

**APPENDIX A - PHIL GALLAGHER THE DISTRIBUTION OF GOVERNMENT  
SUPPORT FOR RETIREMENT INCOME-POINT-IN-TIME AND LIFECYCLE  
ESTIMATES RIM TREASURY**

(Refer following pages)



Australian Government  
The Treasury

# The Distribution of Government Support for Retirement Income – Point-in-Time and Lifecycle Estimates

Presentation to Colloquium of Superannuation  
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**Phil Gallagher PSM, Manager,**

**Retirement and InterGenerational Modelling UNIT**

**Tax Analysis Division, The TREASURY**

**Phone: 02 6263 3945**

**email: [phil.gallagher@treasury.gov.au](mailto:phil.gallagher@treasury.gov.au)**

**websites: <http://rim.treasury.gov.au>**

*Views expressed in this presentation are those of the author and are not necessarily those of any  
Commonwealth Agency or of the Government*

# Acknowledgements

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- Bruce Bastian
- Michelle Dixon
- Mandy Brown
- Will Wang
- Will Young

Of course they are not responsible for any errors, omissions or inadequacies



# AIM

## Point in time distributions

- **Examine distribution of contributions and earnings tax concessions - 2009-10 ,  
Change in distribution of concessions on contributions 2007-08 to 2012-13**

## Cameo lifecycles

- **Review Rothman and Mercer Studies on Government support for Retirement Incomes Across the Lifecycle**
- **Improve on Mercer study using actual data for incomes, contributions and non-super assets at selected quantiles**

# What is the tax concession on superannuation?

## Using a comprehensive Income Benchmark

- Benchmark is TTE, so the tax expenditure is:
  - Difference between personal marginal tax rate and 15% super fund tax rate on contributions +
  - Difference between personal marginal tax rate and 15% super fund tax rate on earnings –
  - Taxes paid on payouts

## Using Expenditure Tax Benchmark

- Benchmark is EET or TEE

Income Benchmark is most common in Australia

# Data and methodology

**DATA** – Totally confidentialised sample of personal tax and aggregated member contribution statements for 2009-10 and 2007-08.

**TE Methodology** – add contributions and/or earnings to taxable income to estimate counterfactual tax rate

**2012-13 Projection** – RIM's superannuation microsimulation model based on ATO sample data.

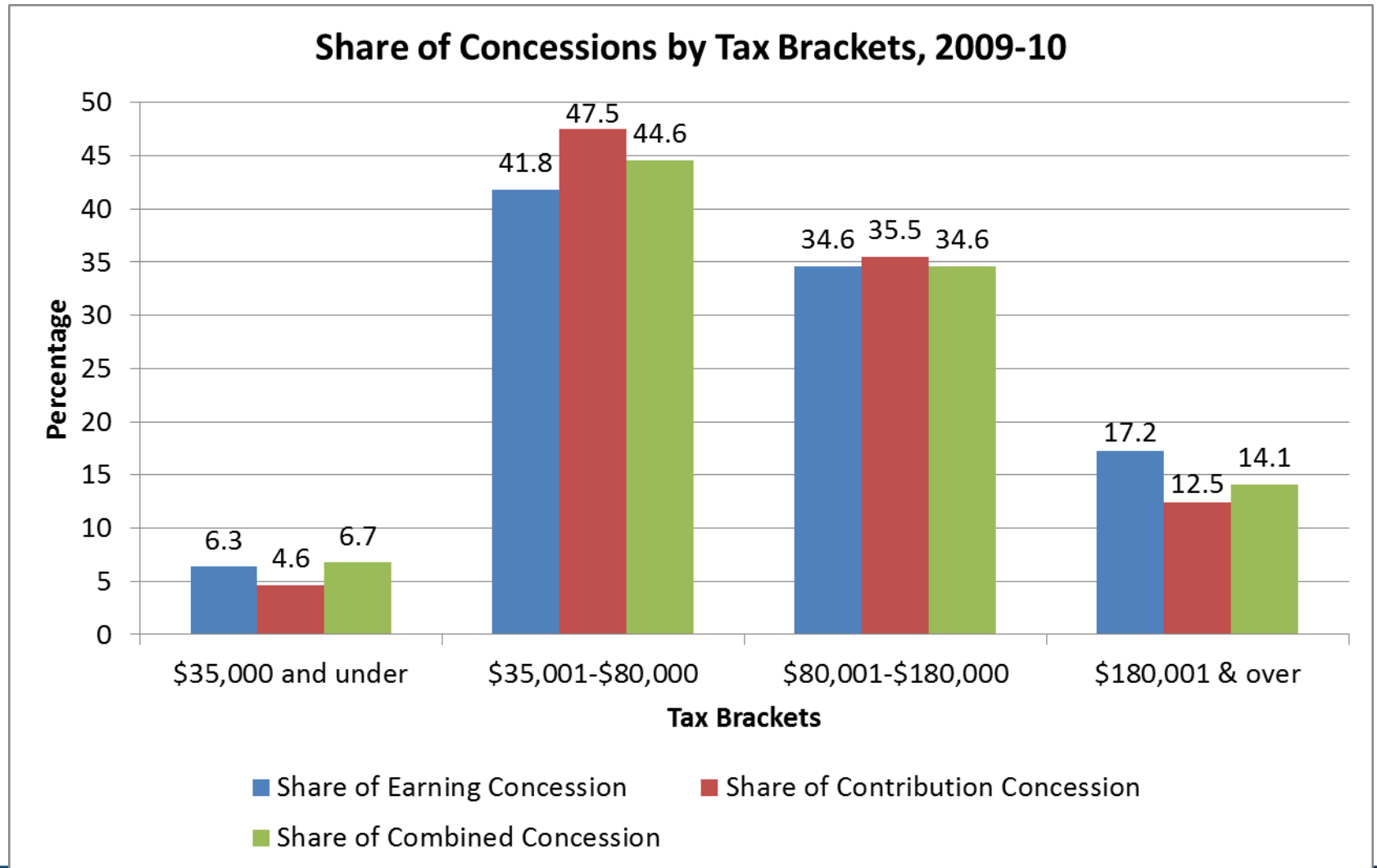
# Tax scales used in this analysis – Medicare levy and LITO are added

	2007-08	2009-10	2012-13
Effective tax free threshold	\$11,000	\$15,000	\$20,542

	2007-08			2009-10			2012-13		
Tax Brackets and Rates	Tax range (low)	Tax range (high)	Rate	Tax range (low)	Tax range (high)	Rate	Tax range (low)	Tax range (high)	Rate
Bottom tax bracket	low	\$ 6,000	0%	low	\$ 6,000	0%	low	\$ 18,200	0%
2nd tax bracket	\$ 6,001	\$ 30,000	15%	\$ 6,001	\$ 35,000	15%	\$ 18,201	\$ 37,000	19%
3rd tax bracket	\$ 30,001	\$ 75,000	30%	\$ 35,001	\$ 80,000	30%	\$ 37,001	\$ 80,000	32.5%
4th tax bracket	\$ 75,001	\$ 150,000	40%	\$ 80,001	\$ 180,000	38%	\$ 80,001	\$ 180,000	37%
Top tax bracket	\$ 150,001	high	45%	\$ 180,001	high	45%	\$ 180,001	high	45%

