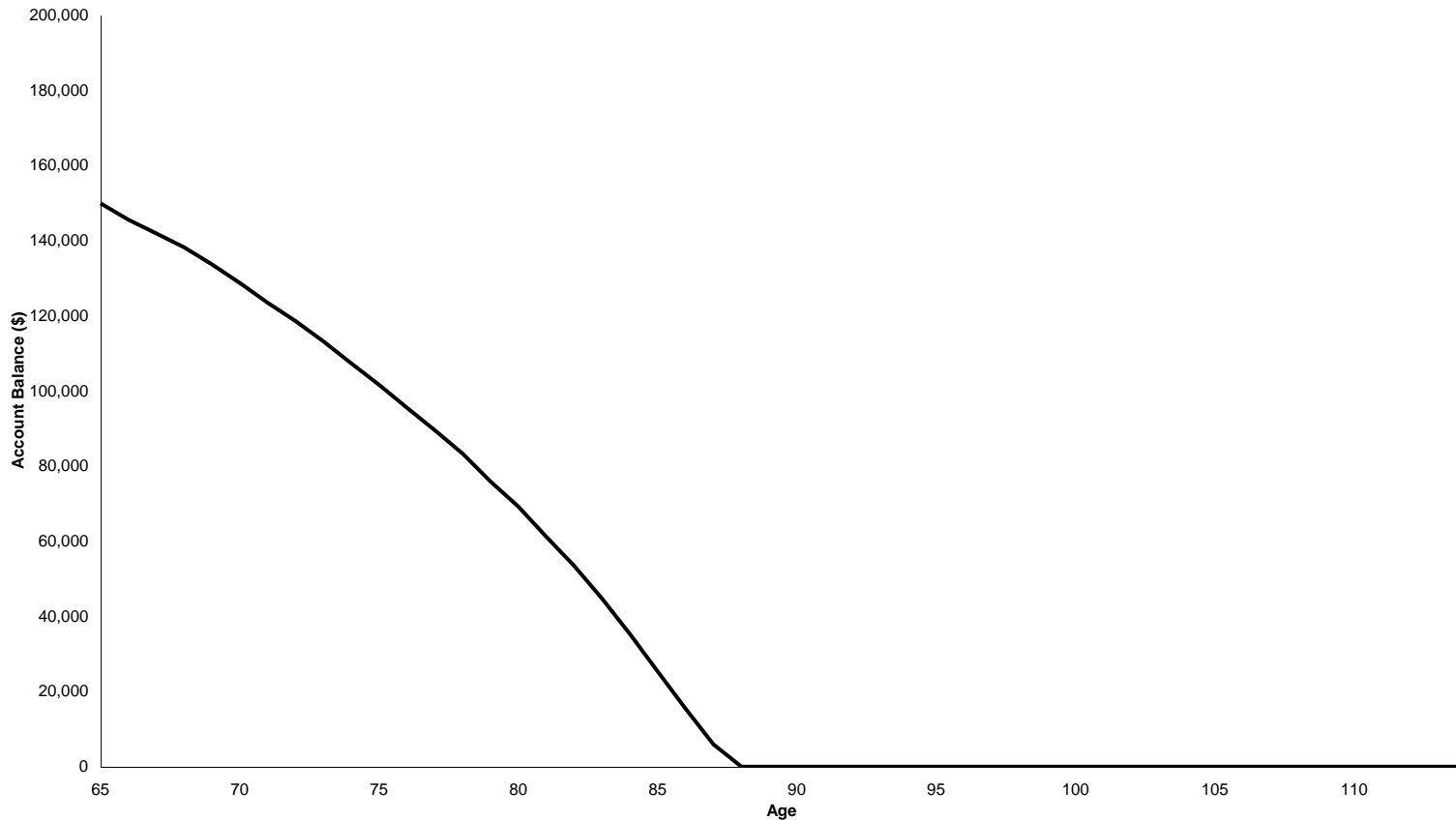


- Retiree balance \$150,000
- Annual income \$26,000 (indexed to wage inflation)
- Investment strategy 70% growth / 30% defensive
- All amounts in today's dollars

— Sc 1 - Account Based Pension (ABP)

