



# **Money in retirement: will we have enough?**

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**An update to the Grattan Retirement Income Projector  
12 April 2019**

# Money in retirement: will we have enough?

## Today's retirees are pretty comfortable: their reality contradicts a lot of forecasting

- Current retirees **feel more comfortable** financially than younger workers
- Retirees tend to **spend less after they retire**, and even less in old age, and are *net savers*
- Rising **healthcare costs** are largely borne by the taxpayer

## The future also looks bright for most retirees

- More super, more wages growth, and wealth windfall for middle-aged
- Assumptions about **private savings** and **career breaks** not crucial to results, but **wage v CPI deflation** is crucial (also drawdown rate, investment returns, comparison periods)
- We will not have “two Australias”: **part** Pension will always matter for many people
- But **renting retirees** often struggle, and there will be more in the future

## Why are others' results so different? It's all about the assumptions...

- ASFA comfortable standard is an inappropriate benchmark for policy
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## Policy needs a rethink

- Super is not free: we **trade off** wages today against super income tomorrow
- Super will not save the budget money (until about 2100)
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- Reduce **Age Pension taper rate**: current EMTR > 100%; helps bottom 70%; costs less
- Raise **Rent Assistance** by 40%: priority to help non-homeowners (particularly working age)
- **Encouraging drawdown** is the toughest problem: health and aged care is key (not CIPRs)<sup>2</sup>

# What should our retirement incomes system aim to achieve?

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- Ensure some **minimum** standard of living in retirement
- Facilitate **lifetime consumption smoothing**
- Not about boosting **inheritances**
- Be fiscally **sustainable**
- Maintain **incentives** to work, save and invest
- Manage **risks**: investment; longevity etc.

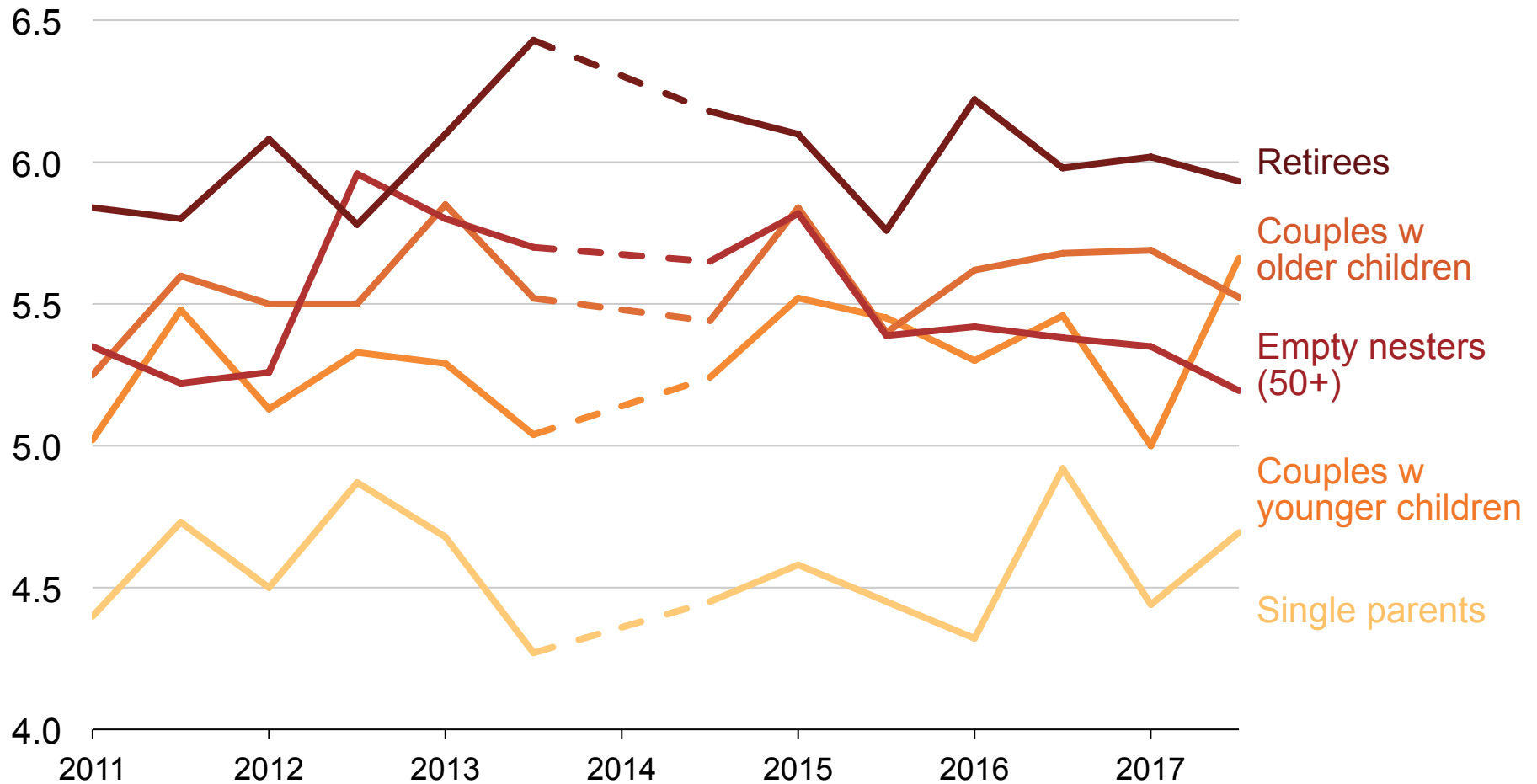
# How can we measure the adequacy of retirement incomes?

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- **Subjective well-being:** Ask retirees today whether they feel comfortable financially
- **Spending behaviour:** examine whether retirees are in fact able to buy the things they want
- **Replacement rates:** compare expenditure/income when working to expenditure/income in retirement
- **Budget standards:** assess whether can afford a basket of goods and services
- **Relative poverty:** compare incomes in retirement to measures of relative poverty (i.e. 50% of median household equivalised disposable incomes)

# Existing retirees feel less stressed on subjective measures of financial wellbeing

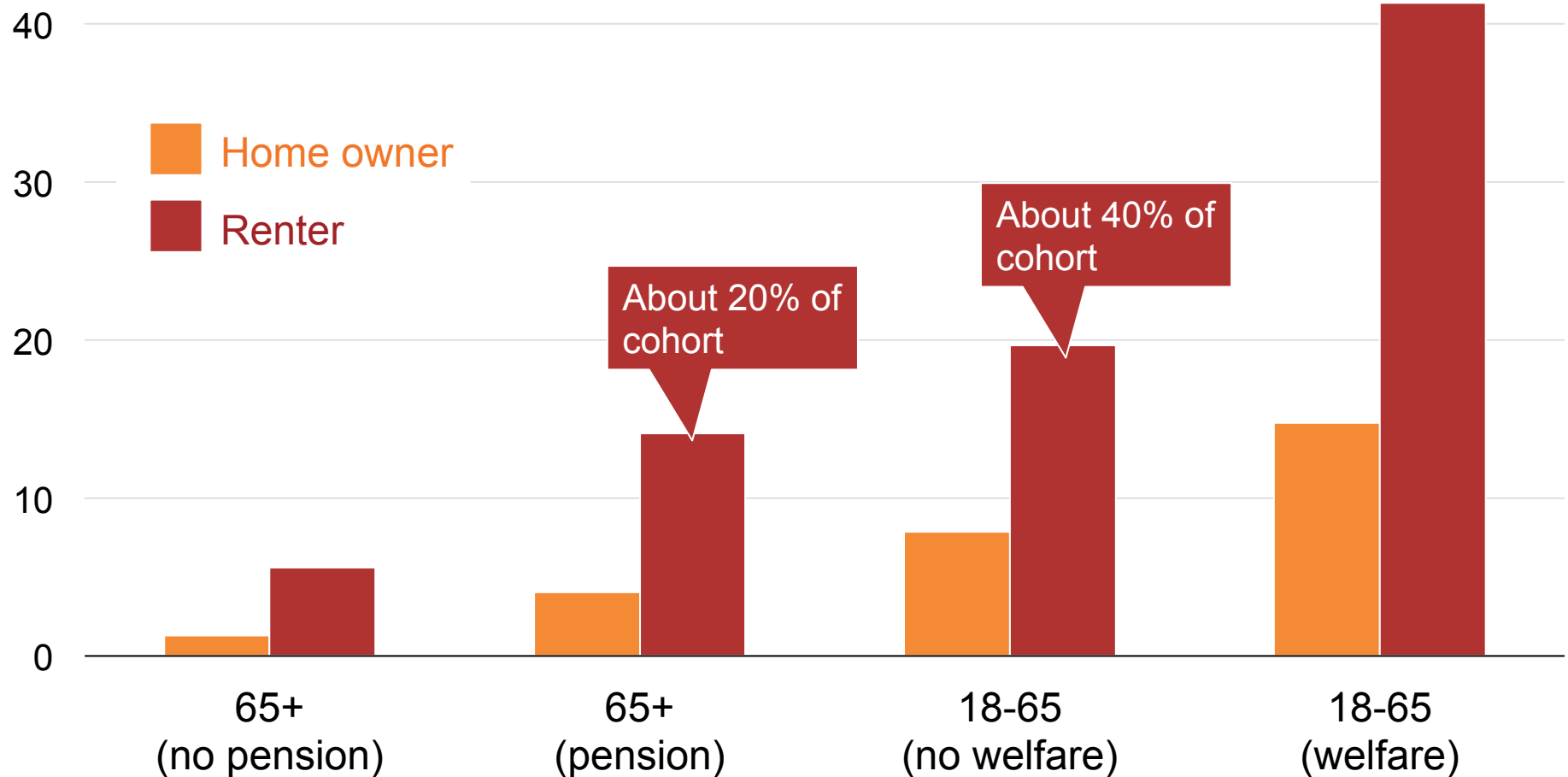
## Self-assessed financial comfort



Notes: Excludes anomalous Dec 2014 survey  
Sources: Members equity, Financial comfort survey

# Retirees are less financially stressed than those of working age

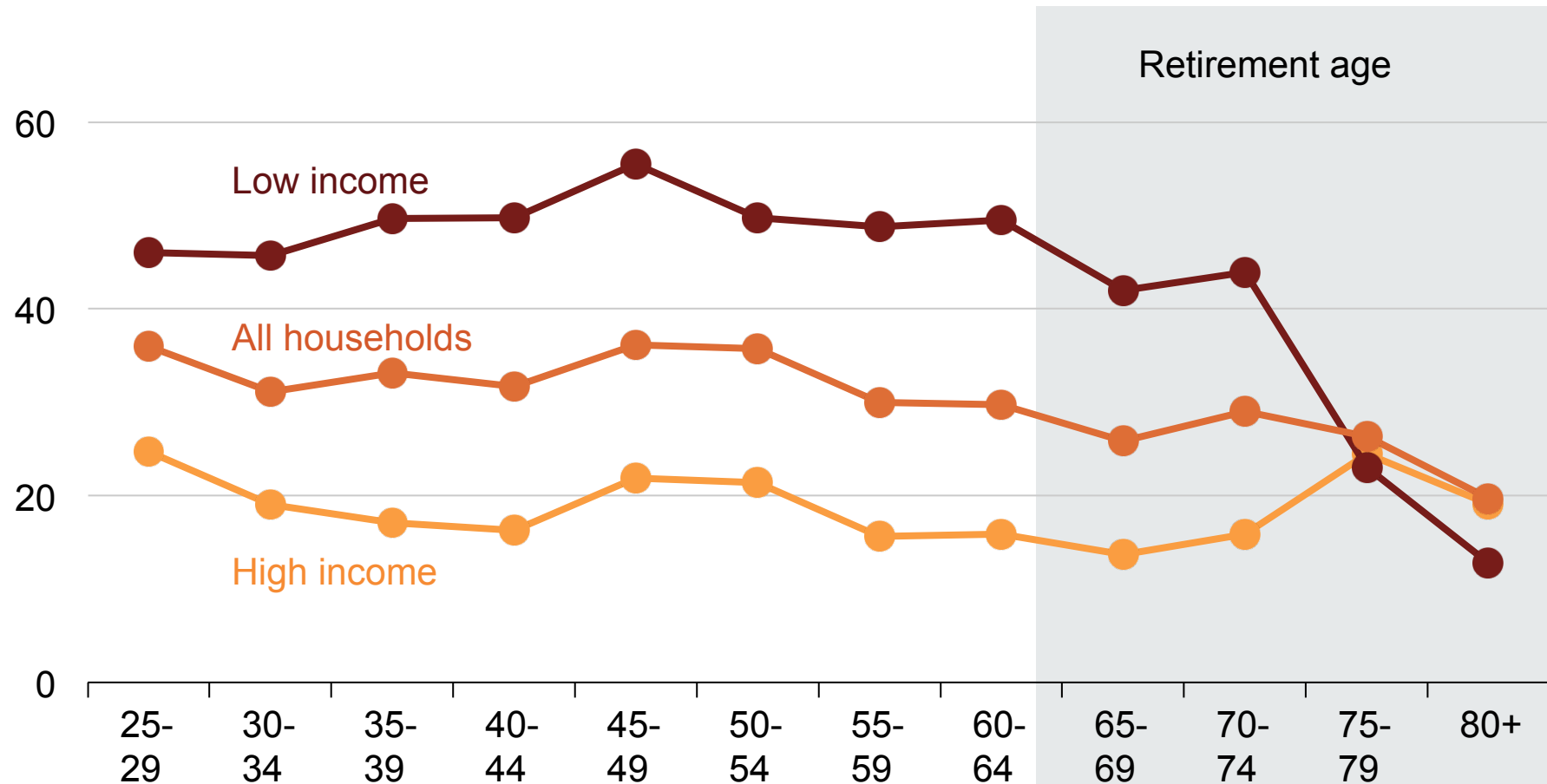
Percentage of households facing at least one financial stress, 2015-2016



Notes: Financial stress defined as money shortage leading to 1) skipped meals; 2) not heating home; 3) failing to pay gas, electricity or telephone bills on time; or 4) failing to pay registration insurance on time. 'Pension' and 'welfare' includes all those receiving cash benefits of more than \$100 per week  
Sources: ABS Household Expenditure Survey 2015-16, Grattan analysis.

