

Institute of Actuaries of Australia

**Super Policy
Forum**

Which Groups Can Expect Less than Adequate Retirement Income in 2020

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Views expressed are those of the author

Approach

- **Present a variety of adequacy standards**
- **Present a variety of results**
- **Discuss pattern of variation, particularly by income**

Concepts of Adequacy & the 3 Pillar System

**Retirement Income
Pillar**

Concept of Adequacy

**Poverty Alleviation
using means tested
age pension**

**Compare age pension to:
Price index
Gross wage
Net wage
Poverty line**

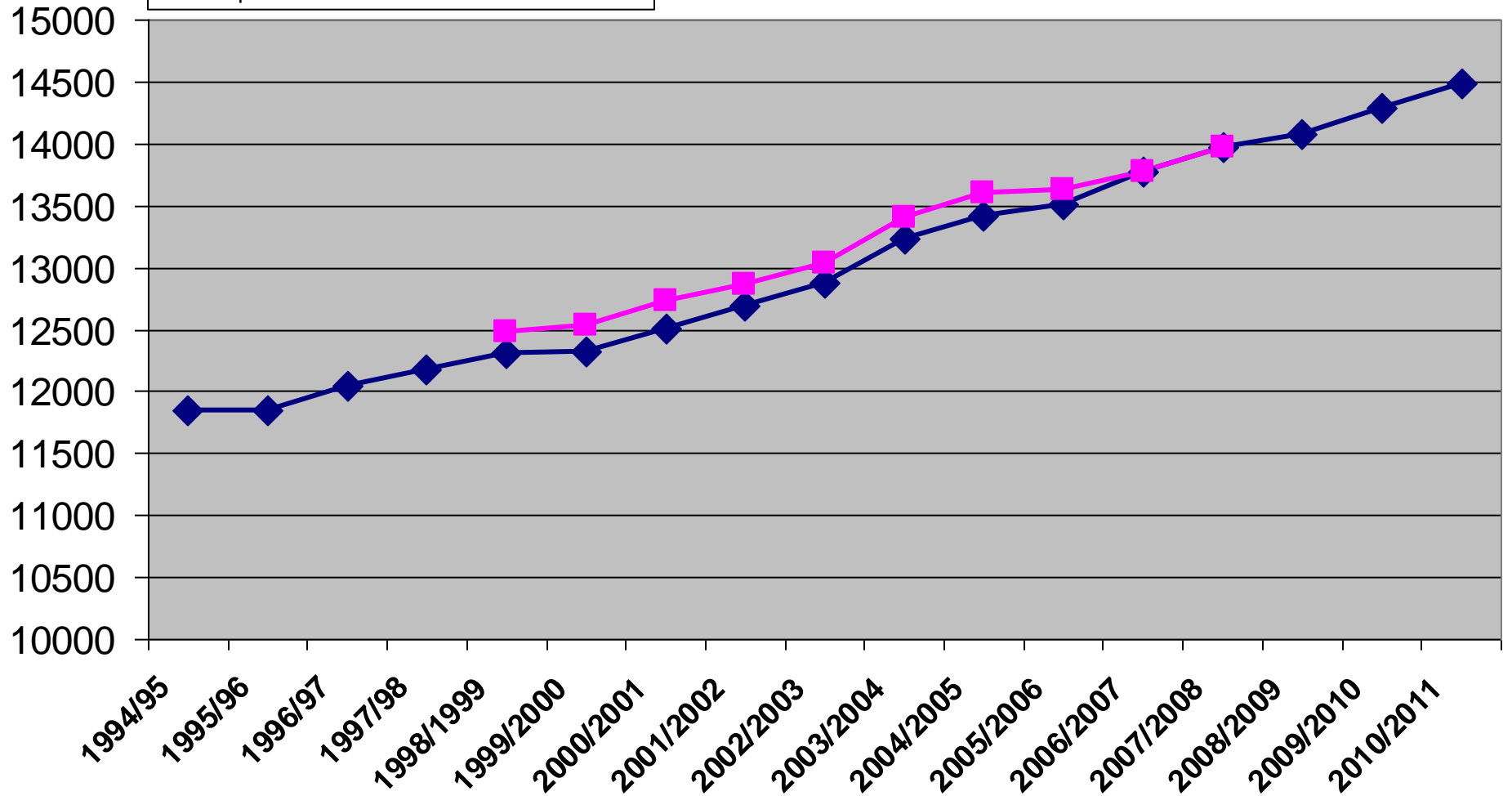
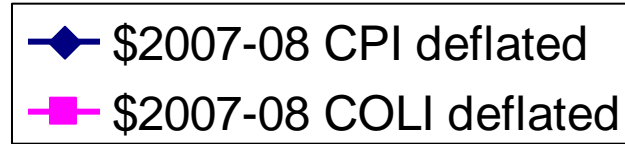
**Mandatory defined
contribution private
pension scheme**