Account Based Pension Scenario – Available Assets

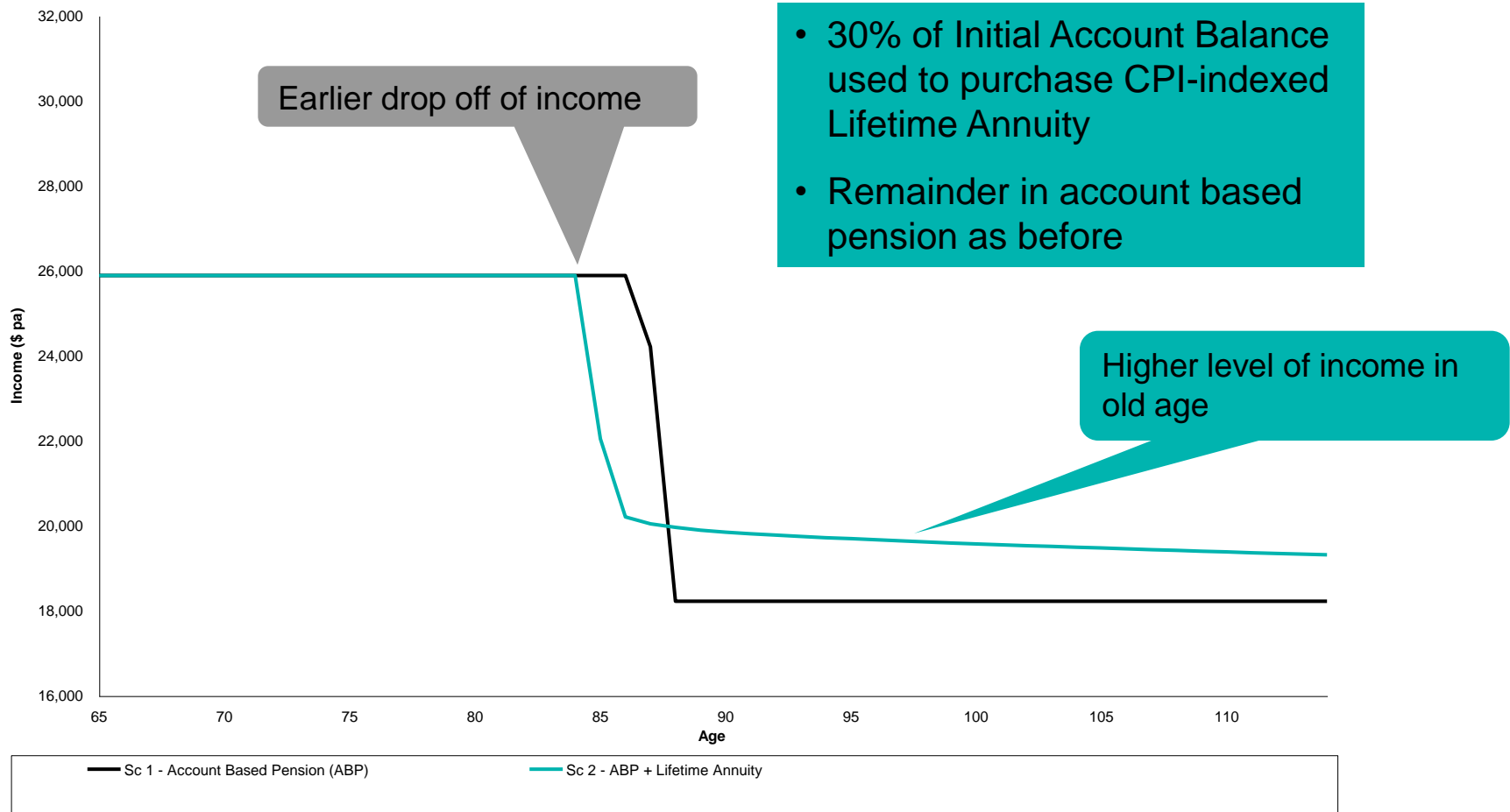
MEDIAN OUTCOME



— Sc 1 - Account Based Pension (ABP)