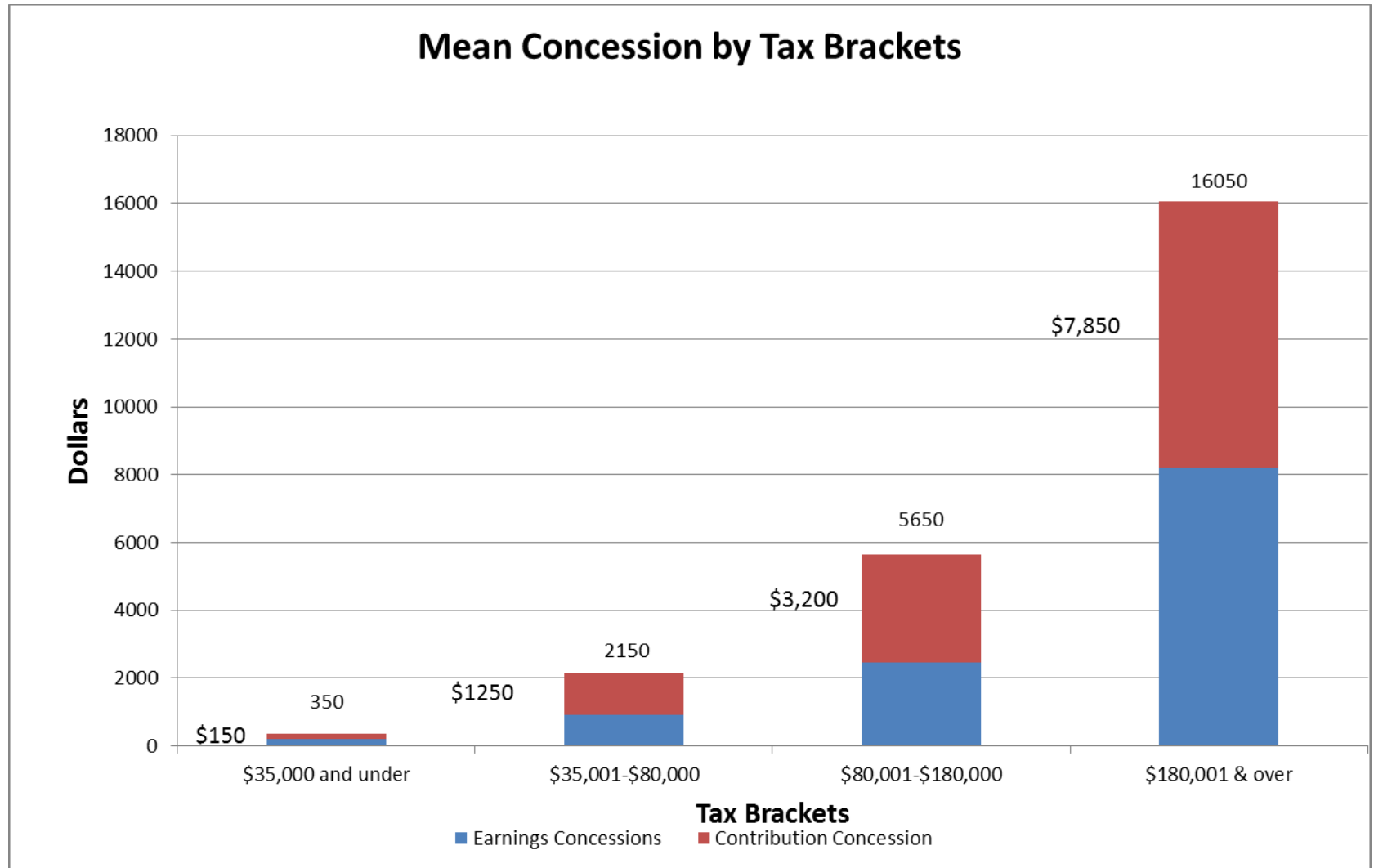
Changes in tax brackets or rates from the previous year have been highlighted in grey