**Replacement rates
Modest budget standards**

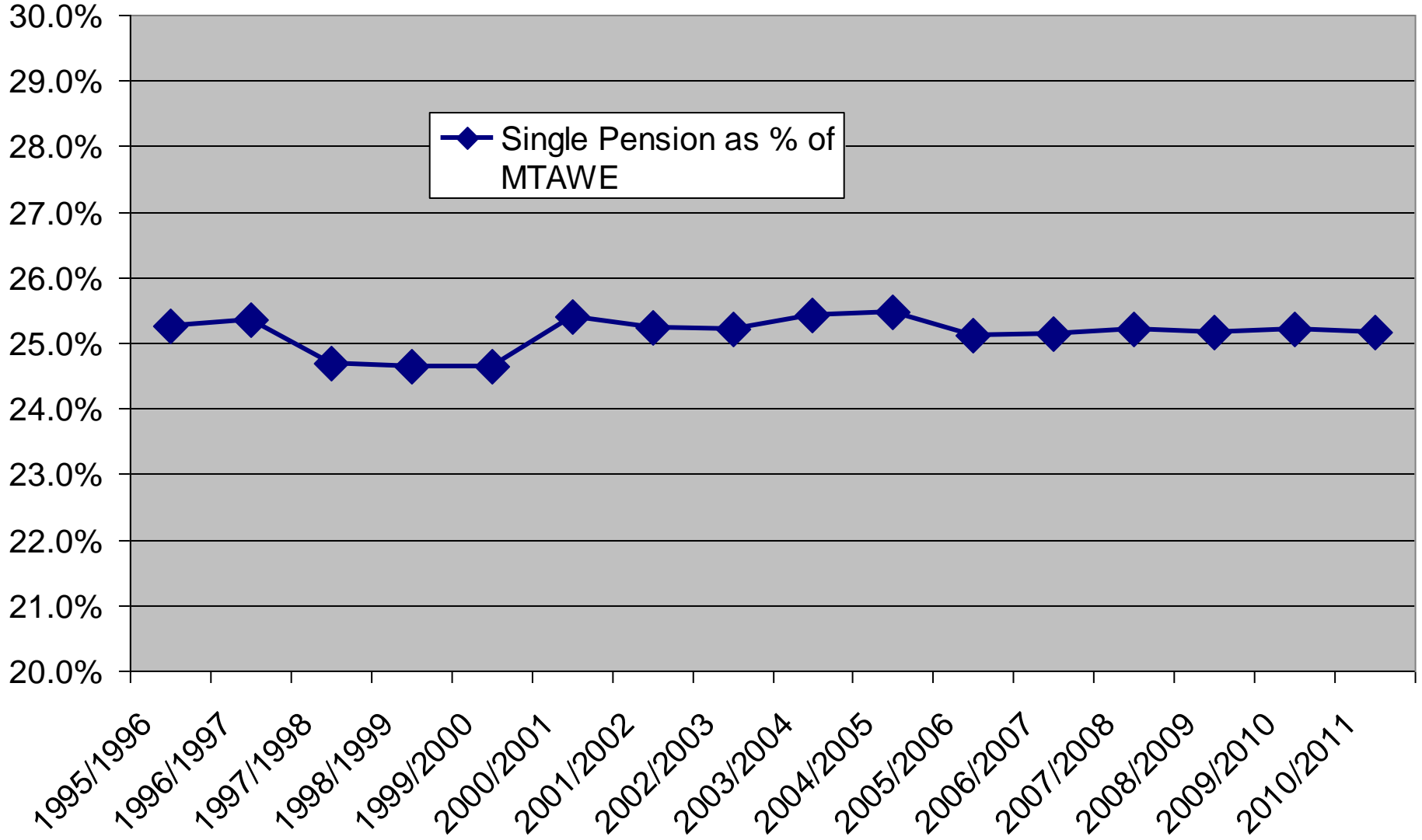
Voluntary Saving

**Hypothetical replacement
rates
Affluent budget standards