# Older retirees miss out on fewer experiences because of cost than working aged people

Proportion of households that missed out on an experience because of cost in the last 12 months (per cent)

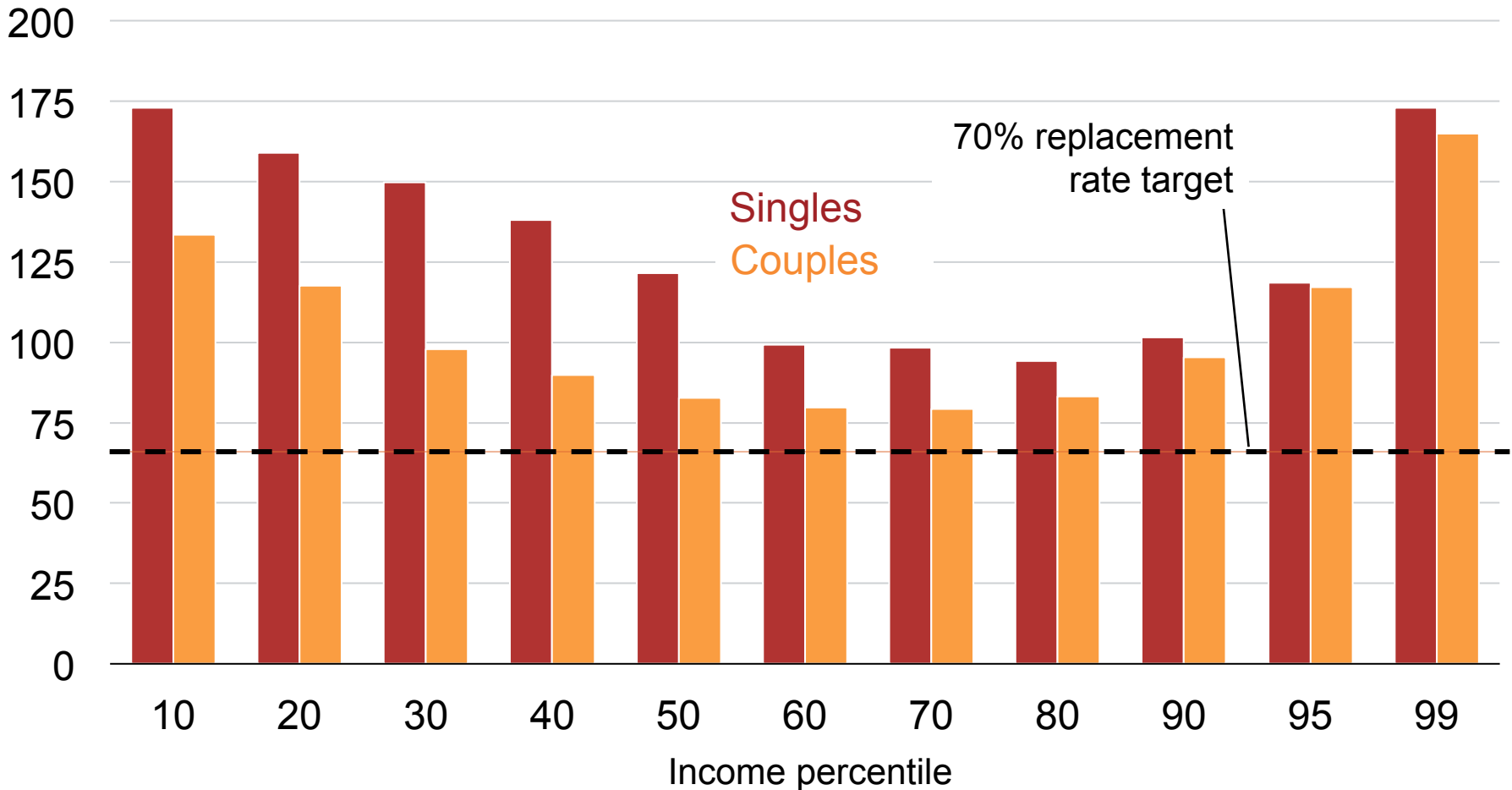


Notes: High (low) income includes all those in the top (bottom) third of incomes for that age cohort. 'Missing out experiences' includes not being able to afford a holiday once a year or not being able to afford a special meal once a week.

Source: ABS Survey of Income and Housing; Grattan analysis.

# Many retired low income households have higher incomes than when they were working

Disposable income for households aged 65-84 in 2015, relative to income for households aged 45-64 in 1995, \$2015-16



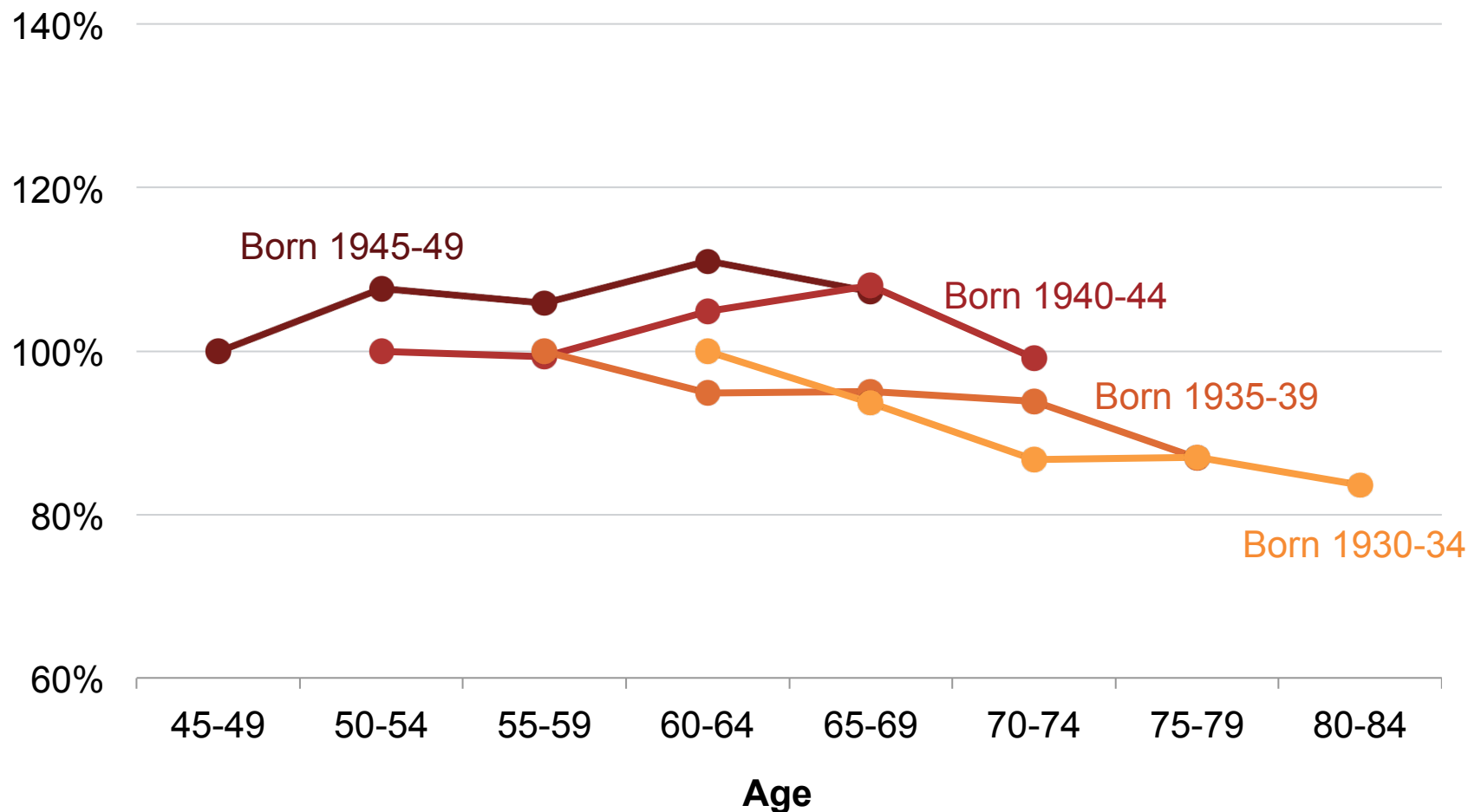
Notes: Disposable income includes income of head of household and their partner, but not children. Incomes adjusted due to changes in how the ABS defines incomes between surveys.

Source: ABS Survey of Income and Housing; Grattan analysis.



# Retirees spend less as they age

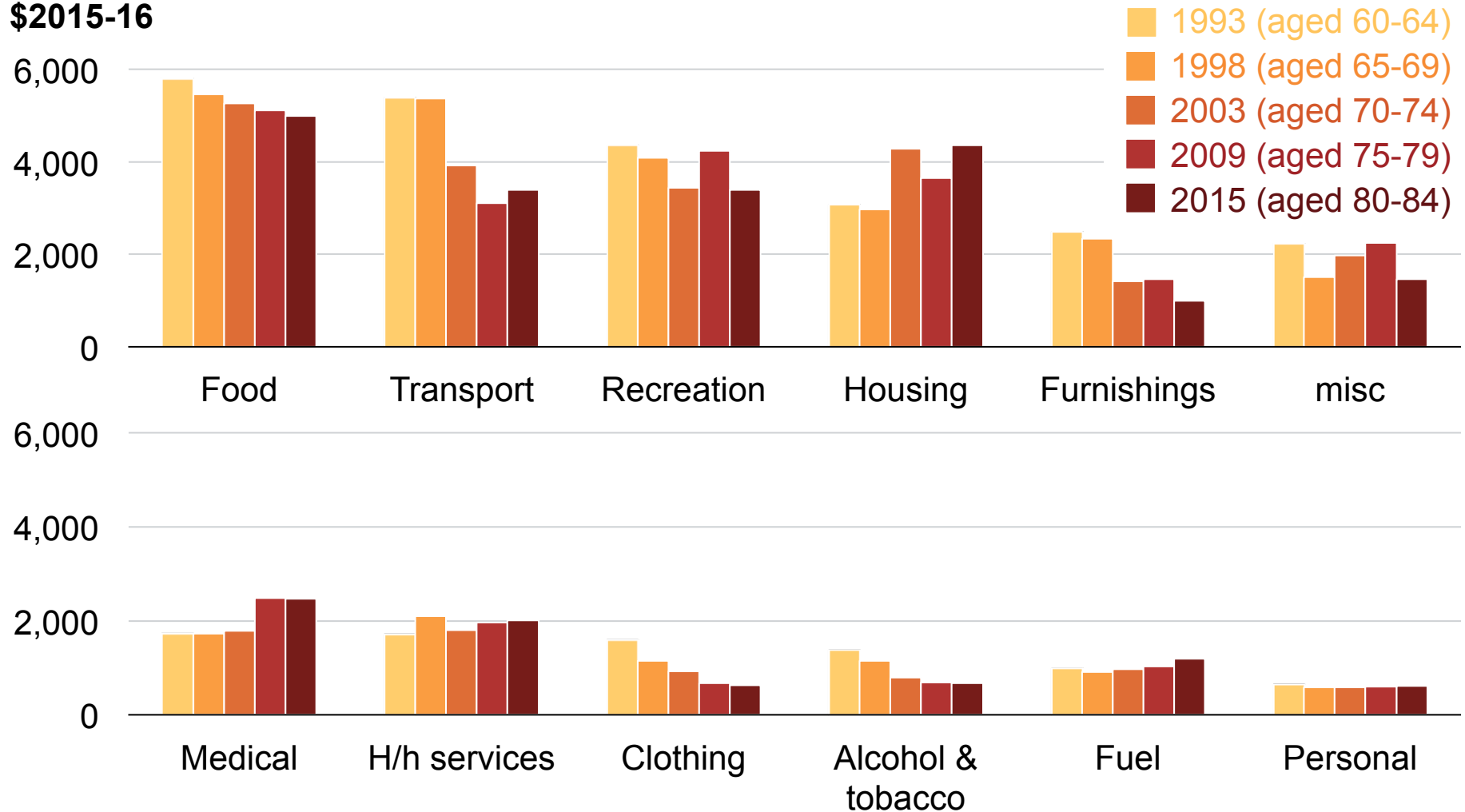
Household spending relative to 1993-94, by age cohort, equivalised households, \$2015-16



Notes: Spending from 1993-94, 1998-99, 2003-04, 2009-10 and 2015-16 Household Expenditure Survey. Each line represents a single cohort across time as they age. While the age cohorts are 5 years apart, there was a gap of 6 years between the last three HES surveys. Spending deflated by CPI.  
Source: ABS Household Expenditure Survey (multiple years); Grattan analysis.