# Shares of Contributions & Earnings Concessions 2009-10, by tax bracket

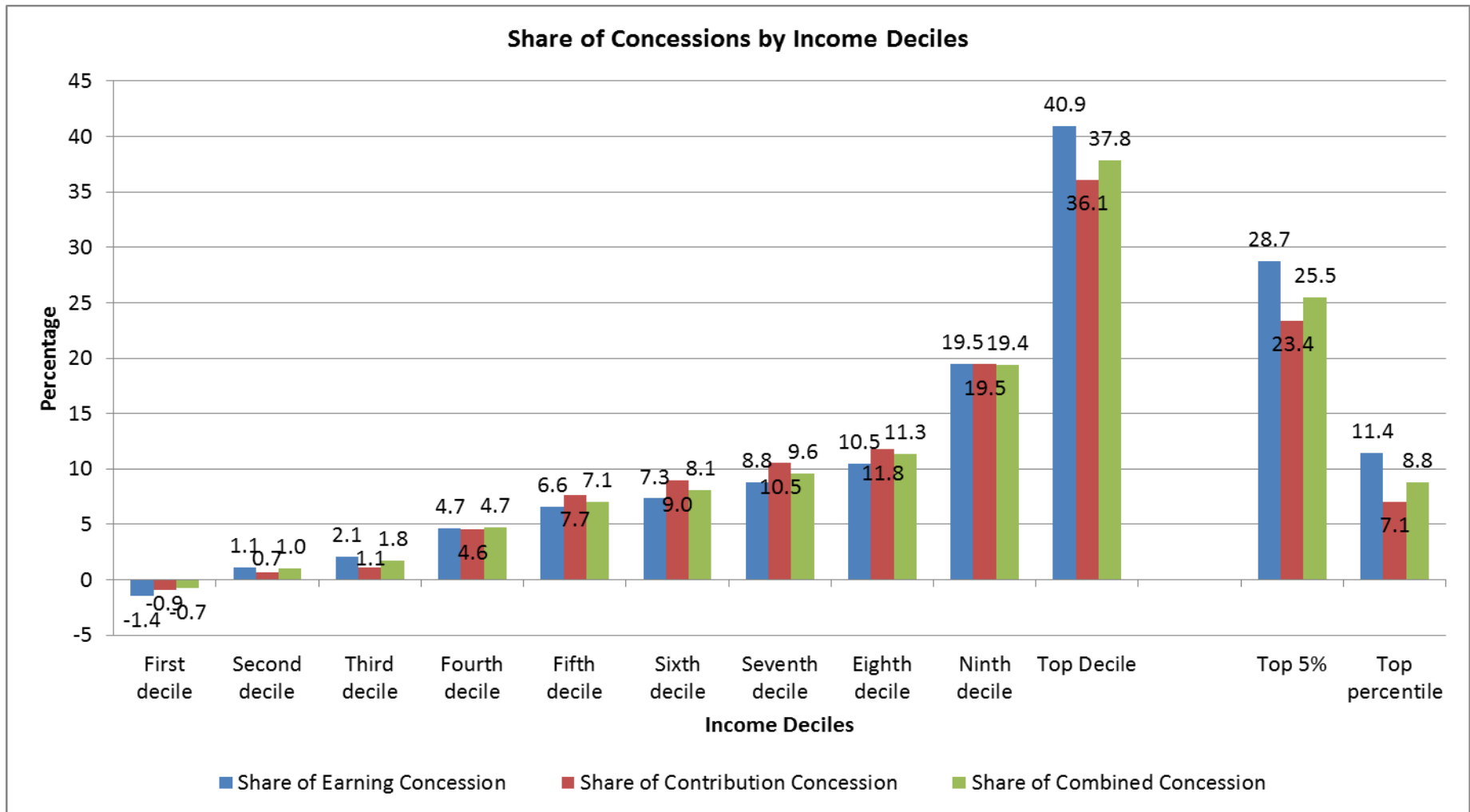




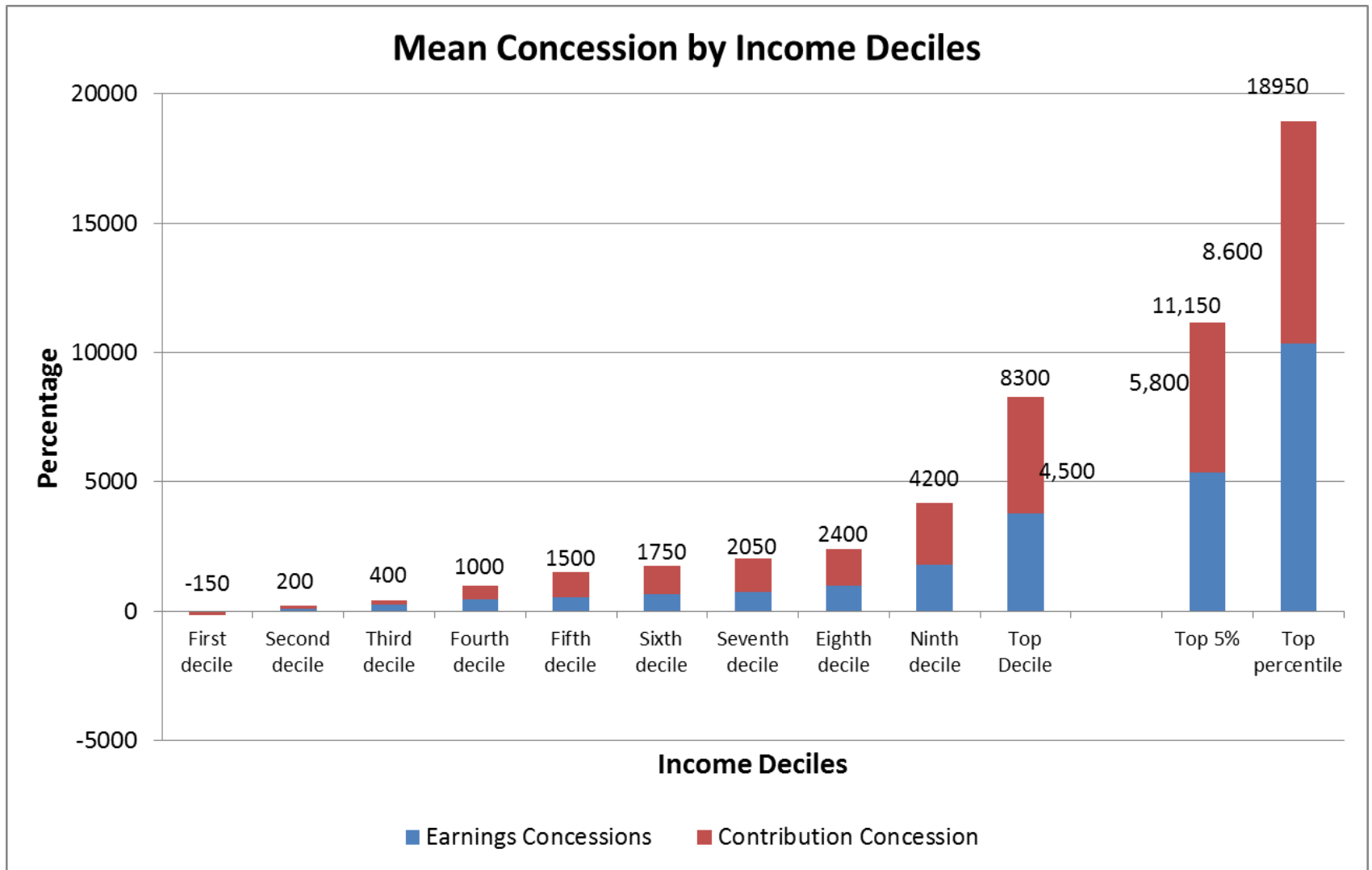
# Mean concession by tax bracket, 2009-10



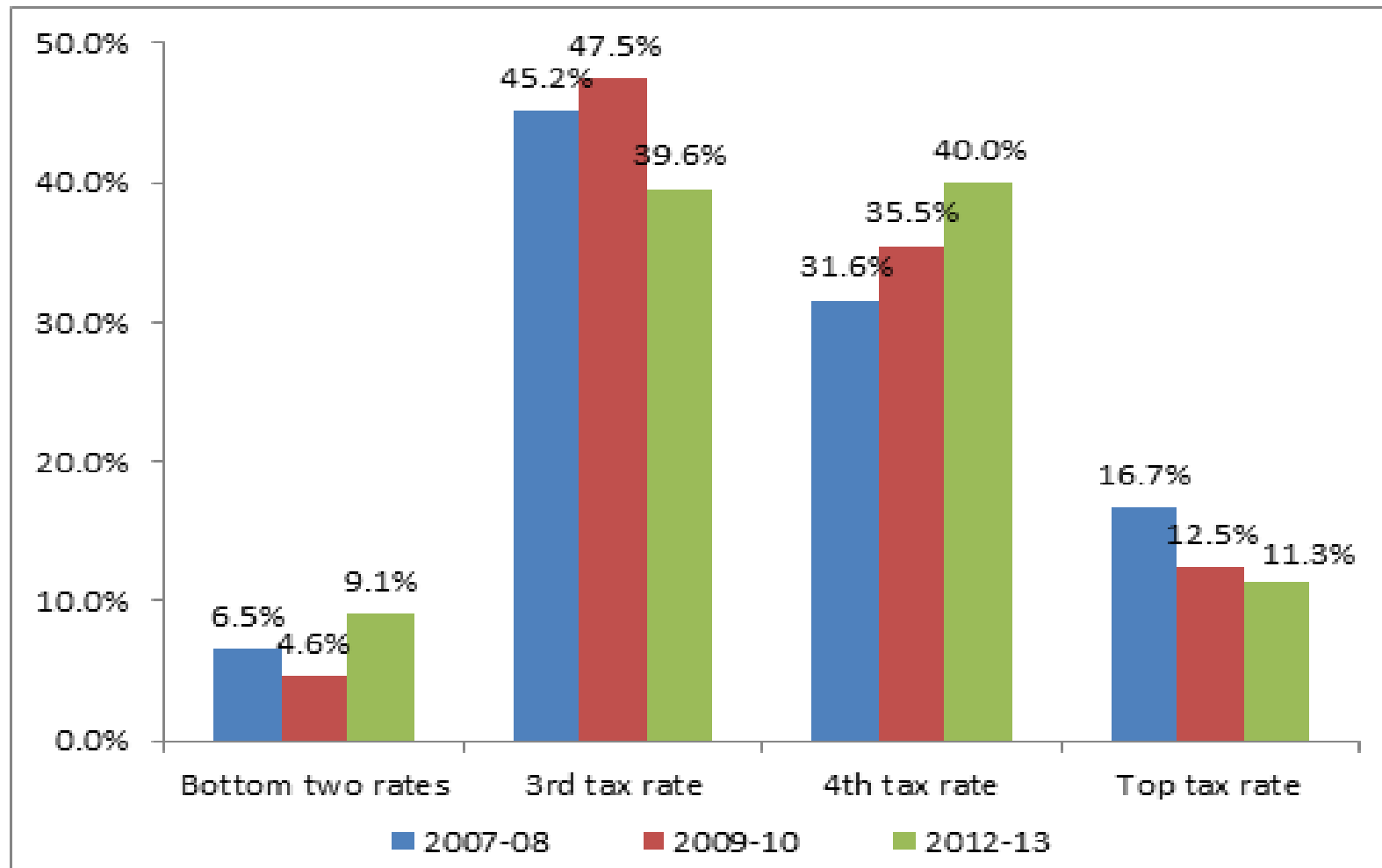
# Share of Contribution & Earnings Concessions 2009-10 by Decile of Taxable Income