Population replacement
rates**

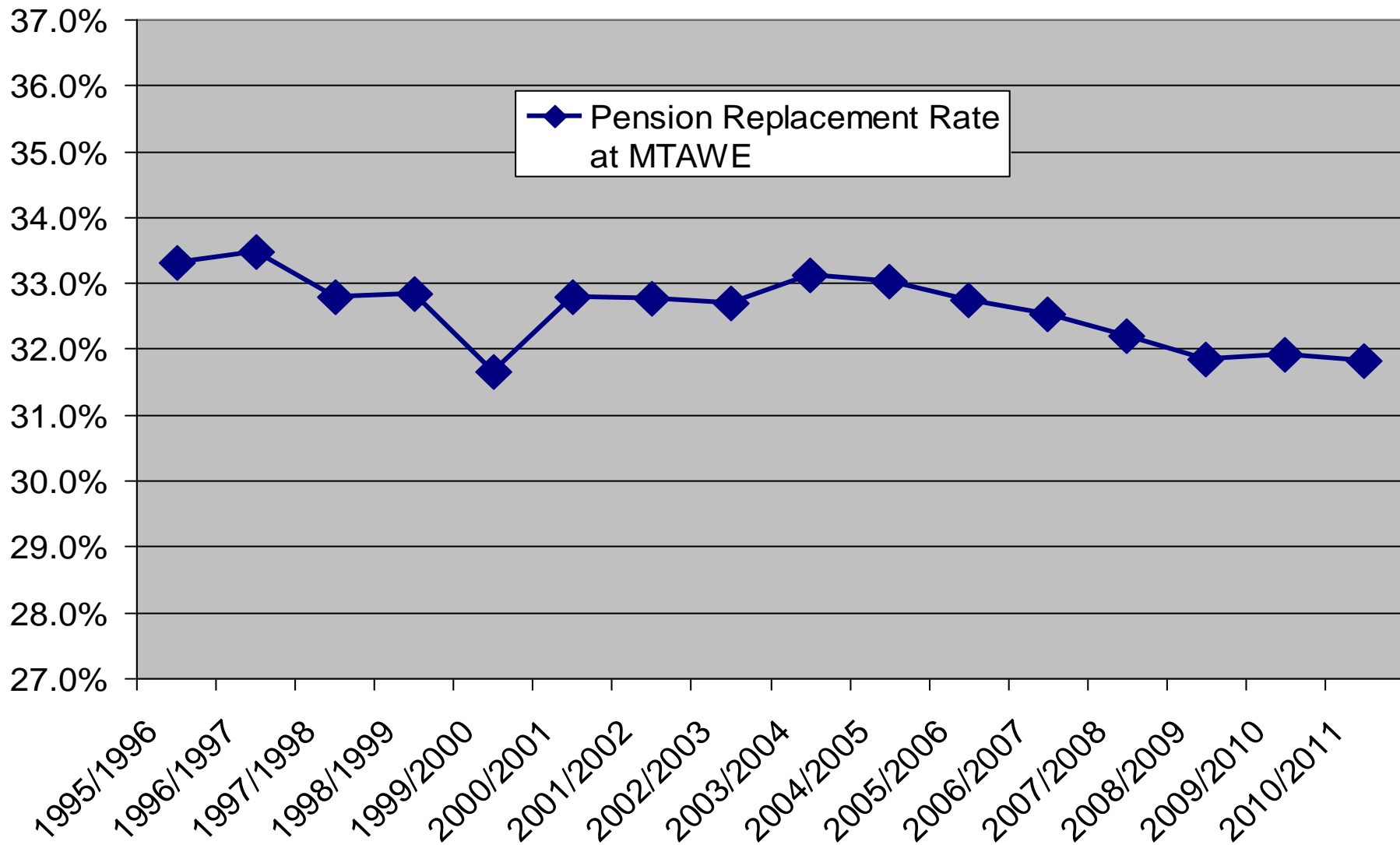
Poverty Alleviation: Real Single Age Pension using CPI and Pension Cost of Living Index