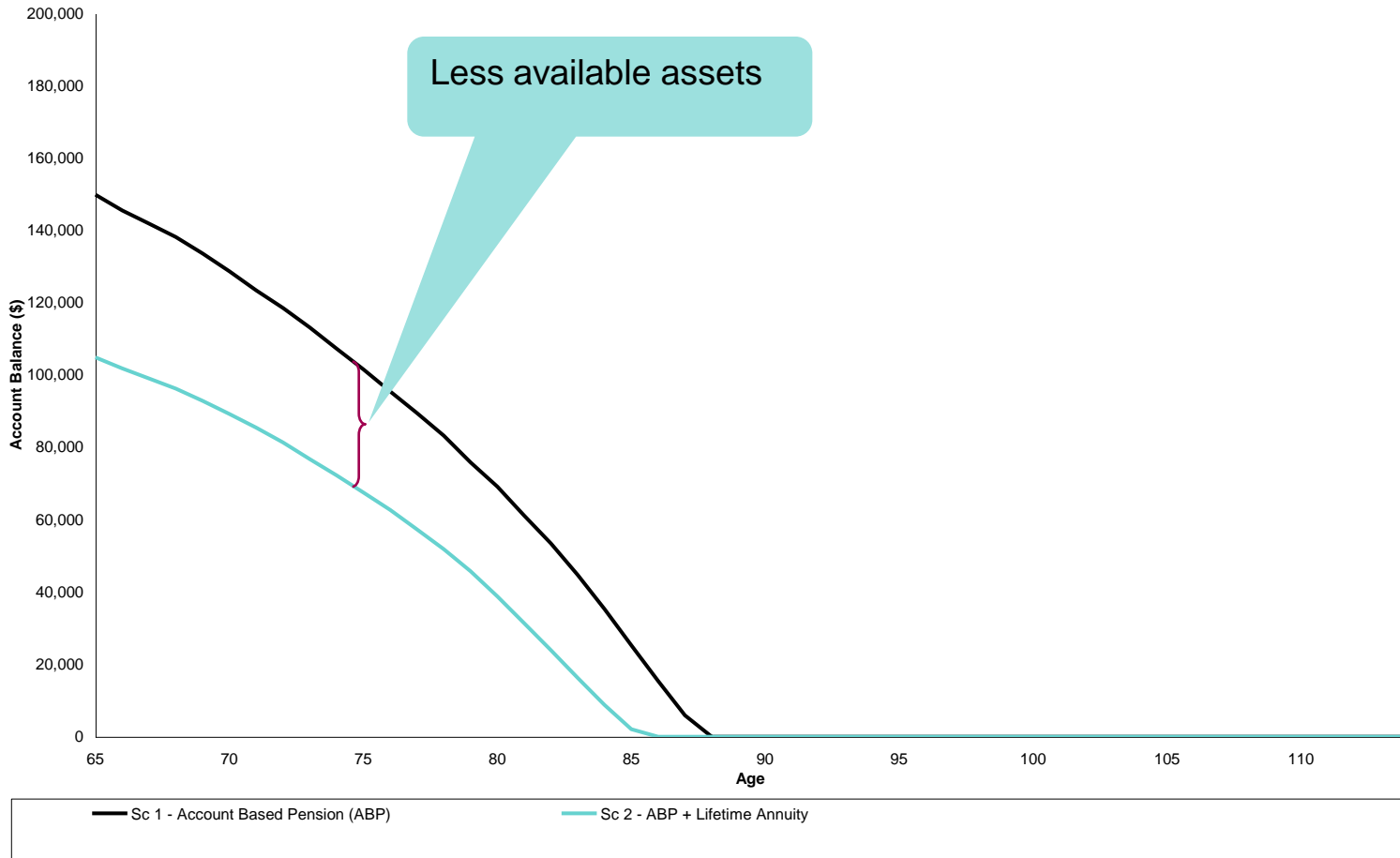
Immediate Lifetime Annuity Scenario – Retiree Income