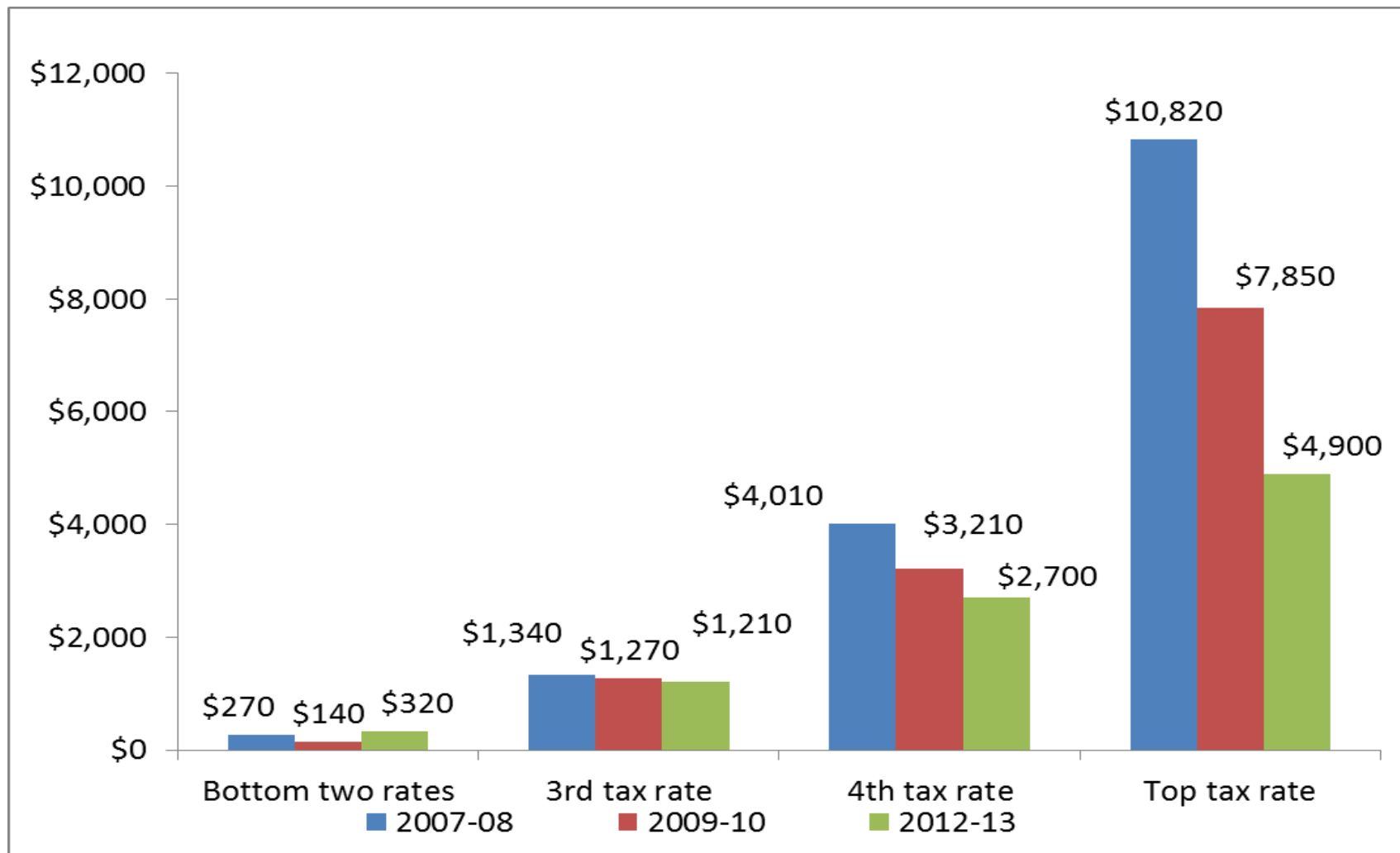
# Mean Concessions by Income Decile, 2009-10