Poverty Alleviation: Age Pension as % of Male Total Average Weekly Earnings



Poverty Alleviation: Single Age Pension as % of Disposable Income at MTAW



Poverty Alleviation: Age Pension and Henderson Poverty Line, Dec Q 2007

HPL Indexed by Household Disposable Income Per Capita

Pensioner	Age Pension	Age Pension and rent assistance	Poverty line (including housing)	Poverty line (other than housing)
Single	\$13,980	\$16,721	\$15,774	\$9,413
Couple	\$23,353	\$25,938	\$22,344	\$15,350

SG Standards: Replacement Rates

- **Prefer comparison of spending before and after retirement**
- **RIM usually deflates spending by CPI, but others recommend wage deflation**
- **Period in comparison is important**
- **As are parameters**

Replacement Rates for different periods

Single Male, 35 years work, CPI deflation

Salary (multiple of AWOTE)	Private benefit taken as:	Average over retirement / last year work*	First 10 years retired / last 10 years work	First 5 years retired / last 5 years work	First year retired / last year work
0.75	Allocated pension	80%	80%	75%	71%
	Lump Sum	78%	72%	67%	63%
1.00	Allocated pension	70%	69%	64%	60%
	Lump Sum	67%	61%	56%	52%
1.50	Allocated pension	60%	57%	53%	49%
	Lump Sum	56%	49%	44%	40%
2.50	Allocated pension	52%	49%	45%	44%
	Lump Sum	46%	38%	34%	32%

Base Parameter Settings

Are adjusted to historical rates, with a gradual transition to the following long term settings:

- 2.5% per annum for inflation;
- 4.0% pa for growth of average full time wages for a person of given age and gender ;
- 6% pa for the long term bond rate;
- 7% pa for the average pre-tax return of superannuation funds (after expenses of managing funds but before tax- administrative expenses are deducted separately on a per capita basis); and
- effective tax rates on the earnings of superannuation funds of 7% for SG funds.

Target Replacement Rates

- **In 2002, Institute of Actuaries suggested 70 - 80 % for a spending replacement rate**
- **In 2007 Senator Sherry and Wayne Swan suggested '65 at 65'**

In most analyses, SG Replacement Rates improve as the system matures

Replacement Rates for a Single Female, SG only, retiring at 65
CPI deflation

		Retire in				
Wage as Multiple of AWOTE	Wage in 2007-08	2007-08	2015-16	2025-26	2035-36	2042-43
0.50	29,091	72.7	75.4	84.9	91.8	94.2
0.75	43,637	55.9	59.2	67.4	72.9	74.6
1.00	58,183	46.0	50.1	57.7	62.5	64.5
1.50	87,274	35.3	39.6	47.7	52.0	53.5
2.00	116,366	29.3	33.6	41.5	46.0	48.3
2.50	145,457	24.7	29.2	37.1	42.4	44.9

Westpac/ASFA (SPRC) Budget Standards Dec 2007

SPRC 2004 recommends indexation by CPI between updates for new baskets

Comfortably affluent but sustainable (CAS) budget standard

- reflects a standard of living among older, healthy and fully active self-funded retired Australians that allows them to engage actively with a broad range of leisure and recreational activities without having to require a rapid or substantial disbursement of assets
- it represents a lifestyle that is common amongst those in the top (income) quintile of the aged population