# Lower spending in retirement is driven by food, transport, furnishings, clothing and recreation

Equivalised household annual expenditures for cohort of retiree households as they age, \$2015-16

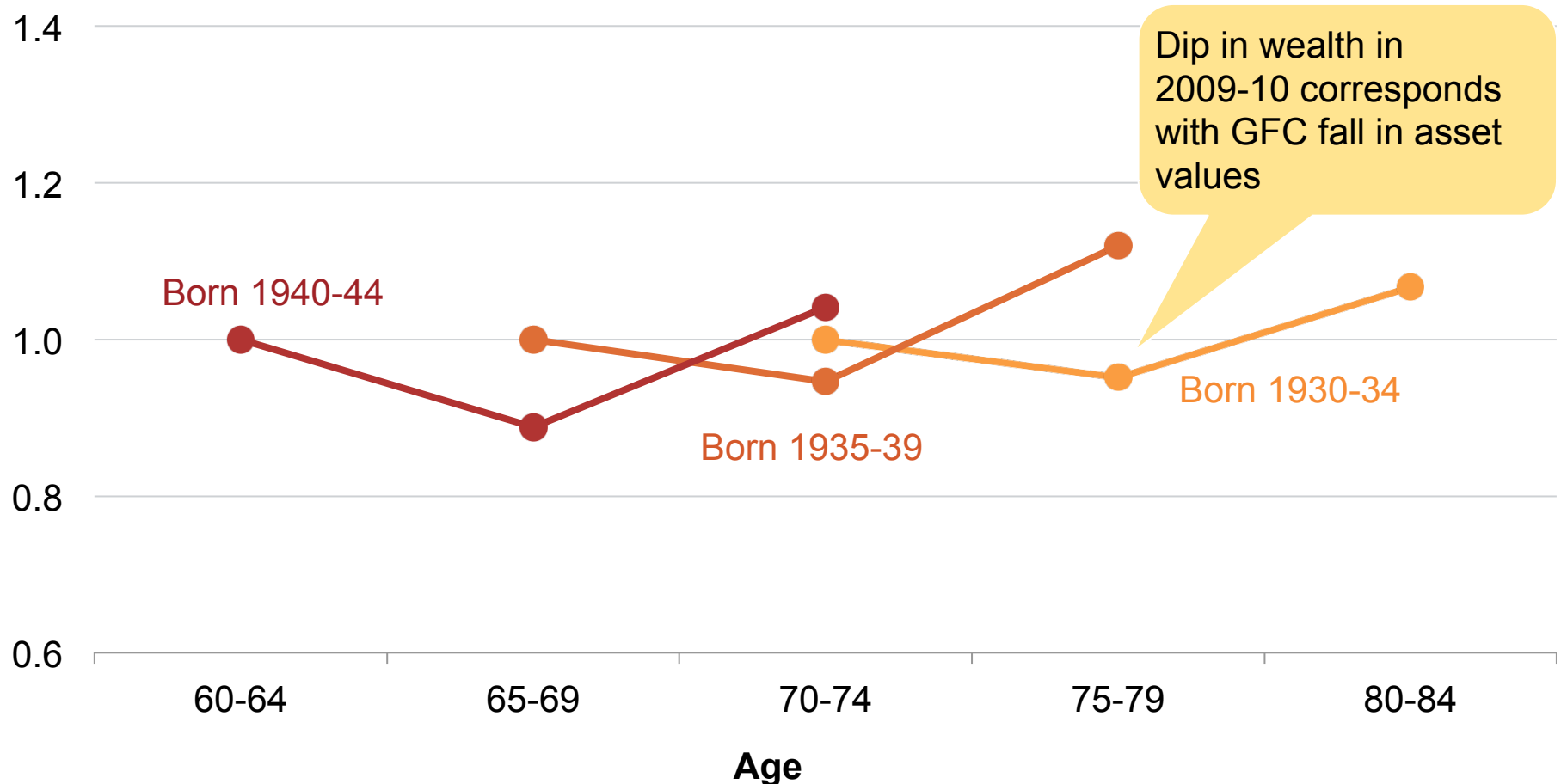


Notes: Spending from 1993-94, 1998-99, 2003-04, 2009-10 and 2015-16 Household Expenditure Survey. Each line represents a single cohort across time as they age. While the age cohorts are 5 years apart, there was a gap of 6 years between the last three HES surveys. Spending deflated by CPI.

Source: ABS Household Expenditure Survey (multiple years); Grattan analysis.

# Retirees generally don't spend their nest egg in retirement

Household net financial wealth, excluding the family home, relative to 2005, \$2015-16



Notes: Based on net financial wealth from the 2005-06, 2009-10 and 2015-16 iterations of the Survey of Income and Housing. Net financial wealth is total net wealth excluding the value of the principal place of residence (and related mortgage liabilities), personal effects and motor vehicles. Net financial wealth across years is deflated by the consumer price index to \$2015-16.

Source: ABS Survey of Income and Housing (various years); Grattan analysis.

# Why don't people spend their savings?

## Framing

- Minimum drawdown rules frame drawdown choices

## Uncertainty

- Fear of unexpected **spending** (particularly health and aged care)

- Uncertain about **returns** to savings (and government policy changes)
- Uncertain about **life expectancy**, and how long savings will be needed

CIPRS can help here

## Investment constraints

- Hard to draw down on illiquid assets (particularly homes)

## Want to leave bequest

### Reduced needs

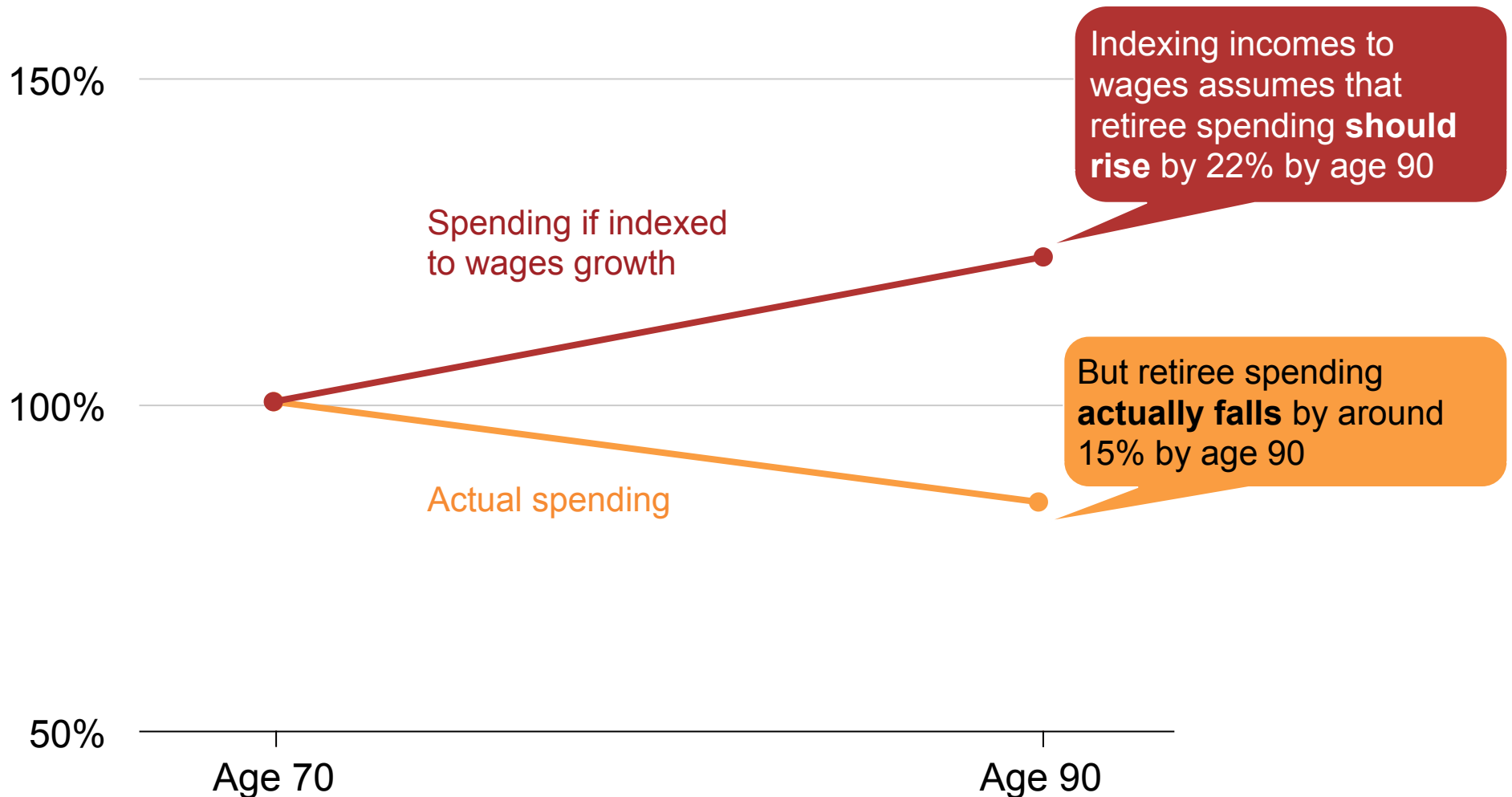
- People have more leisure time to do things for themselves (e.g. food preparation)

Retirees also tend to have lower spending needs as they age

Literature suggests this is the big problem

# Implication: retirement incomes should only rise in line with inflation, not wages

Real (inflation adjusted) retiree spending as a proportion of their spending at age 70



Notes: Assumes annual real wages growth of 1 per cent.  
Source: Grattan analysis.

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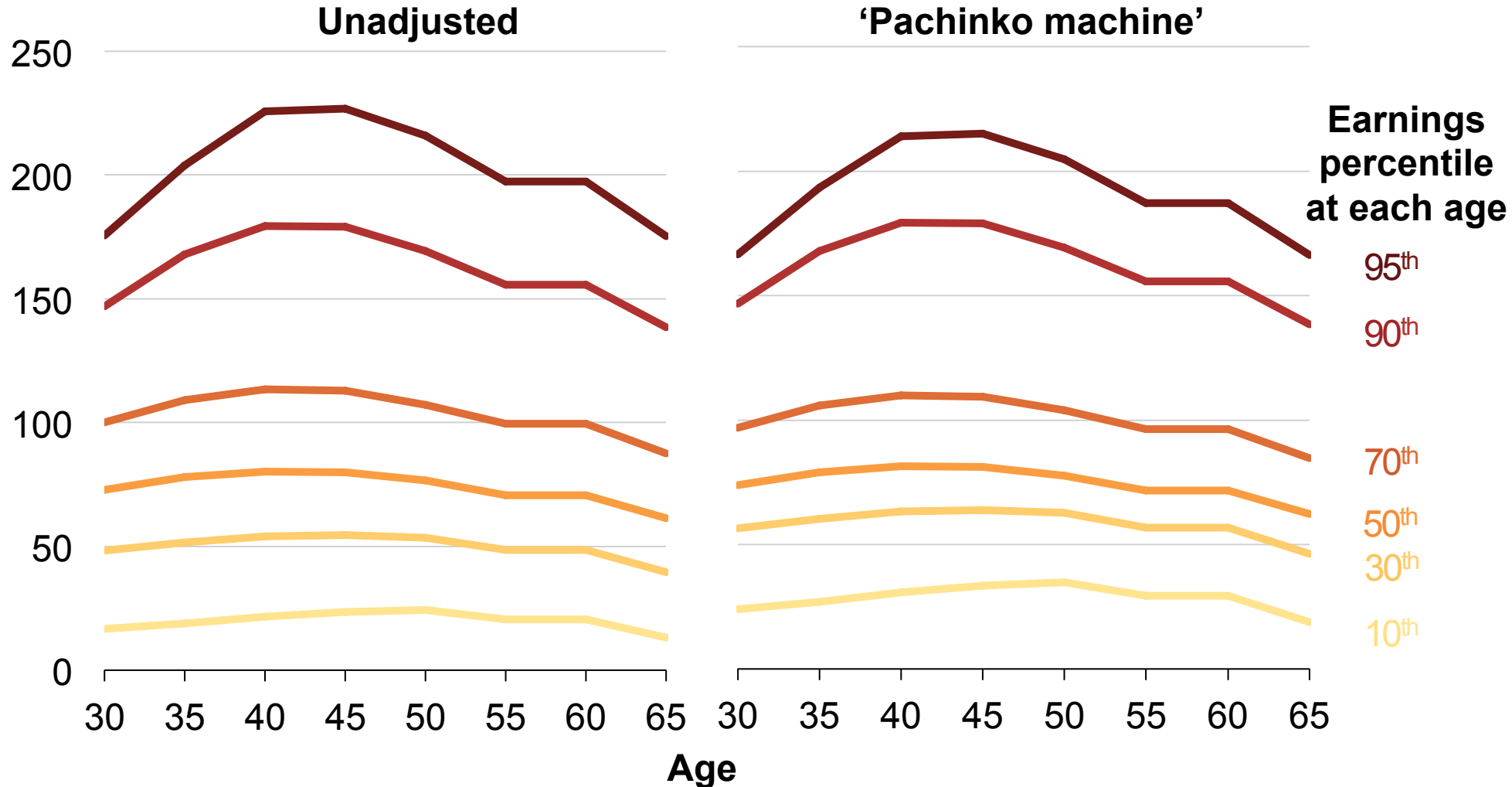
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# Projecting future retirement incomes: the Grattan Retirement Income Projector (or GRIP)

Salary income as per cent of AWOTE by age at different starting earnings points



Notes: Lifetime income adjusted using a transition matrix which reflects the likelihood of moving up and down the income distribution of the course of a person's working life.

Source: Grattan analysis of ATO Tax Statistics 2013-14; HILDA; Grattan analysis.