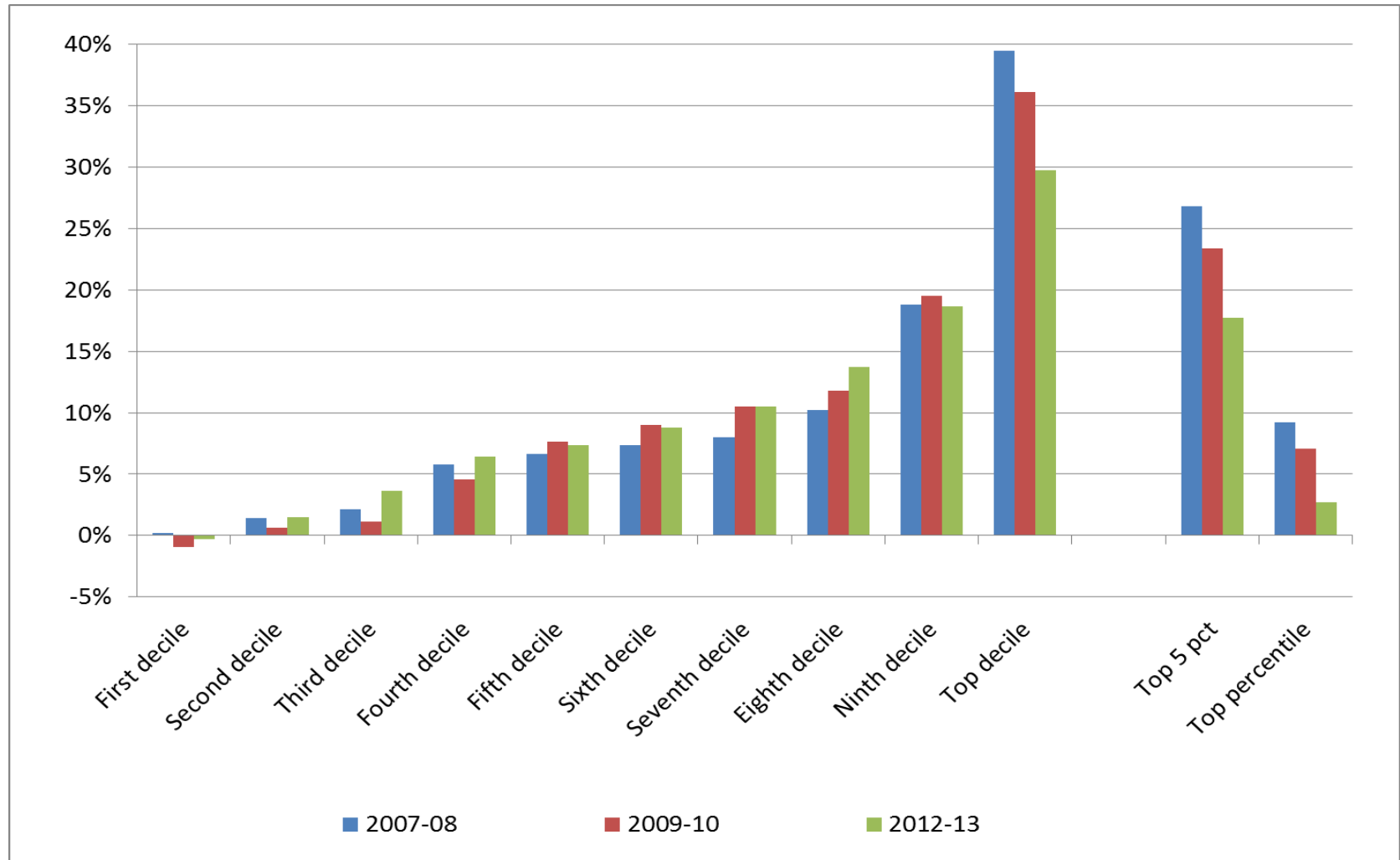
## Contribution Concession Shares by Tax Bracket, 2007-08, 2009-10, 2012-13



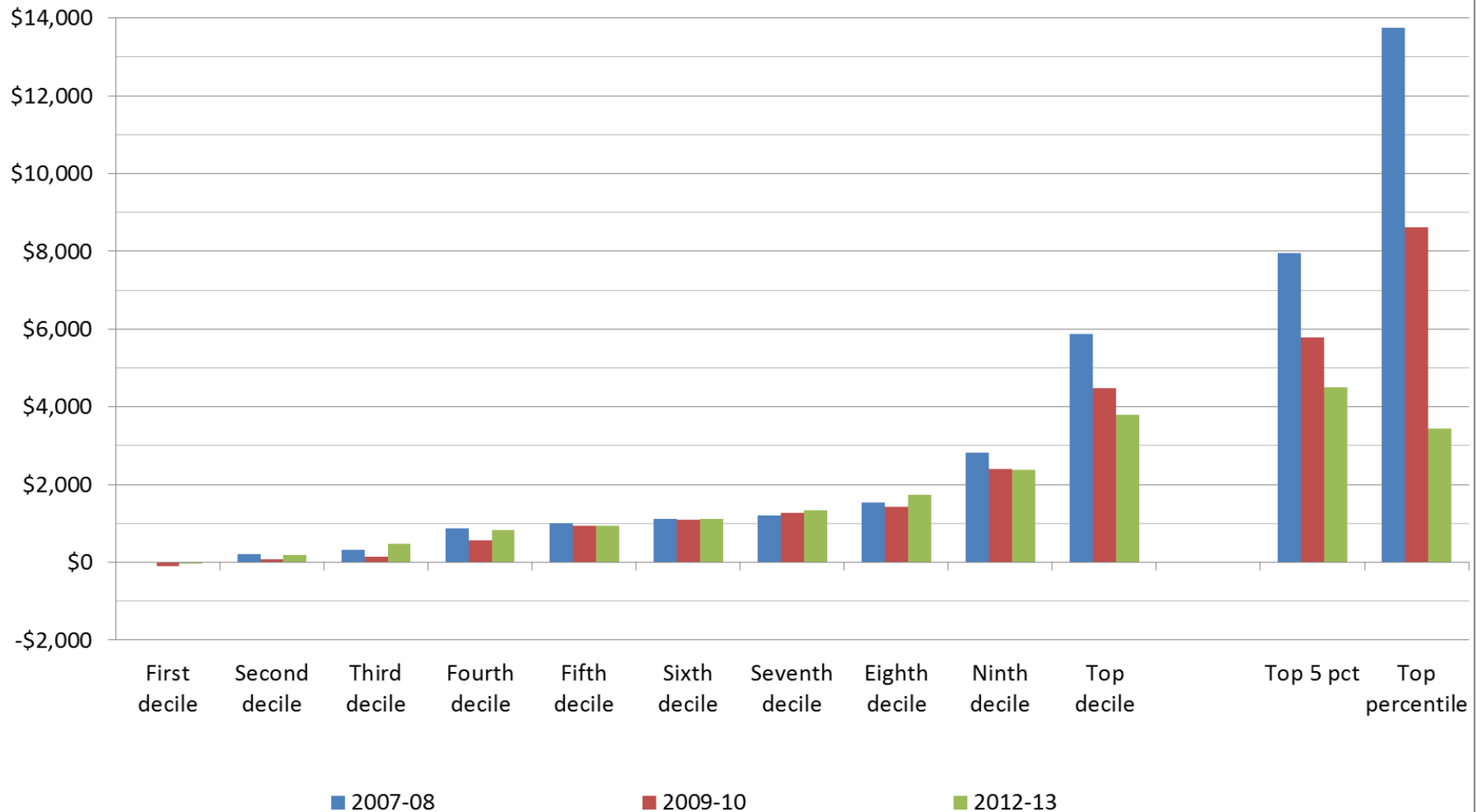
# MEAN Contribution Concession by Tax Bracket, 2007-08, 2009-10, 2012-13



## Changes in SHARES of Contribution Concessions by Decile of Taxable Income – 2007-08, 2009-10, & 2012-13 from Changes of tax scales, income, LISC, SG caps, and 'VHISCRM'



# Changes in MEANS of Contribution Concessions by Decile of Taxable Income – 2007-08, 2009-10, & 2012-13 from Changes of tax scales, income, LISC, SG caps, and 'VHISCRM'