Modest but adequate (MBA) standard

- represents a standard that affords full opportunity to participate in contemporary Australian society and the basic options it offers. It is seen as lying between the standards of survival and decency and those of luxury as these are commonly understood
- this corresponds in round terms to the median standard of living in the community as a whole

Modest lifestyle	Comfortable lifestyle	Modest lifestyle	Comfortable lifestyle
single female	single female	couple	couple
\$18,920	\$36,607	\$26,531	\$48,962

The 2020 SG only cameo

- **Female retiring in 2020 (or 2010) with SG since 1992**
- **Dies at age 91 when retires at 65, but at 89 when retires at 55 (LE + 4 from age of retirement)**
- **Takes an allocated pension with drawdowns designed to exhaust it at life expectancy**

Female Retiring 2020 (2010), LE+4, Alloc Pen to LE

CPI Deflation MEASURE OF ADEQUACY	Wages as %AWOTE - SG only employee					Self Employed 100%	Retire to DSP at 55 75%
	50%	75%	100%	150%	250%		
Replacement Rates							
Average Retirement to Last year of Work	80.3%	63.5%	53.5%	43.2%	32.2%	37.8%	63.1%
First 10 years of Retirement to Last 10 year of Work	83.4%	68.0%	59.5%	50.0%	38.5%	35.6%	65.4%
Average Retirement Income RATIOS TO:							
Modest Budget Standard	129.7%	140.1%	150.3%	170.7%	198.7%	106.3%	123.7%
Affluent Budget Standard	67.0%	72.3%	77.6%	88.1%	102.6%	54.9%	63.8%
MTAWE	44.4%	47.9%	51.4%	58.4%	68.0%	36.4%	42.3%
Disposable Income at MTAWE	56.7%	61.2%	65.7%	74.6%	86.9%	46.5%	54.1%