Replacement rates calculated by comparing **disposable (post-tax) incomes** over **entire retirement** compared to **last 5 years of working life**

Future retirement incomes **deflated by CPI (not wages)**

- Consistent with principle of lifetime consumption smoothing and closer to retirees' *actual* spending behaviour

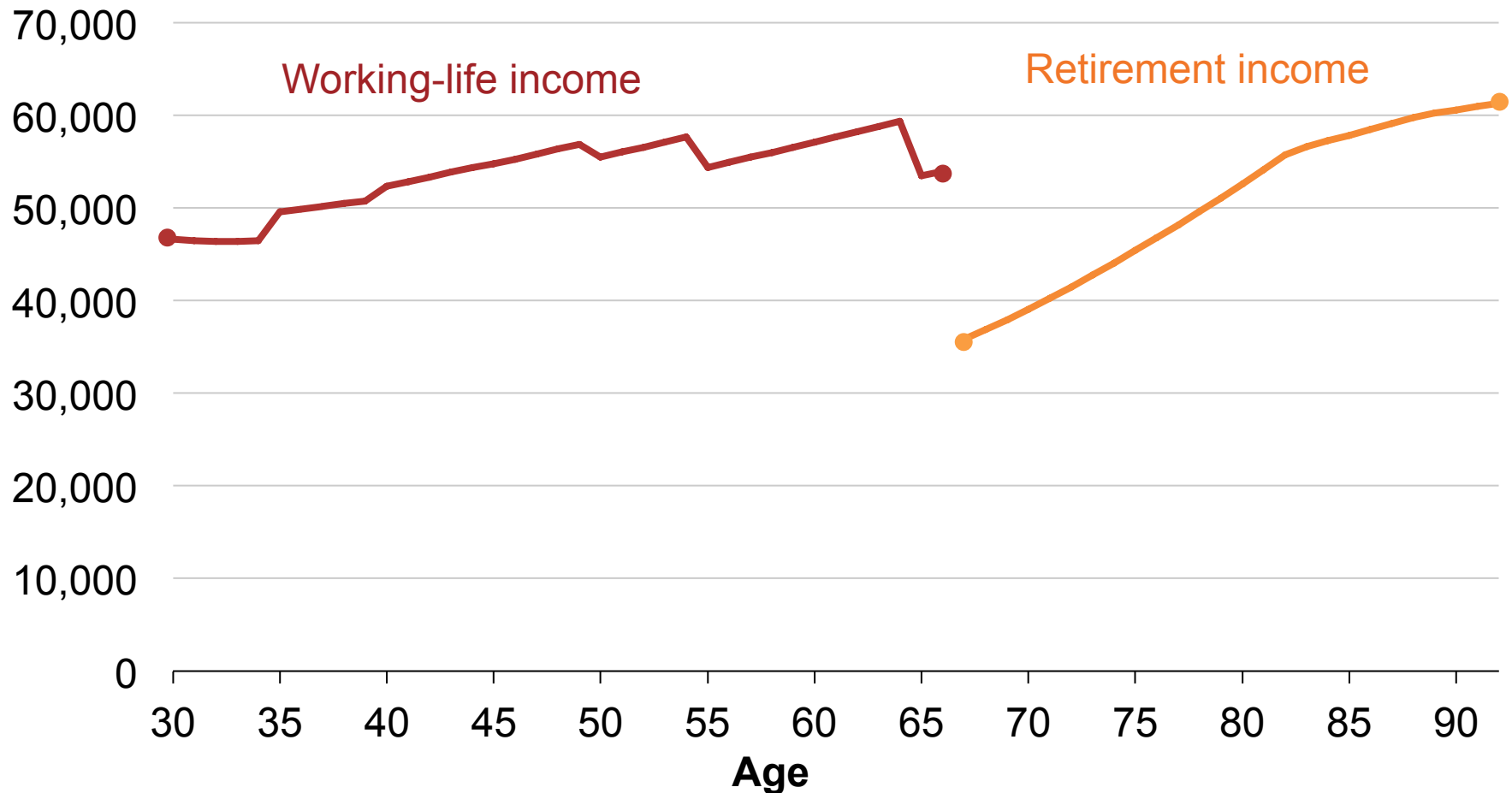
Includes **voluntary super and non-super savings** (but not the home)

- Voluntary savings are significant for wealthier retirees



# How we measure replacement rates

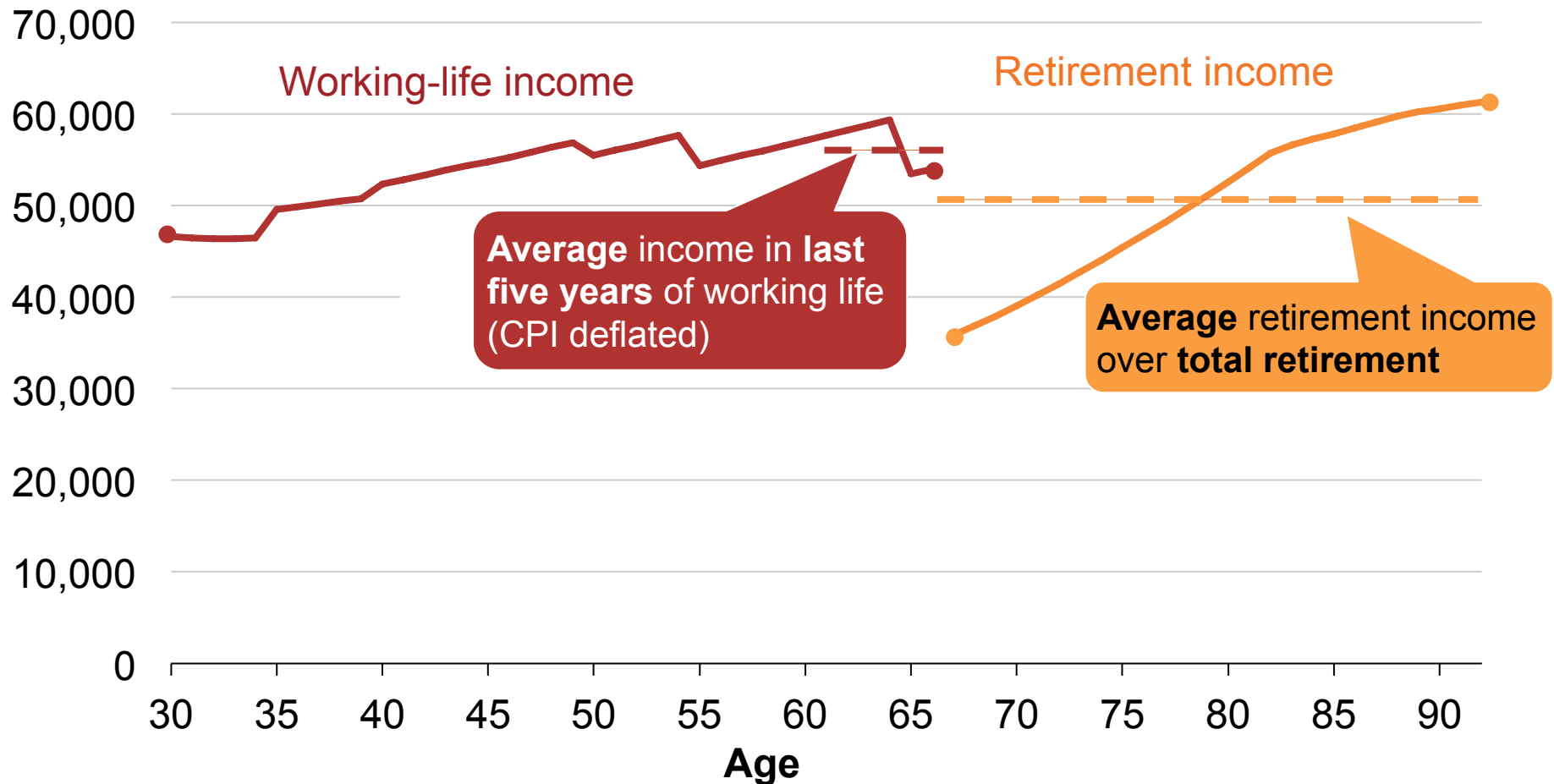
## Real annual income, median earner, \$2015-6 (CPI-deflated)



Notes: Models retirement income of a person born in 1985, who works uninterrupted from 30 to 67, and dies at age 92. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Retirement income deflated by CPI  
Source: Grattan Retirement Income Projector:

# How we measure replacement rates: all of retirement compared to last five years working

Real annual income, median earner, \$2015-6 (CPI-deflated)



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# What's an “adequate” retirement income?

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**Our target: 70% replacement rate up to 80<sup>th</sup> percentile of earnings distribution, or roughly 1.5 times full time average earnings (\$120,000)**

## Why not 100% replacement rate?

- Housing costs *typically* fall sharply in retirement once house paid off
- Retirees substitute expenditure for leisure
- Retirees no longer incur some work-related expenses

## Why differs across income distribution?

- Replacement rates for low-income earners exceed 100%: poor before retirement; and poor afterwards
- Beyond 80<sup>th</sup> percentile individuals tend to have enough

# Similar sounding target replacement rates vary a lot given different bases for calculation

## Target replacement rate for median (i.e. average) income earner

Institution	Replacement rate benchmark	Replacement rate under GRIP to deliver a retirement income similar to nominated benchmark	
	Measure	Per cent	Per cent
OECD	Net final earnings (wage deflated)	70	77
World Bank	Net lifetime earnings (CPI deflated)	78	74
World Bank (alternate)	Net final earnings (CPI deflated)	53	50
Melbourne Mercer Global Pension Index	Net lifetime earnings (wage deflated)	70	90

Notes: 'Net lifetime earnings' is the ratio of disposable income (after tax and transfers) across retirement compared to net lifetime earnings pre-retirement. Both the OECD and the Mercer Global Pension Index include income from government pensions and compulsory superannuation contributions, but exclude voluntary super contributions and non-super savings. OECD and Mercer deflate retirement earnings by wage deflation; World Bank and Treasury deflate them using CPI. OECD assumes 2% CPI inflation and 1.25% real wage growth. The World Bank assume 2.5% CPI inflation and 2% real wage growth. GRIM assumes 2.5% CPI inflation and 1% real wage growth. The average net lifetime replacement rate across OECD countries for a median income earner is 66%.

Source: OECD. (2017) *Pensions At a Glance*, p.98, p.100; OECD. (2012) *Pensions At a Glance*, p.161; World Bank. (1993) *Reversing the Old Age Crisis*, p.293-4; Mercer (2017) *Melbourne Mercer Global Pension Index 2017*, p.38.

## What's changed since *Money in Retirement*?

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Since *Money in Retirement* was published in November 2018, the Grattan Retirement Income Projector has been updated.

What's changed?

- GRIP updated to reflect income and voluntary pre-tax contributions data from the 2015-16 ATO Taxation Statistics.
- The methodology for voluntary pre-tax superannuation contributions has been amended.

As the following slides show, the results are largely unchanged<sub>21</sub>

# Those entering the workforce today will be able to maintain their standard of living in retirement

Replacement rates, by employment earnings percentile, CPI deflated, per cent

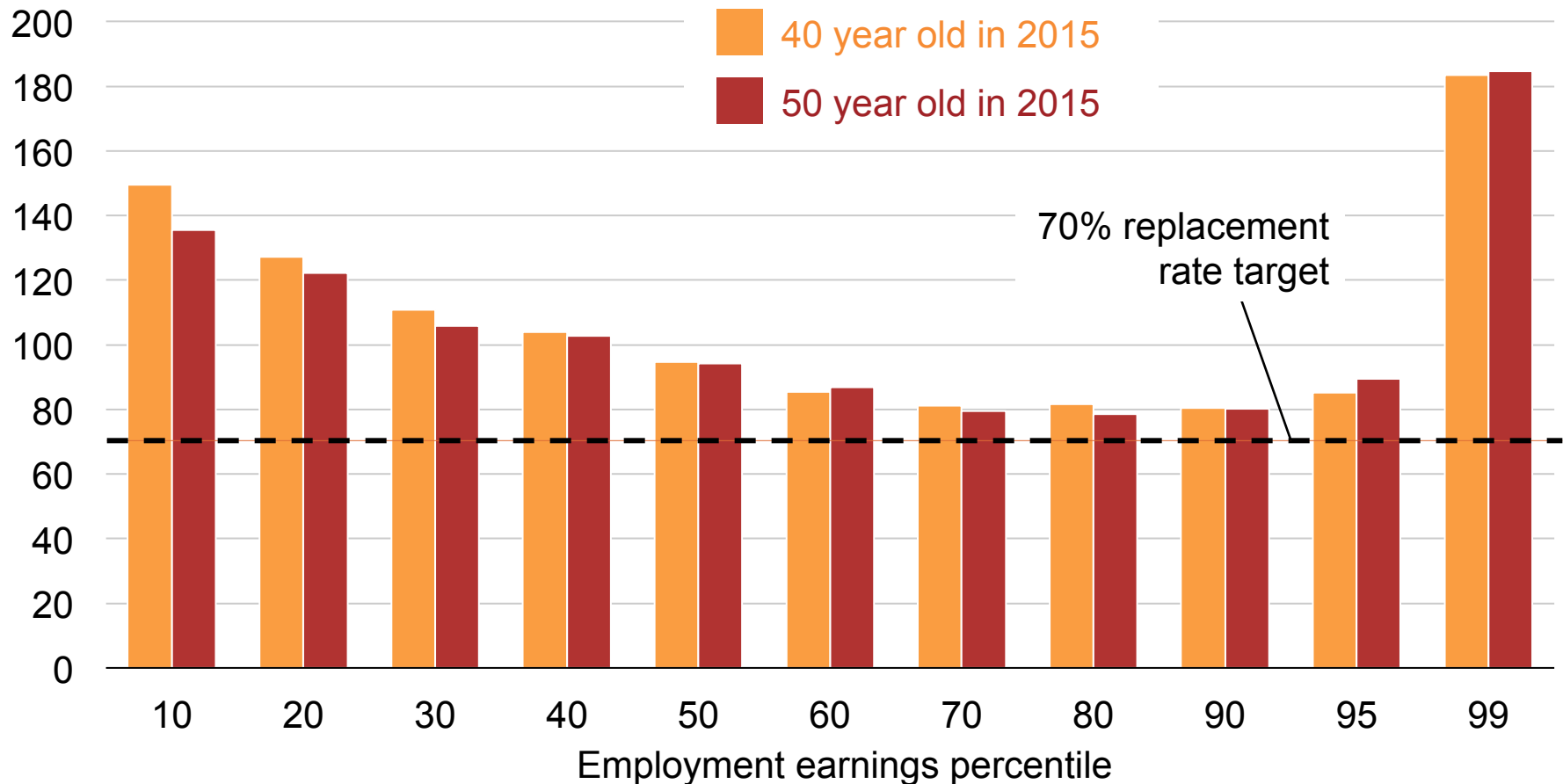


Notes: Models retirement income of a person born in 1985, who works uninterrupted from 30 to 67, and dies at age 92. Includes compulsory Superannuation Guarantee of 12 per cent. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Retirement income deflated by CPI

Source: Grattan Retirement Income Projector

# Middle aged people today will be able to maintain their standard of living in retirement

Replacement rates, by employment earnings percentile, CPI deflated, per cent



Notes: Models retirement income, assuming person works uninterrupted from nominated age to 67, and dies at age 92. Includes compulsory superannuation Guarantee of 12 per cent. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Retirement income deflated by CPI.