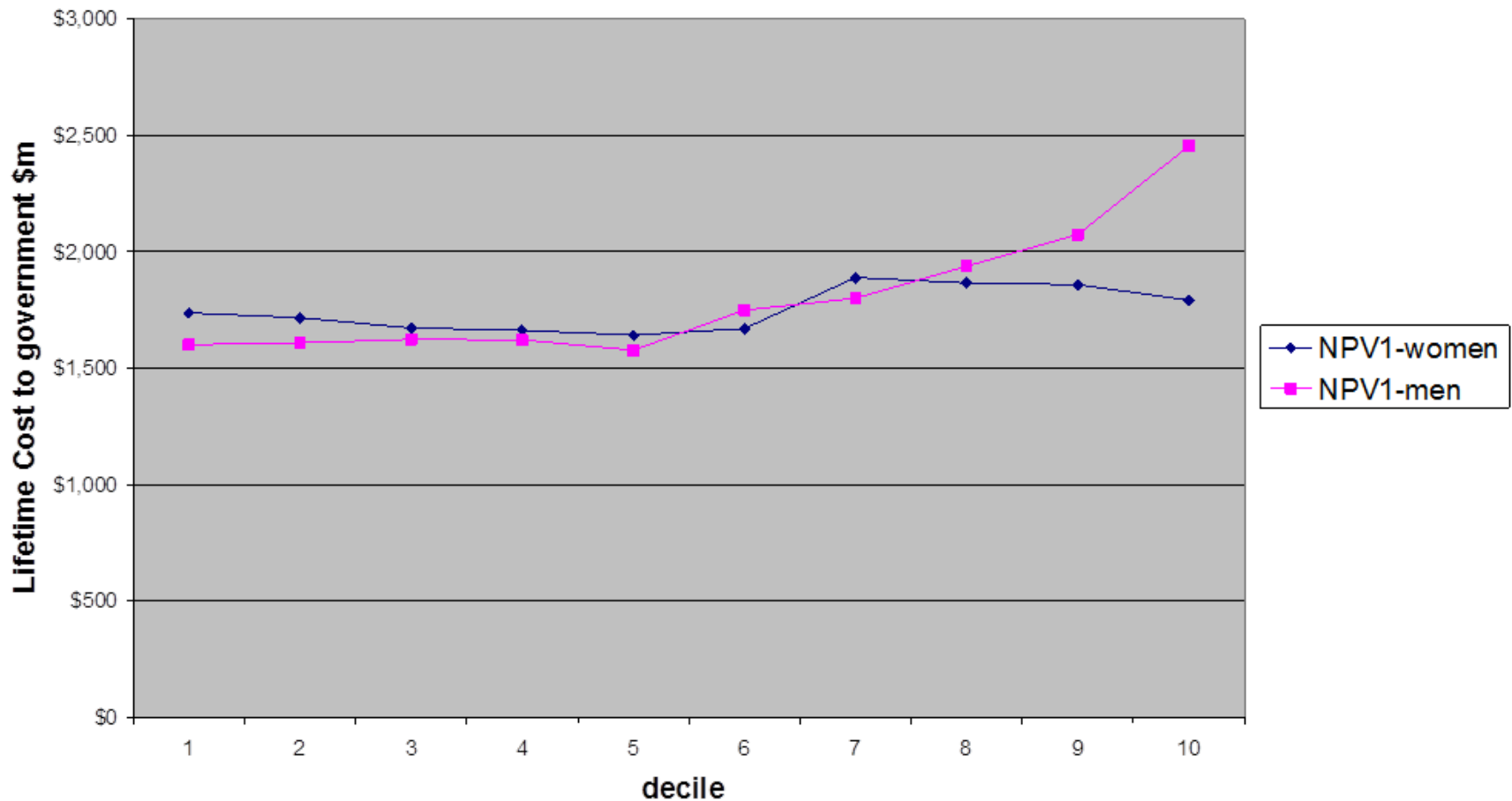
# Government Support over the Lifecycle

**Net present value of superannuation tax concessions and age pension paid for people in a cohort at different income levels**



# Rothman 2009, RIMGROUP all people born in 1960

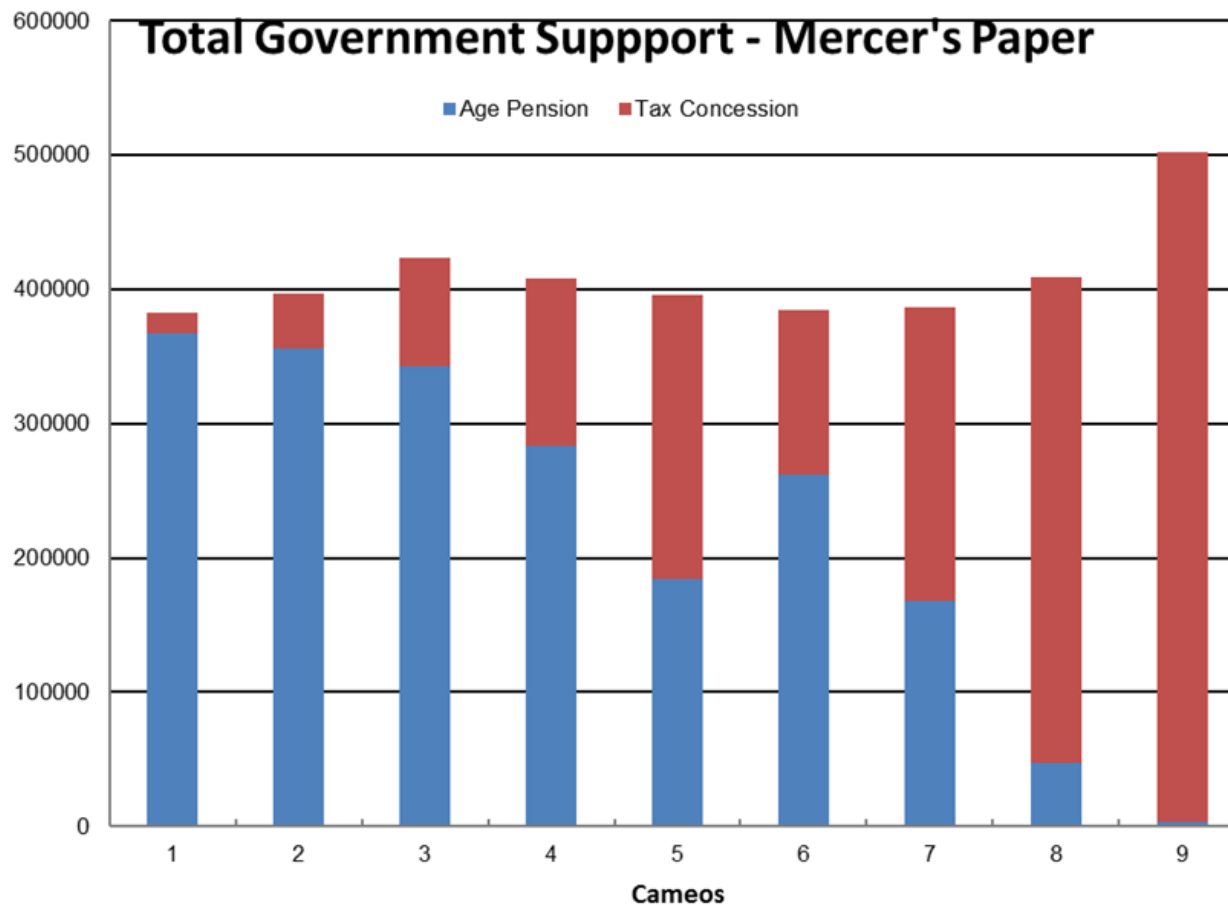
Base Case - Cost to Government of 1960 birth cohort:  
Women relative to men