Female Retiring 2020, LE+4, Alloc Pen to LE

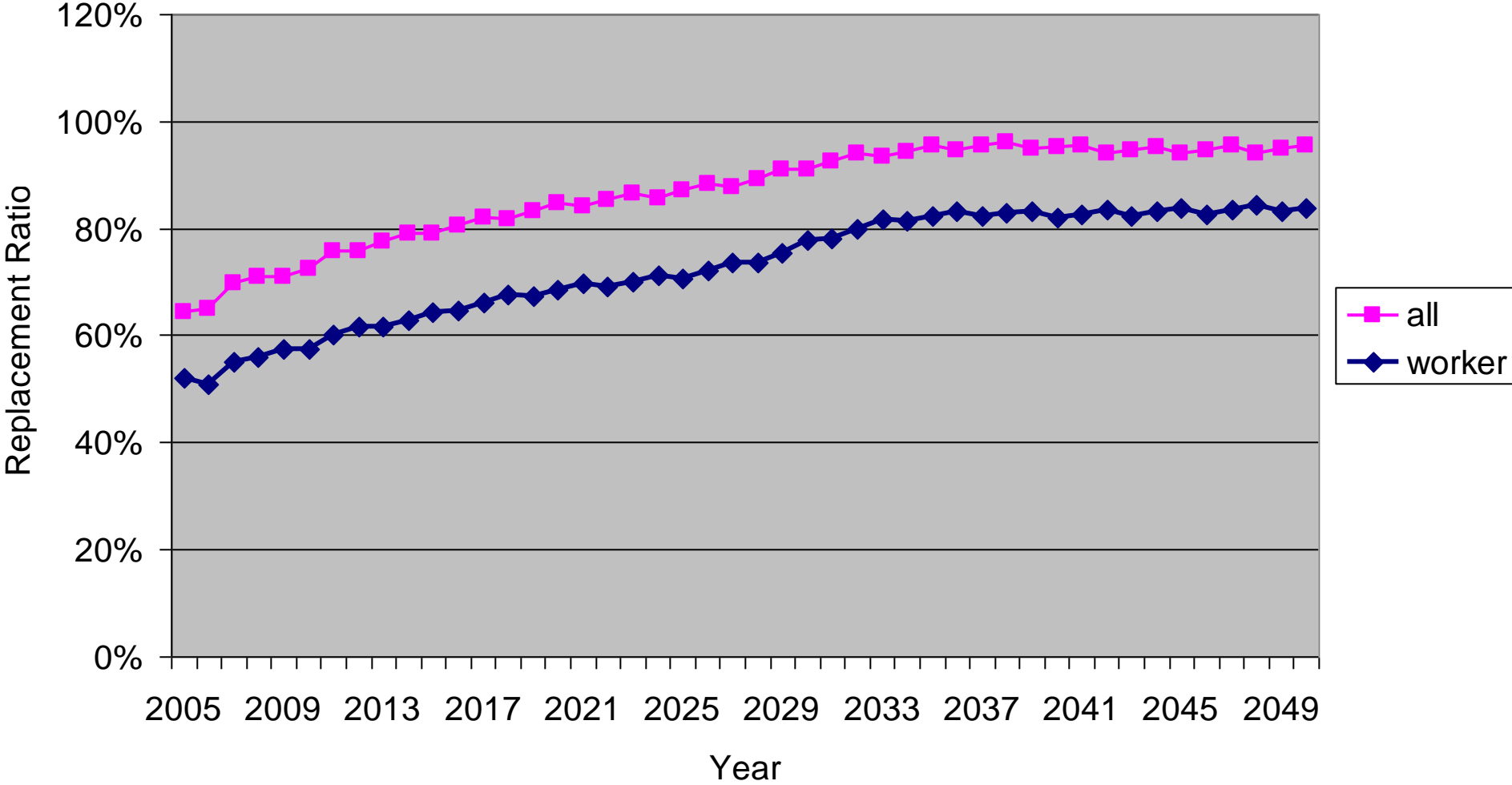
AWE Deflation MEASURE OF ADEQUACY	Wages as %AWOTE - SG only employee						Self Employed		Retire to DSP at 55
	50%	75%	100%	150%	250%		100%		75%
Replacement Rates									
Average Retirement to Last year of Work	66.4%	52.8%	44.6%	36.2%	27.1%		30.9%		49.1%
First 10 years of Retirement to Last 10 year of Work	72.1%	58.8%	51.5%	43.3%	33.3%		30.8%		57.1%
Average Retirement Income RATIOS TO:									
Modest Budget Standard	90.4%	98.0%	105.5%	120.4%	140.8%		73.1%		93.8%
Affluent Budget Standard	46.6%	50.6%	54.4%	62.2%	72.7%		37.8%		48.4%
MTAWE	30.9%	33.5%	36.1%	41.2%	48.2%		25.0%		32.1%
Disposable Income at MTAWE	39.5%	42.8%	46.1%	52.6%	61.6%		32.0%		41.0%

The system including voluntary saving Whole of Population Replacement Rates using RIMGROUP

- **RIMGROUP 2000 is a group model of the entire Australian population from 2000 to 2060**
- **Divided into gender, single years of age and decile of career income cohorts**
- **Has full population and labour force projections with comprehensive employment status including self-employed and public sector**
- **Incomes and home ownership based on SIHC/HEIS**
- **8 superannuation accounts – use of SEAS**
- **Non-super assets – based on HEIS 2003-04**
- **Multiple retirement accounts – Use of SIHC, PNILF, Census,**
- **Full superannuation, tax and social security policies.**
- **Multiple increment and decrement actuarial cohort model (death , disability, retirement, job change)**