Source: Grattan Retirement Income Projector

# Retirement incomes will be adequate even using less favourable calculations and assumptions

## Replacement rate for median income earner

Retirement age income comparator	Whole of retirement			
	last 5 years CPI	whole working CPI	last 5 years wage	whole working wage
Working age income comparator				
Deflation				
<b>Current policy</b>	<b>0.89</b>	<b>0.94</b>	<b>0.76</b>	<b>0.69</b>
<b>Assumptions</b>				
Lower investment returns	0.86	0.91	0.73	0.67
Minimum draw down	0.81	0.86	0.69	0.63
No non-super savings	0.89	0.94	0.75	0.69
<b>Policy changes</b>				
SG remains at 9.5%	0.87	0.93	0.74	0.68
Assets test taper rate to \$2.25	0.92	0.97	0.78	0.72
SG remains at 9.5%; assets test taper rate \$2.25	0.89	0.95	0.76	0.70
As above + super tax breaks + SAPTO + M/care levy	0.88	0.93	0.75	0.68
Retirement age to 70 (on its own)	1.00	1.01	0.86	0.74
All of the above	0.99	1.00	0.86	0.73

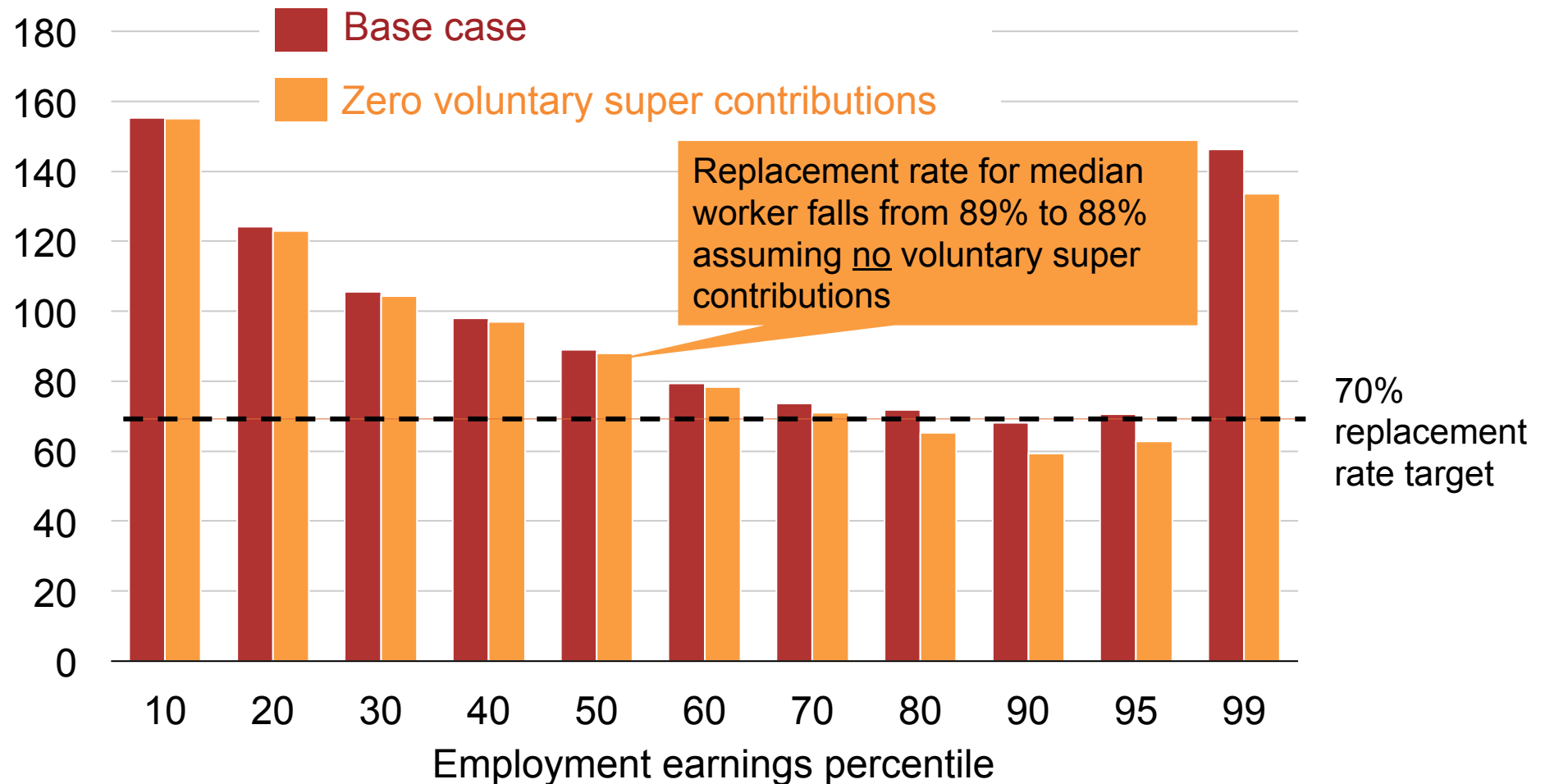
Notes: "Current Policy": policy as currently legislated, including: 12% Superannuation Guarantee from 2025; retirement age at 67; existing superannuation tax breaks with indexation of relevant caps and thresholds. "Full Grattan package": SG remains at 9.5%; Age Pension asset taper rate lowered so Pension reduced by \$2.25 a fortnight per \$1,000 in assessable assets; SAPTO and Medicare levy changes as recommended in Grattan Institute's *Age of Entitlement* report; superannuation tax breaks tightened to \$11,000 annual cap on pre-tax super contributions, \$50,000 annual cap on post-tax super contributions and 15% tax on earnings in the pension phase.

Source: Grattan Retirement Income Model.



# Most workers exceed 70% benchmark even if they make no voluntary super contributions

Replacement rates, by employment earnings percentile, CPI deflated, per cent

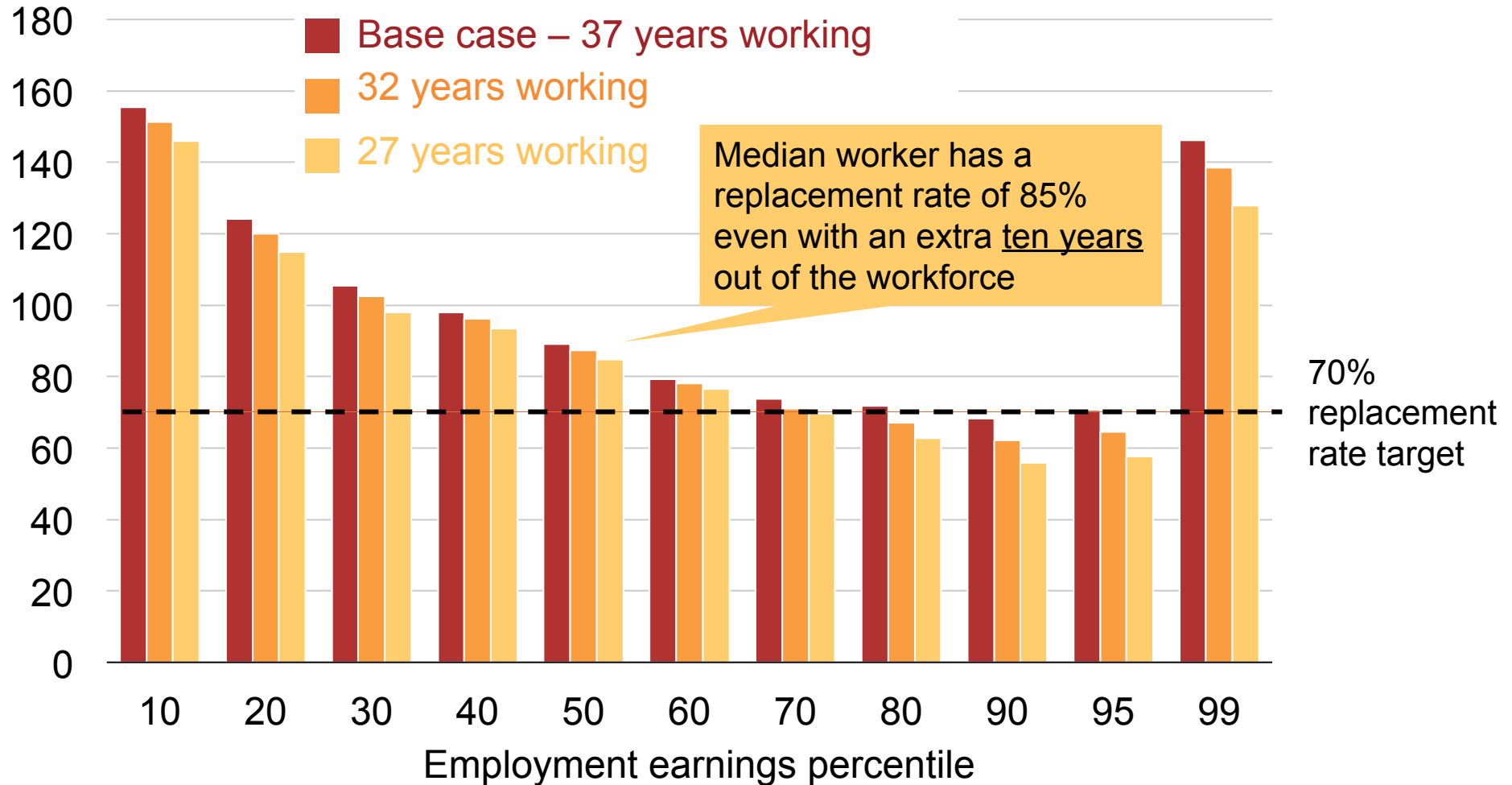


Notes: Results from modelling the retirement income of a person born in 1985, who dies at 92. Retirement savings drawn down so that small bequest is left in addition to home. "Zero voluntary super contributions scenario" assumes workers make no voluntary pre-tax super contributions – Super Guarantee contributions only. "Base case" assumes workers make voluntary pre-tax super contributions as observed in the ATO 2% sample file. Neither scenario assumes workers make post-tax contributions during their working lives.