# Rothman 2009 – Method & Issues

- Uses RIMGROUP, increment & decrement model for career earning deciles, gender and birthyear cohorts
- Uses ABS income and housing survey for career income deciles rather than tax data
- Averaging within the top decile hides significant differences for the top 5% and 1%
- Has married couples and their age pension – unlike cameos of individuals

# Mercer, 2012



Knox Cameos	1	2	3	4	5	6	7	8	9
Initial Salary	34000	34000	45000	45000	45000	68000	68000	68000	68000
Final Salary wage deflated	34000	34000	45000	94589	196082	68000	142935	296302	277983

# Mercer 2012 – Method & Issues

- Cameos with made up career progressions

Lowers values of tax concessions by:

- Using flat 12% contributions, not salary sacrifice for high income earners
- Calculating earnings tax concession as HALF the difference between the MTR and effective fund taxation rate
- No tax concessions in earnings phase of allocated pension
- Uses the low contribution cap of \$25,000 indexed for all cases

Raises value of age pension by:

- No non-superannuation assets in retirement
- Indexing age pension means test thresholds by wages (4%) not CPI (2.5%)
- Taking a minimum drawdown from the allocated pension
- Discounting FV by 4% rather than a more typical government bond rate of say 5%

# Treasury 2012 Cameo Projections of Concessions

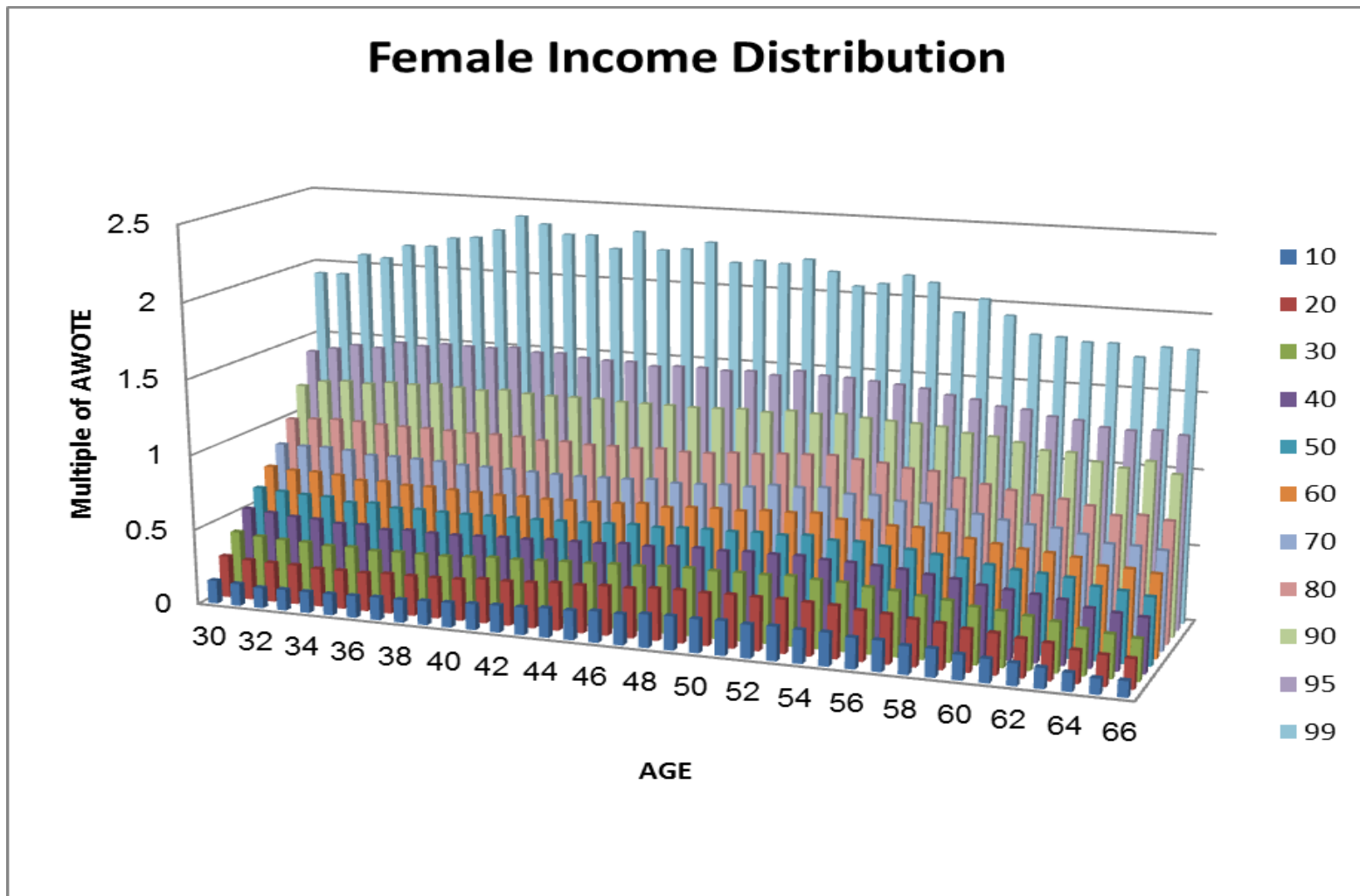
- Based on personal tax and member contribution statement data from the 2009-10 ATO sample tax files and the ABS Survey of Income and Housing 2009-10.
- To get representative cameos (including extra coverage of higher income earners), salary and concessional superannuation contribution data are extracted from the 2009-10 ATO sample tax file at the 10<sup>th</sup>, 20<sup>th</sup>, 30<sup>th</sup>, ... , 90<sup>th</sup>, 95<sup>th</sup> and 99<sup>th</sup> percentile of the salary and wage income distribution at ages between 30 and 66, separately for males and females.
- Superannuation contributions are capped at the concessional contributions cap applying from 2014-15. Non-concessional contributions are not included and this omission may lower earnings concessions and it could increase age pensions.
- Includes SG rise to 12% and LISC and contribution caps, and also includes:
- Voluntary concessional contributions varying by age gender and income; and
- Allowance for savings for retirement outside superannuation

# Salary Income in 2012-13

Percentile	10	20	30	40	50	
Female	9,068	17,216	25,410	33,746	41,776	
Male	22,592	37,828	47,562	55,942	64,273	
Percentile	60	70	80	90	95	99
Female	50,086	59,750	71,537	89,228	106,345	151,861
Male	73,122	83,585	97,220	121,551	145,130	199,836