MEDIAN OUTCOME



Immediate Lifetime Annuity Scenario – Available Assets

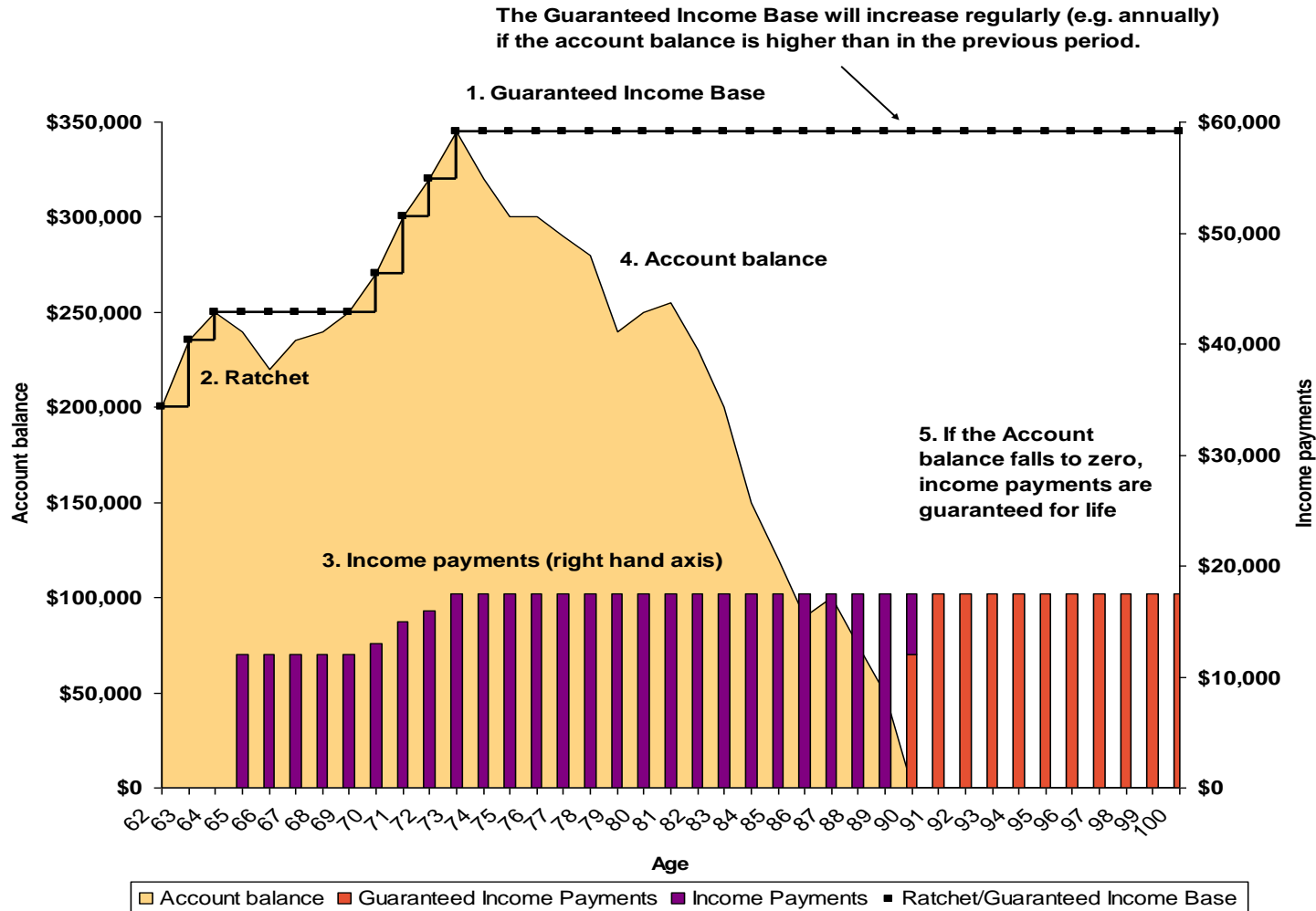
MEDIAN OUTCOME



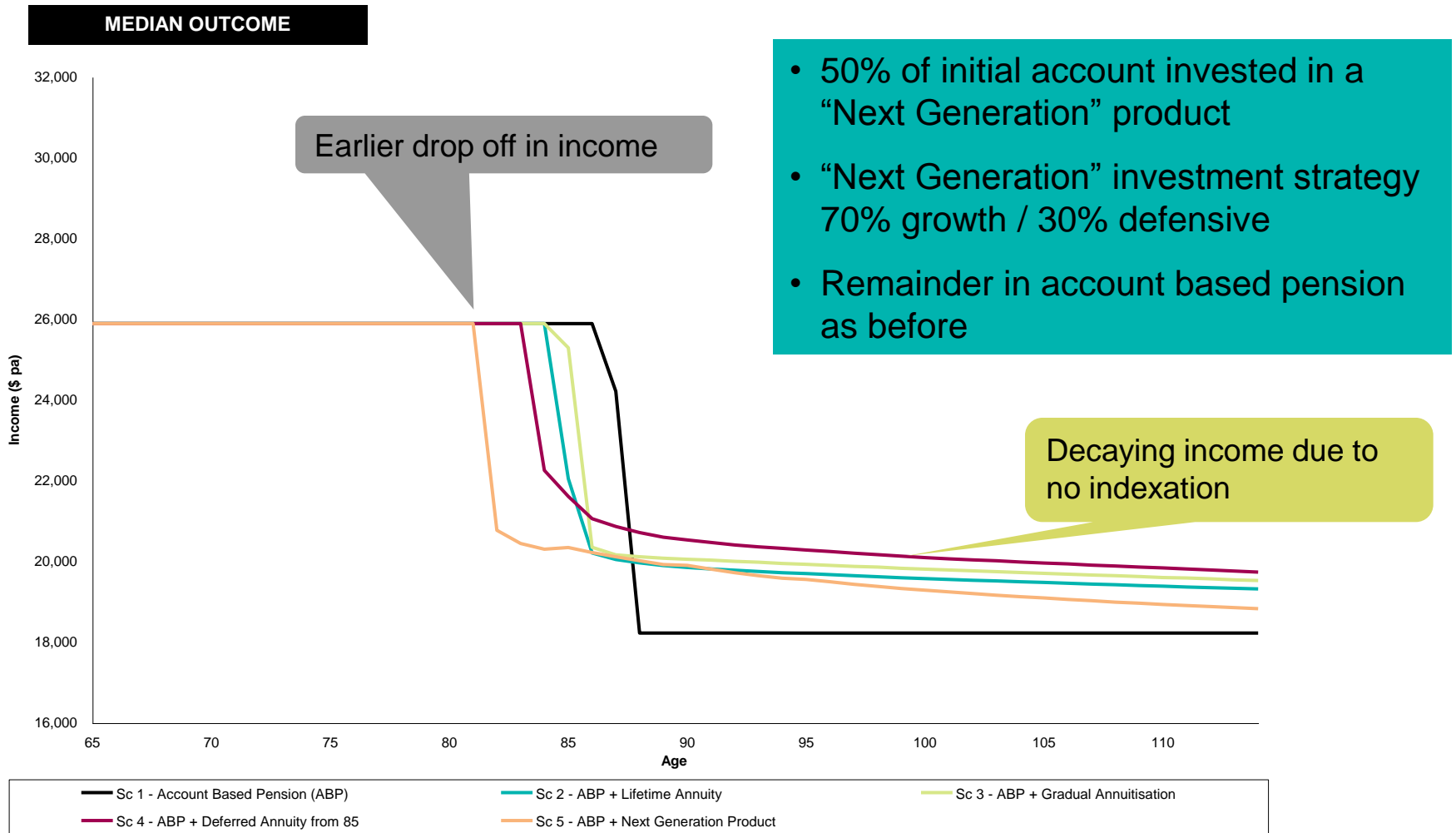
Australian post retirement market

- In October 2009, ING Australia (OnePath) launched its GMWB variable annuity product called MoneyForLife
- Since then, Macquarie Lifetime Income Guarantee and AXA North Protected Income products have been launched