Source: Grattan Retirement Income Model

# Retirement incomes are adequate even with career breaks: they get more pension instead

Replacement rates, by employment earnings percentile, CPI deflated, per cent

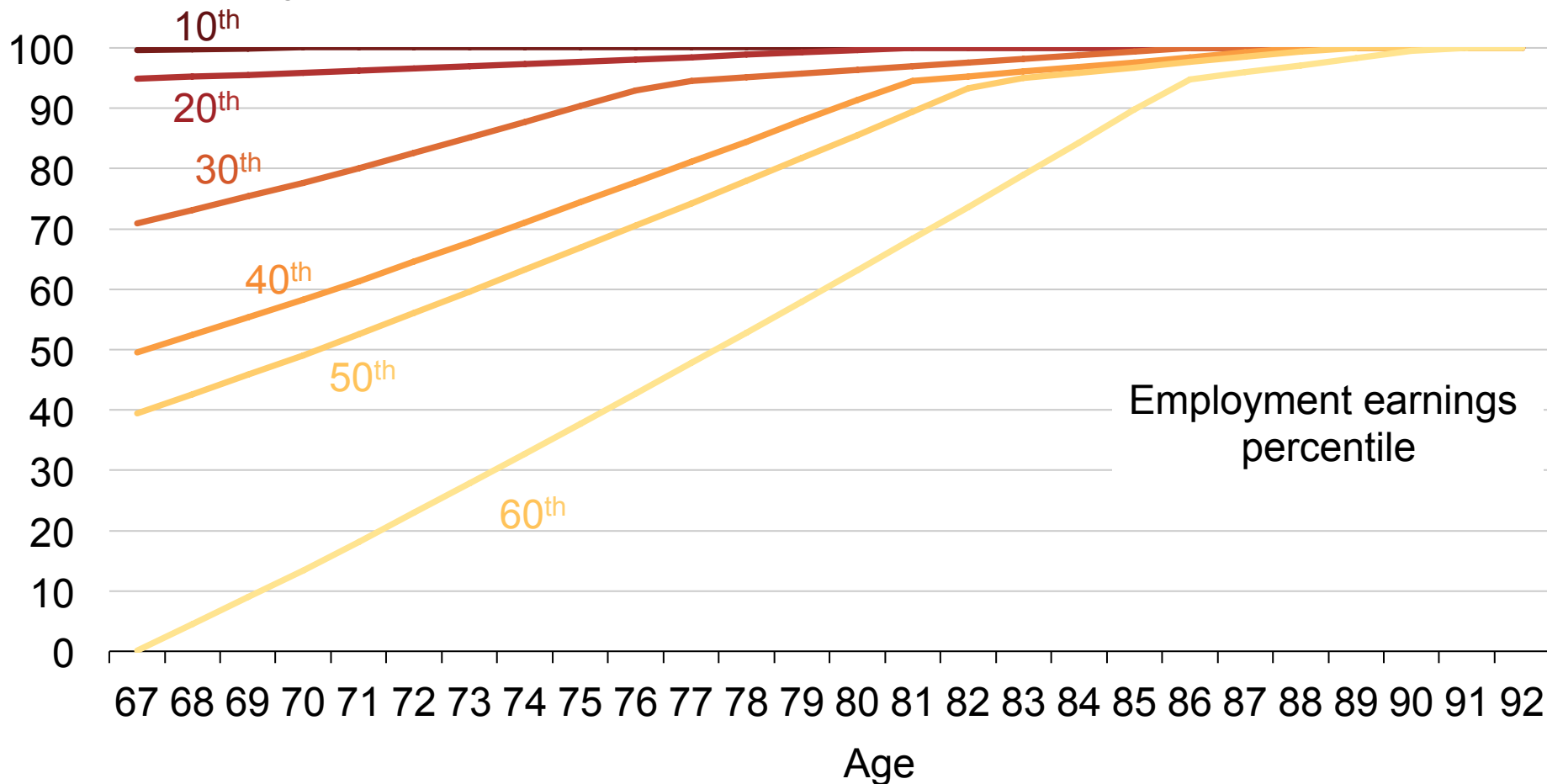


Notes: Results from modelling the retirement income of a person born in 1985, who dies at 92. Retirement savings drawn down so that small bequest is left in addition to home. Career break scenarios assume retirees start work at age 30, and take either a five or ten year career break from age 35 (until either age 40, or 45) before returning to work until age 67. GRIP includes part-time workers.

Source: Grattan Retirement Income Projector

# We will not have “two Australias”, but many people will get a part Age Pension

Per cent of full-rate Age Pension received in retirement, by employment earning percentile, per year

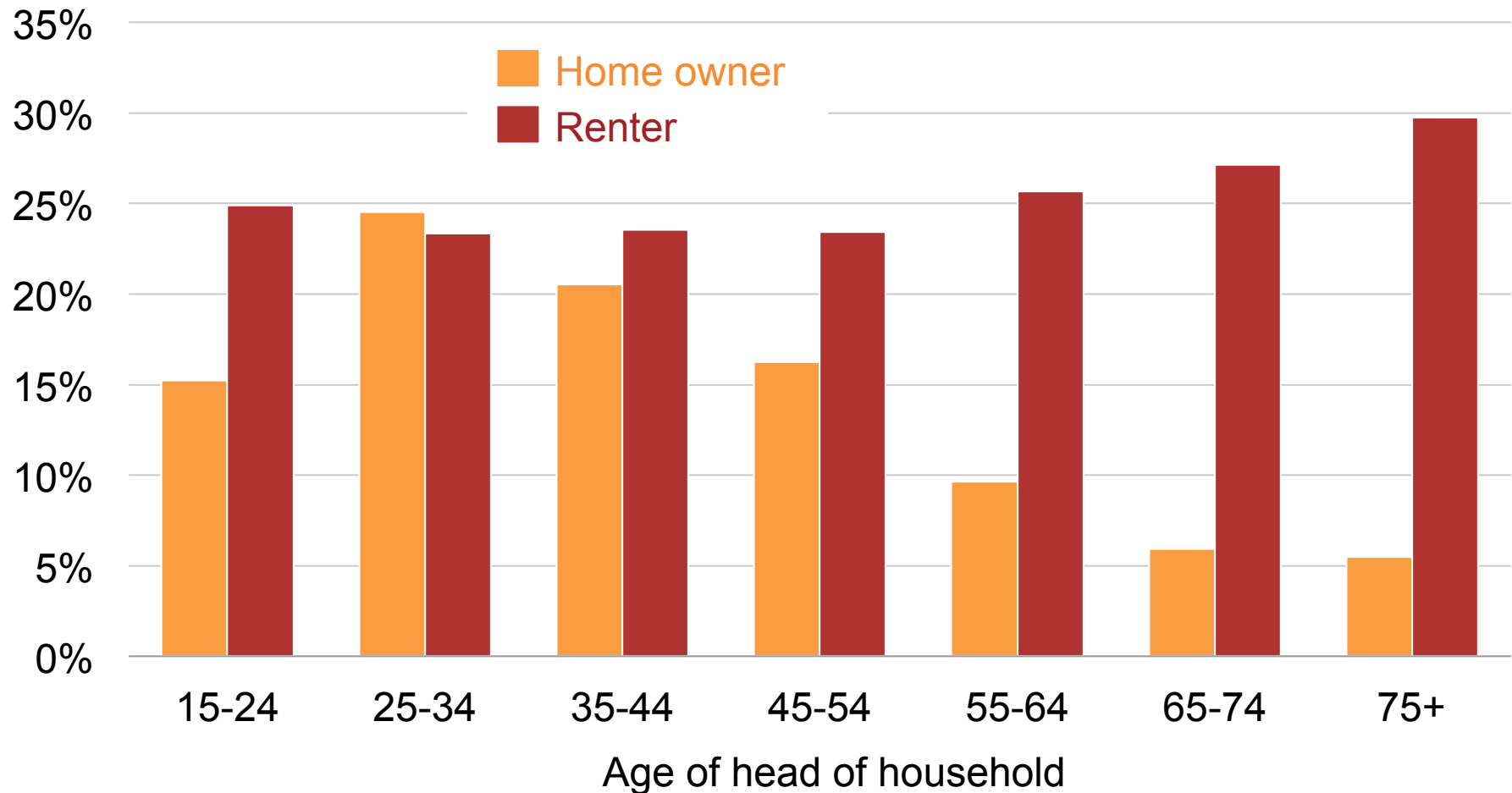


Notes: If a person receives more than 95 per cent of the full Age Pension (that is, when their assets are less than \$250,000 in 2015-16 dollar values), the precise amount of pension received depends on the deemed income of those assets (which uses a lower taper rate) rather than the value of the assets.

Source: Grattan Retirement Income Projector.

# Homeowners' housing costs decline sharply as households approach retirement

Housing costs as a share of household disposable income, 2015-16

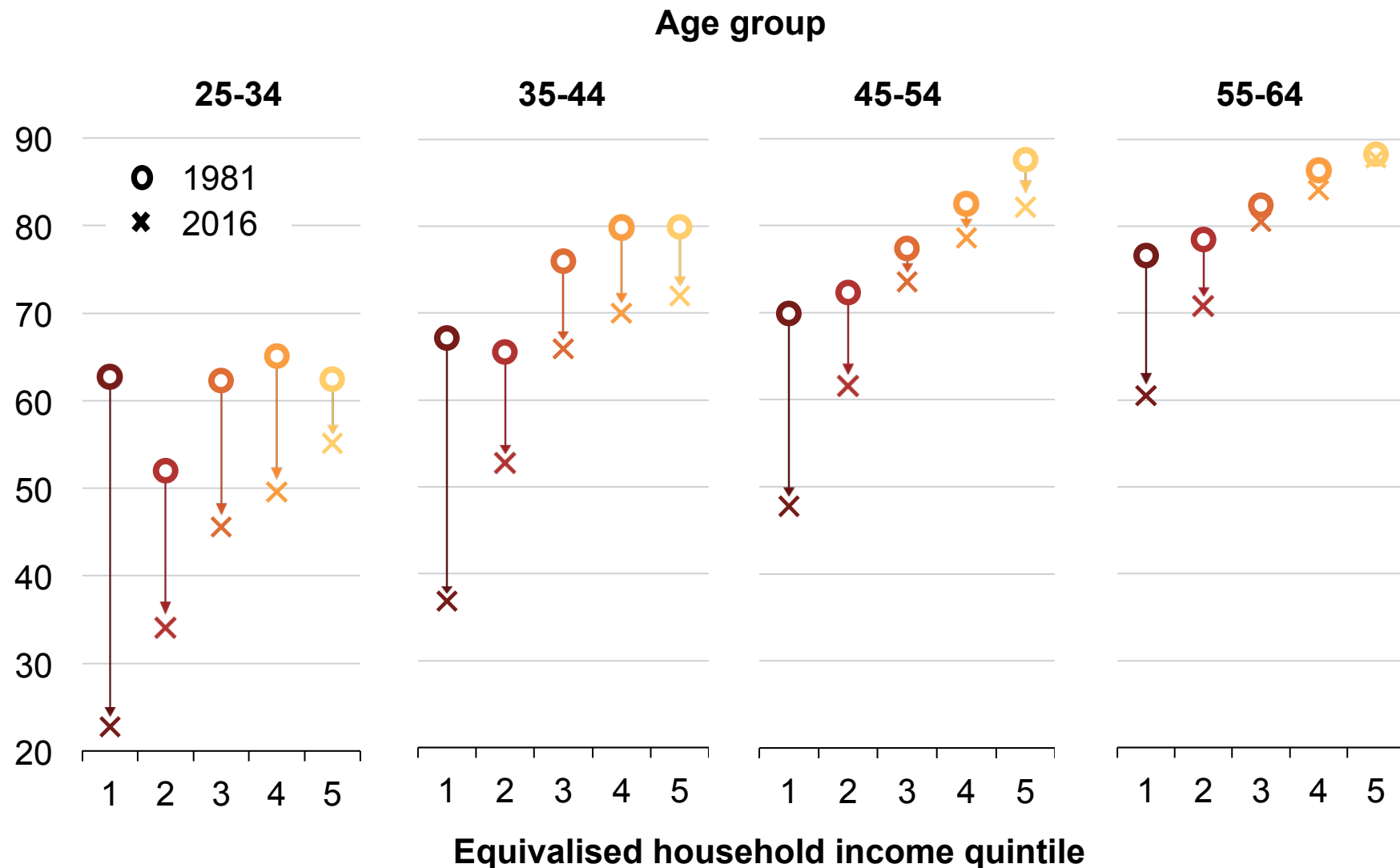


Notes: Housing costs include mortgage interest and principal repayments and general rates for homeowners, and rental payments for renters. Does not include imputed rent.

Source: ABS Household Expenditure Survey (2017); Grattan analysis.

# Many more retirees will be renting in the future

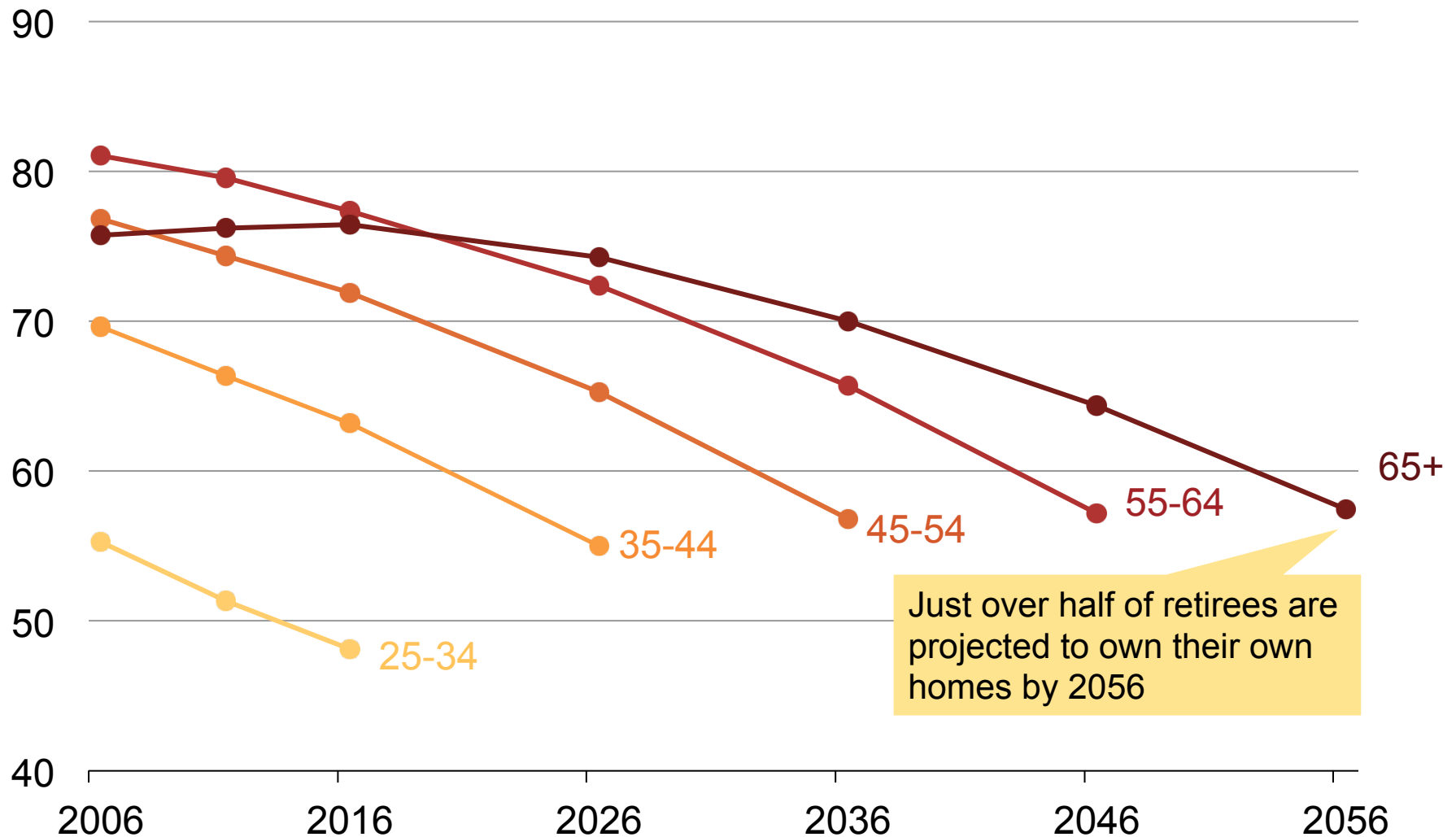
Home ownership rates by age and income, 1981 and 2016



Source: Census; Burke et al 2014; ABS.