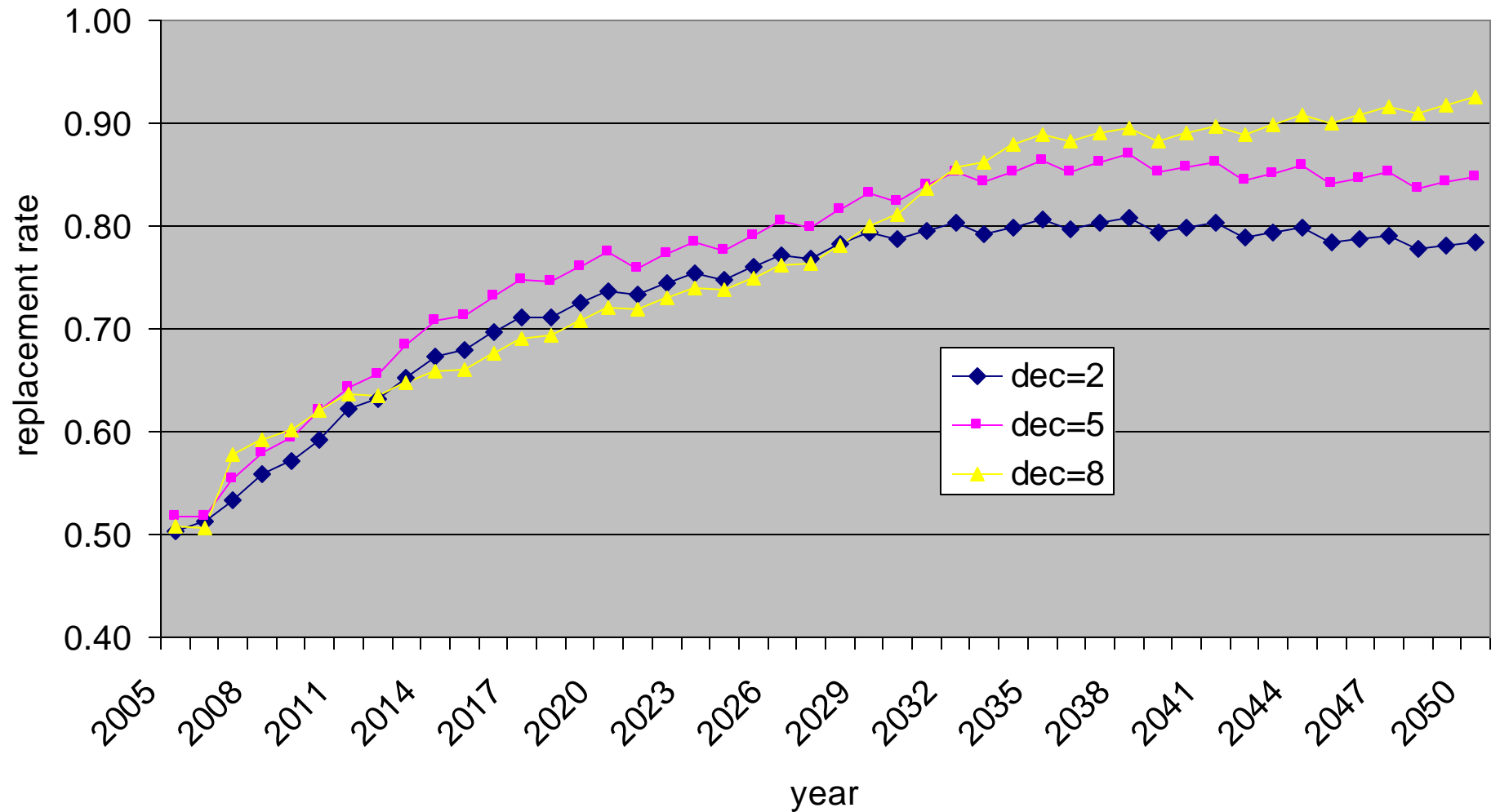
Projected Population Replacement Rates 5 years before and after Age Pension Age

Potential Replacement Ratios All Deciles



Projected Population Replacement Ratios Selected Career Income Deciles

aggregate adequacy



Some Patterns

- **The age pension is increasing in real terms, and is holding against MTAW. It is above the Henderson Poverty line**
- **Employees with SG and earning less than full-time wages can hit suggested targets**
- **Employees earning above average full-time wages should have additional savings – and appear to do so**
- **The self-employed need super and/or saleable business assets – ABS data shows that on average they have more than workers have of super alone**
- **In 2020 the system will still be maturing – the modest budget standard will be surpassed, but only low income workers will be near suggested replacement rate targets**

QUESTIONS