GMWB variable annuity product design

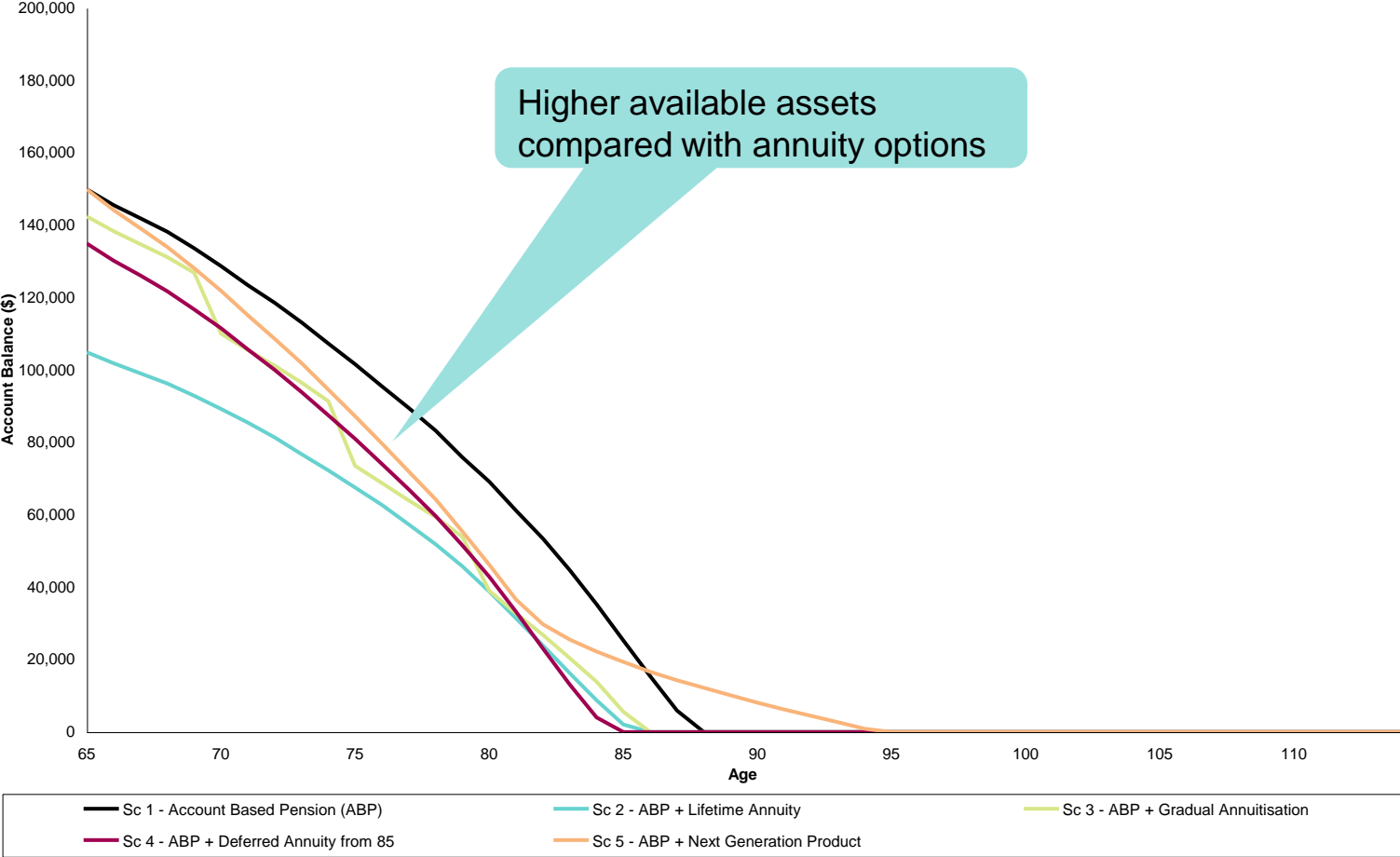


Next Generation Product Scenario – Retiree Income



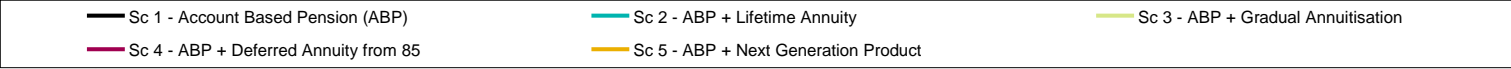
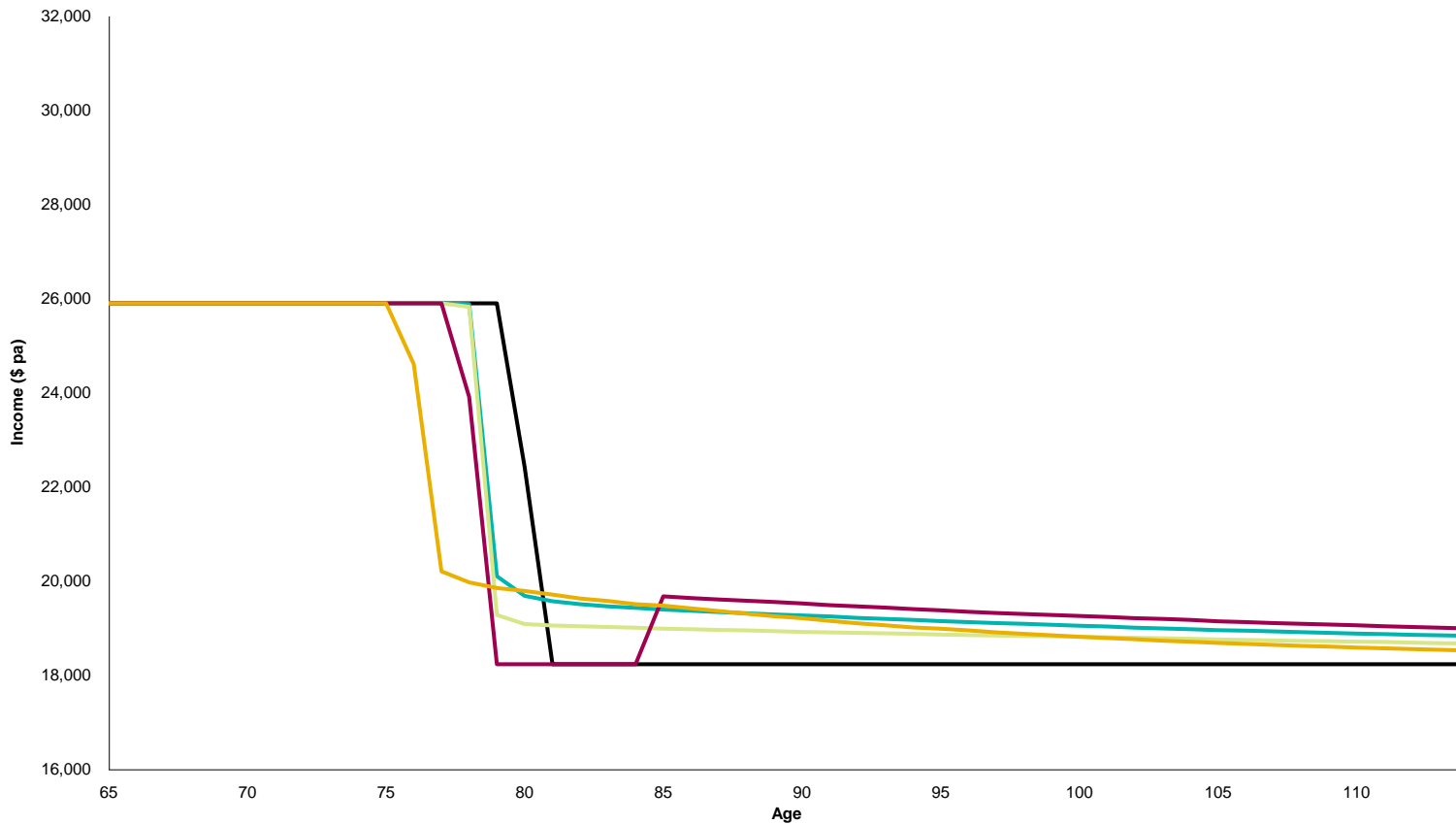
Next Generation Product Scenario – Available Assets

MEDIAN OUTCOME



Retiree Income – “Bad” Outcomes

5TH PERCENTILE



Observations and conclusions

- No free lunch - inevitable trade-offs
- For the case considered, the next generation product is surprising
- For the case considered, gradual annuitisation delivers some interesting results
- Worth pursuing change in tax/regulatory treatment of deferred annuities
- Only one case considered in this presentation – dangers in extrapolating!
- Optimum solution will vary by:
 - Retirement balance
 - Retirement age
 - Target income and associated age pension interactions
 - Assumed investment mix in the account-based pension

Contact Details

- Andrew Boal
 - Managing Director, Australia
 - Level 16, 1 Collins Street, Melbourne VIC 3000
 - +61 3 9655 5103
 - andrew.boal@towerswatson.com

Pooling longevity risk

Total accumulated fund