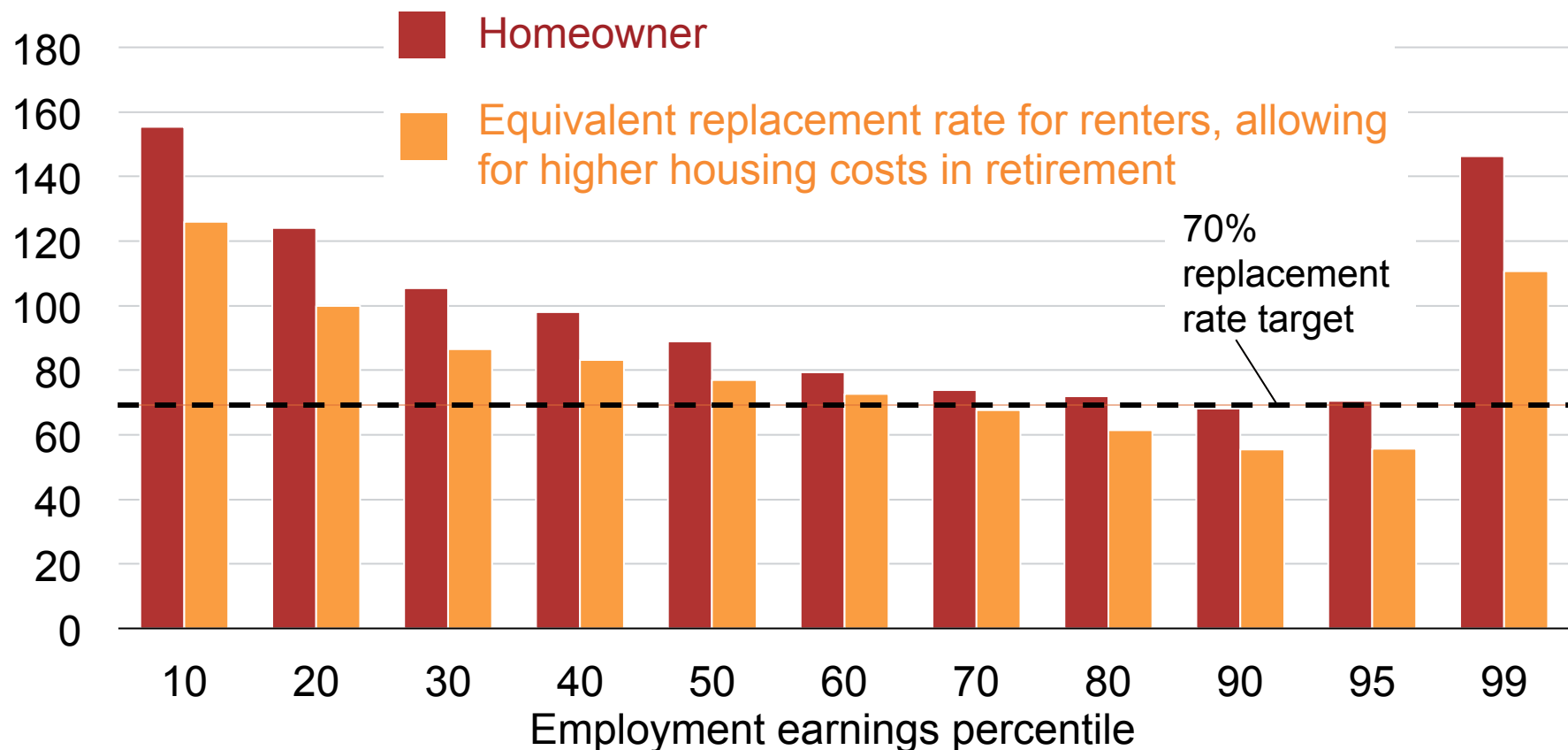
# Far fewer retirees will own their own homes in future

## Home ownership rates by age, 2006 to 2056



# Most renters will still be above replacement rate benchmarks even after allowing for higher housing costs

Replacement rates, by employment earnings percentile, CPI deflated, per cent



*Notes:* The equivalent replacement rate for renters is calculated as retirement income less the additional housing costs that renters pay relative to home owners in retirement, divided by the pre-retirement income without any allowance for housing costs. The housing costs in retirement for renters relative to home-owners are estimated at 25 per cent of income, on the basis that rents are about 30 per cent of income, and housing costs for home-owners are about 5 per cent of income. For more detail regarding calculation of replacement rates, see Appendix C of Daley (2018) *Money in Retirement: More Than Enough*.

Source: Grattan Retirement Income Projector

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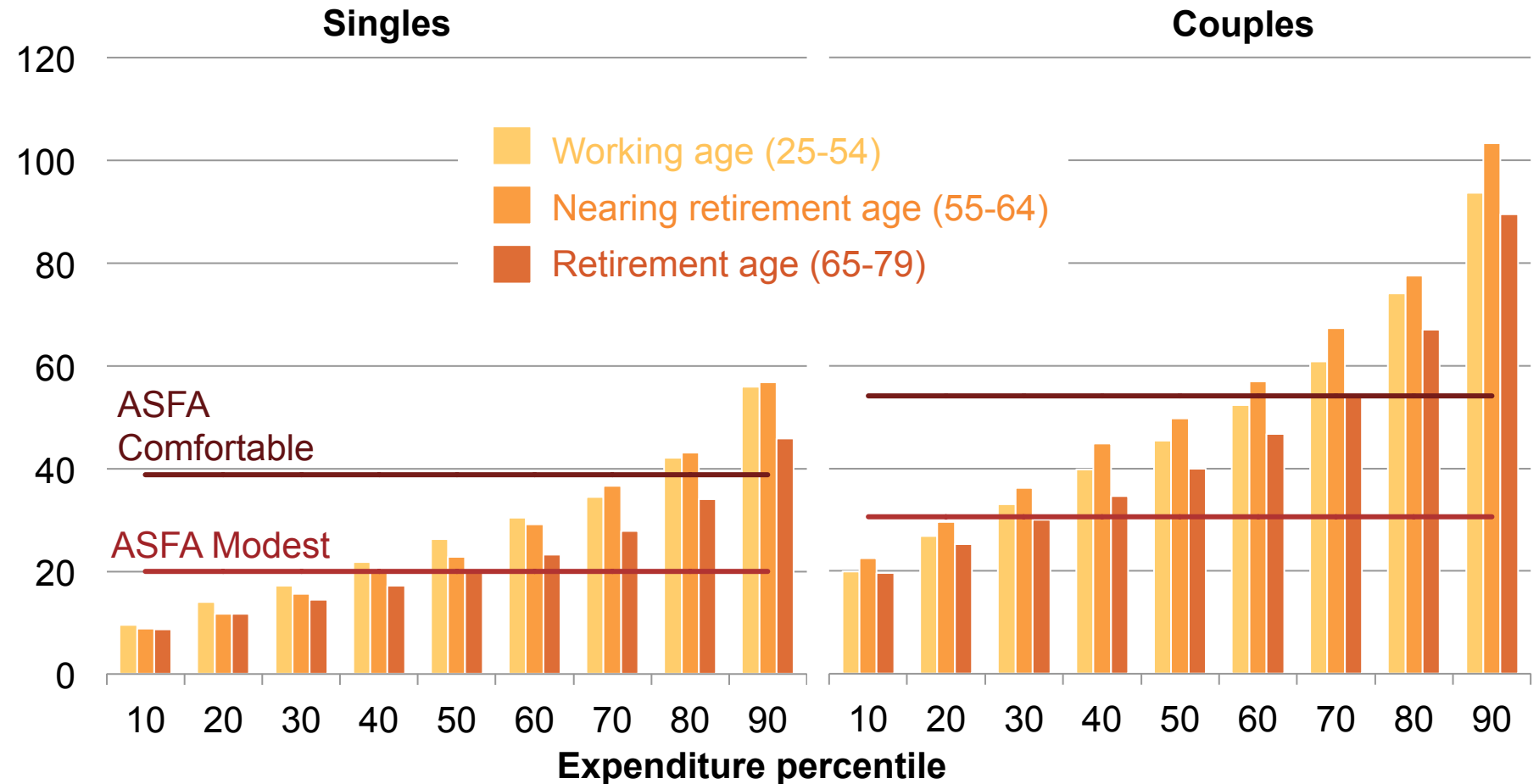
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# ASFA “comfortable” standard is more than most people spend – *before* retirement

Household expenditure (ex housing), \$2015



Notes: Equivalised expenditure of singles and couples, using the OECD standard that assumes that each adult increases the spending of a household by 50%, and each child increases the spending of a household by 30%; partners not equivalised as this spending is accounted for already in the ASFA couples standard. ASFA standard from September quarter of 2015. Household expenditure from 2015-16 Household Expenditure Survey.

Source: ABS Household Expenditure Survey (2015); Grattan analysis.

# Other studies tend to use different (and questionable) assumptions

Study	Metric	Assets included	Deflator in retirement	Do median income retirees meet their standard today?	Will younger median income earners meet the standard when they retire?
Rothman (2004)	Individual replacement rates, five years either side of age 65. No 'adequate' rate defined.	Super only.	CPI		
Rothman (2011); Rothman (2012)	As above	Super, non-super financial assets, and non-home property	CPI and wages		
Henry (2009)	Individual replacement rates for both working life and final working year	Compulsory and salary sacrifice super contributions.	CPI		
Rice Warner (2015)	62.5% of pre-retirement gross earnings	Super only, with small estimate for investment property for high-income earners.	Wage index	Not reported for median earner	No (median figures only given for population of all ages)
Committee for Sustainable Retirement Incomes (2016)	ASFA comfortable standard; lifetime replacement rates and other measures	Super only	Wage index	Most scenarios below ASFA comfortable standard	Single females, but not couples
Burnett <i>et al.</i> (2014)	ASFA comfortable standard	Super, non-super financial assets, and non-home property	Wage index	No	Couples aged 40-64 today meet standard, but not singles
Actuaries Institute (2015)	ASFA comfortable and modest standards	As above	Wage index	Couples – comfortable Singles – modest	Couples and men – comfortable Women - modest
Industry Super Australia (2015b)	ASFA comfortable standard	As above	Not stated (but wages elsewhere)	No	Couples and men but not women

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# What is the trade-off between wages and superannuation?

“The cost of superannuation was never borne by employers. It was absorbed into the overall wage cost .... In other words, had employers not paid nine percentage points of wages, as superannuation contributions, they would have paid it in cash as wages.”

Paul Keating, “The story of modern superannuation” 31/10/2007

“The increase in minimum wages we have determined in this Review is lower than it otherwise would have been in the absence of the superannuation guarantee increase.”

Fair Work Commission, *Annual Wage Review 2012-13*, 3/6/2013

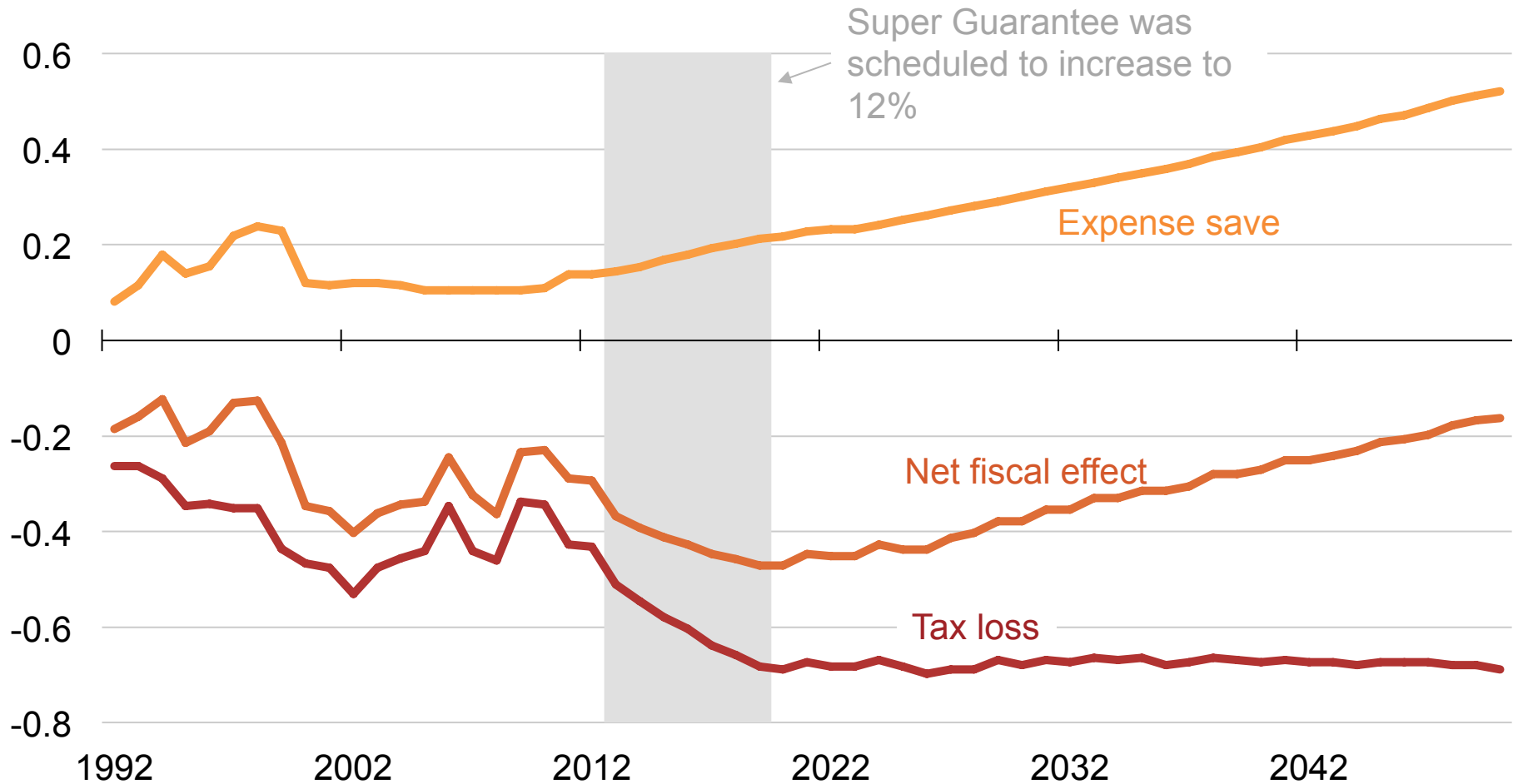
See also Freebairn, J. (2007), *Some Policy Issues in Providing Retirement Incomes*; Keegan, M. and Brown, L. (2012) (NATSEM) *Impact of the increase in the Superannuation Guarantee on wage costs in the health sector*; Rothman, G (2012) (Treasury) *Modelling the sustainability of Australia’s retirement income*

Daley says that if you get super you forgo a wage increase.... It’s an outrageous claim without any basis in fact. It’s basically a nasty polemic.”

Paul Keating, *730 Report*, 12/11/2018

# The Super Guarantee costs the Budget – in both short and long term

## Impact on budget balance, percentage of GDP

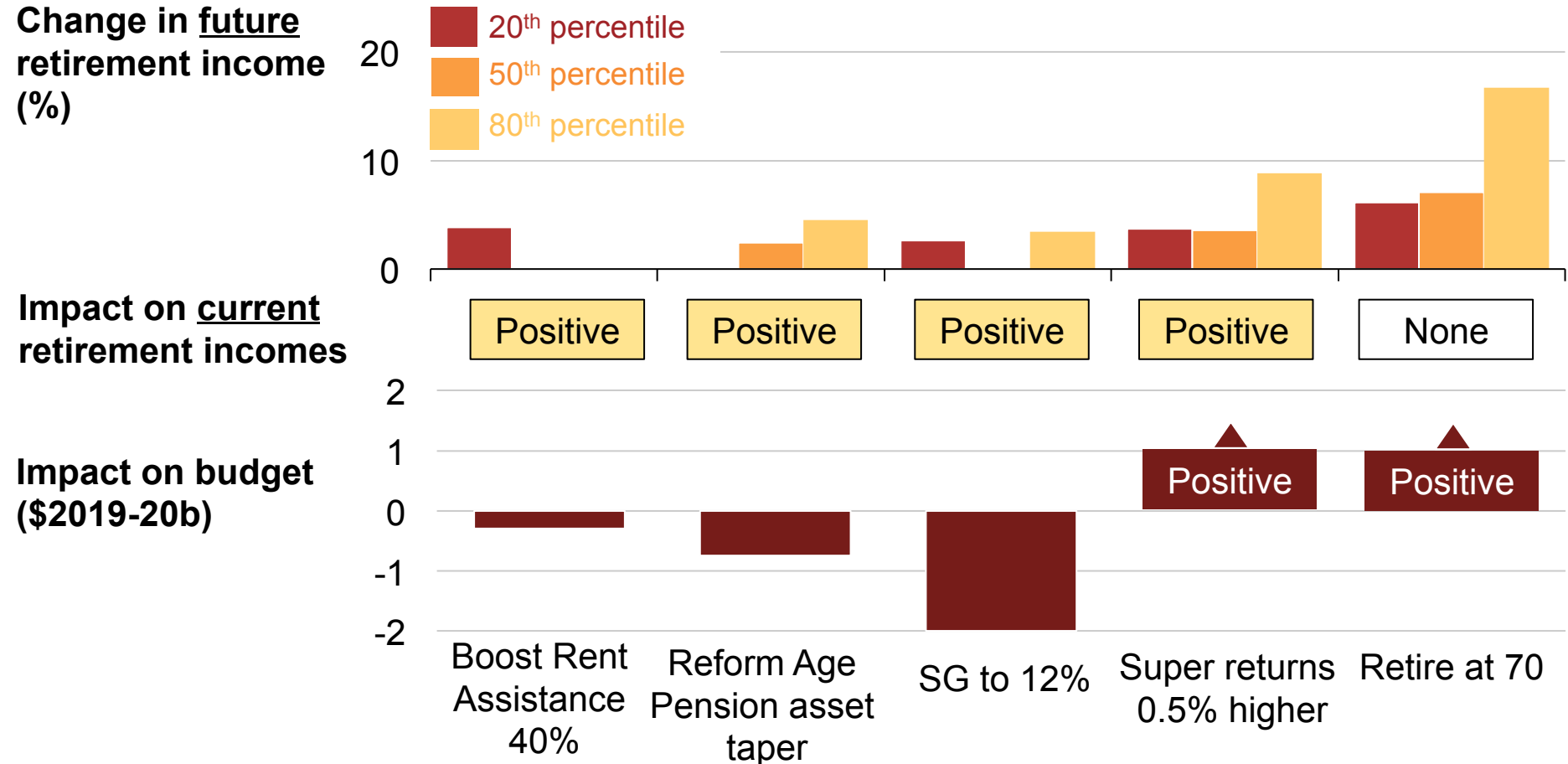


Notes: 2010-11 Budget predicted that increasing the Super Guarantee by 0.25ppt would cost the Budget \$240m in 2013-14. 2014-15 Budget predicted that not increasing the Super Guarantee by the previous Government's policy of 0.5ppt would save \$440m in 2017-18. These cost estimates predated policy changes to increase Age Pension assets test taper rate and tighten of super tax breaks, which would increase fiscal savings by ~0.1% of GDP in 2018-19 (higher taper rate ~\$1b, super tax changes ~\$0.7b). Shaded area indicates 2010-11 Budget policy.

Sources: The Treasury Charter Group 2013; Budget papers; Grattan analysis

# Boosting Super Guarantee helps less, and costs more than all other reforms

Future retirees by position in income distribution:



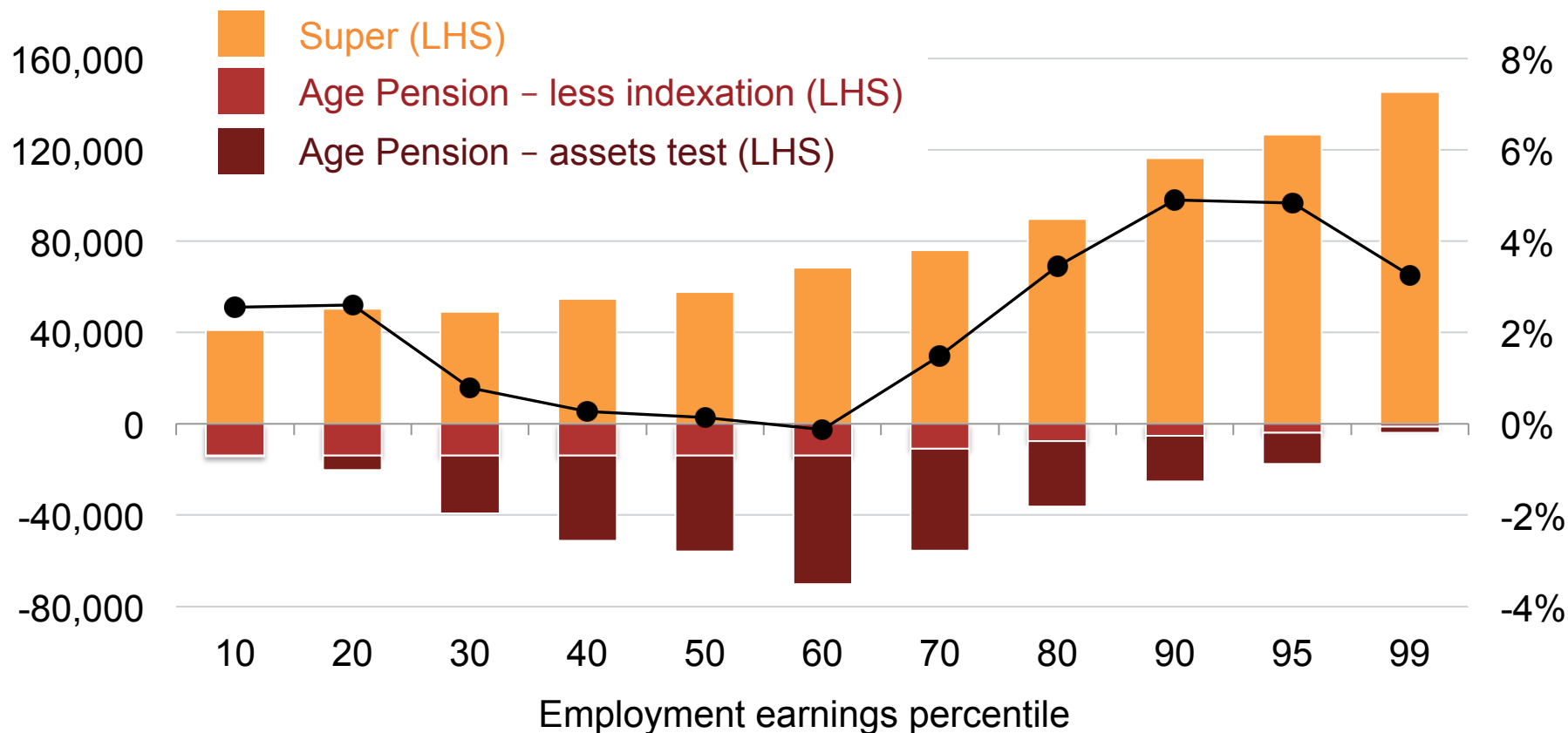
Notes: Budgetary impacts assume policy implemented in full in 2019-20. Long-term budgetary costs will differ significantly: Super Guarantee will cost less, cost of reforms to the Age Pension assets test and Rent Assistance will grow with an ageing population; cost of Rent Assistance will also rise as rates of home ownership decline. Rent Assistance scenario assumes a retiree at the 20th percentile of the income distribution is a renter and eligible for the maximum rate of Commonwealth Rent Assistance for a single, whereas 50th and 80th percentile retirees are home-owners. All other scenarios assume all retirees own their own homes for the purposes of determining Age Pension entitlements. All retirement income scenarios are for a person born in 1985, who works uninterrupted to age 67 (or age 70 in the “retire at 70” scenario) and dies at age 92 (except the “live extra five years” scenario)38  
Source: Grattan Retirement Income Model.

# Increasing the Super Guarantee lifts incomes at the top and the very bottom but not the middle

if Super Guarantee increases to 12% compared to remaining at 9.5%

LHS Change in income over 26 years of retirement (\$2015-16, CPI deflated)

RHS Change in retirement income (%)



Notes: Models retirement income of a person born in 1985, who works uninterrupted from 30 to 67, and dies at age 92. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Assumes voluntary super contributions partially offset lower compulsory contributions if Guarantee remains at 9.5%.

Source: Grattan Retirement Income Projector

# Increasing the Super Guarantee doesn't increase replacement rates much

Replacement rates, by employment earnings percentile, CPI deflated, per cent



Notes: Models retirement income of a person born in 1985, who works uninterrupted from 30 to 67, and dies at age 92. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Assumes voluntary super contributions partially offset lower compulsory contributions if Guarantee remains at 9.5%.

Source: Grattan Retirement Income Projector



# Reducing Age Pension taper helps bottom 80% more than increasing the Super Guarantee

Average annual retirement income, \$2015-16, CPI deflated



Notes: Models retirement income of a person born in 1985, who works uninterrupted from 30 to 67, and dies at age 92. Assumes wages growth falls by the amount of any Super Guarantee increase. Includes savings outside super. Employment earnings adjusted to account for movements up and down the earnings distribution. Retirement savings drawn down over 26 years to leave a small bequest in addition to the home. Assumes voluntary super contributions partially offset lower compulsory contributions if Guarantee remains at 9.5%.

Source: Grattan Retirement Income Projector