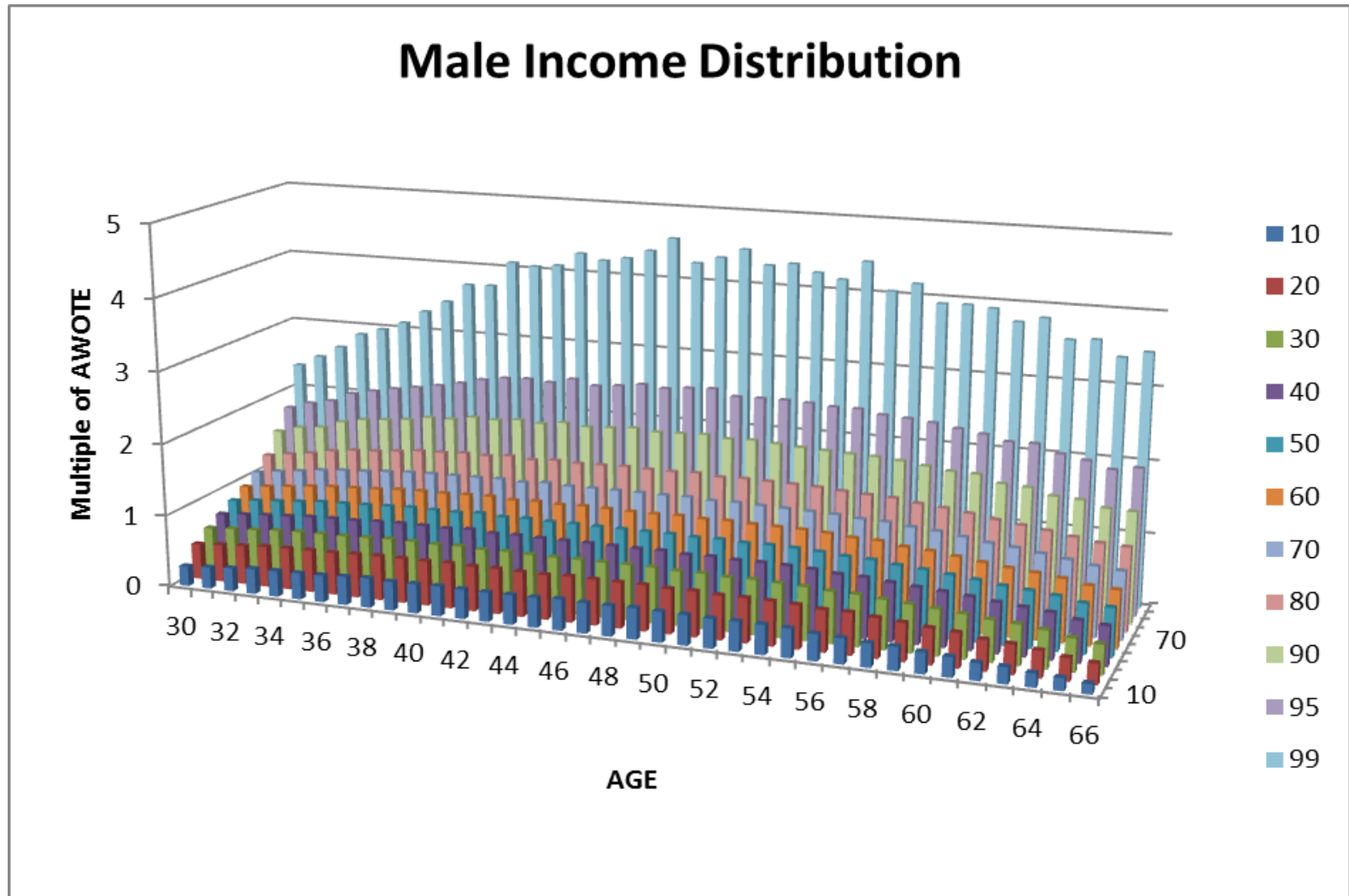
# Female percentile income distribution by age, 2009-10

[Longitudinal variation would improve]



# Male percentile income distribution by age, 2009-10

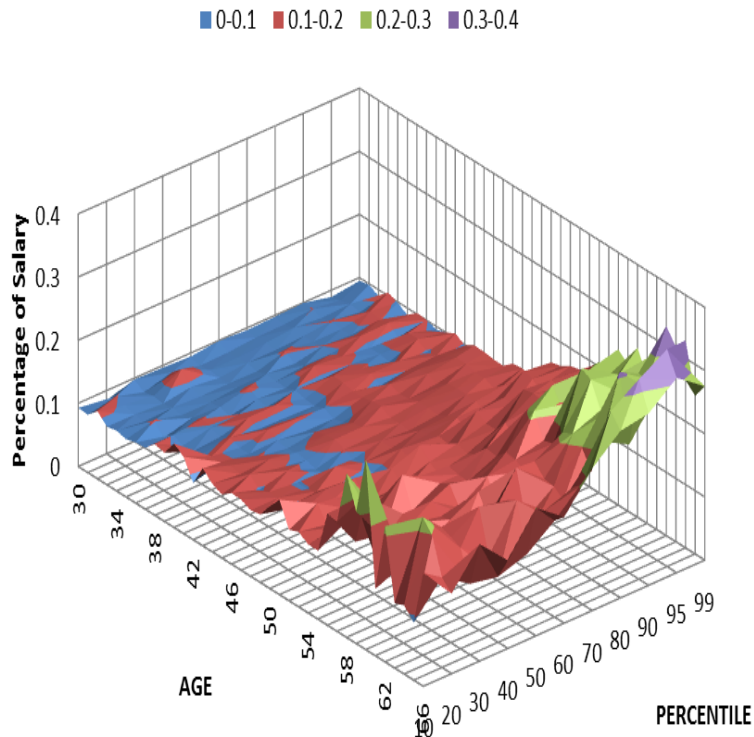
[Longitudinal variation would improve]



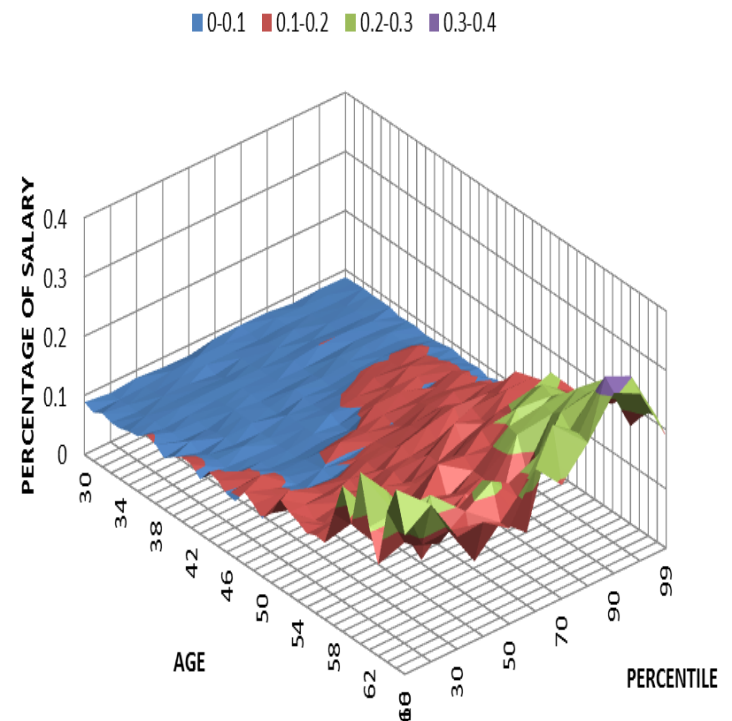


# Average top decile deductible contributions can exceed 30% of remuneration in 2009-10

## Female Contribution Rates



## Male Contribution Rates



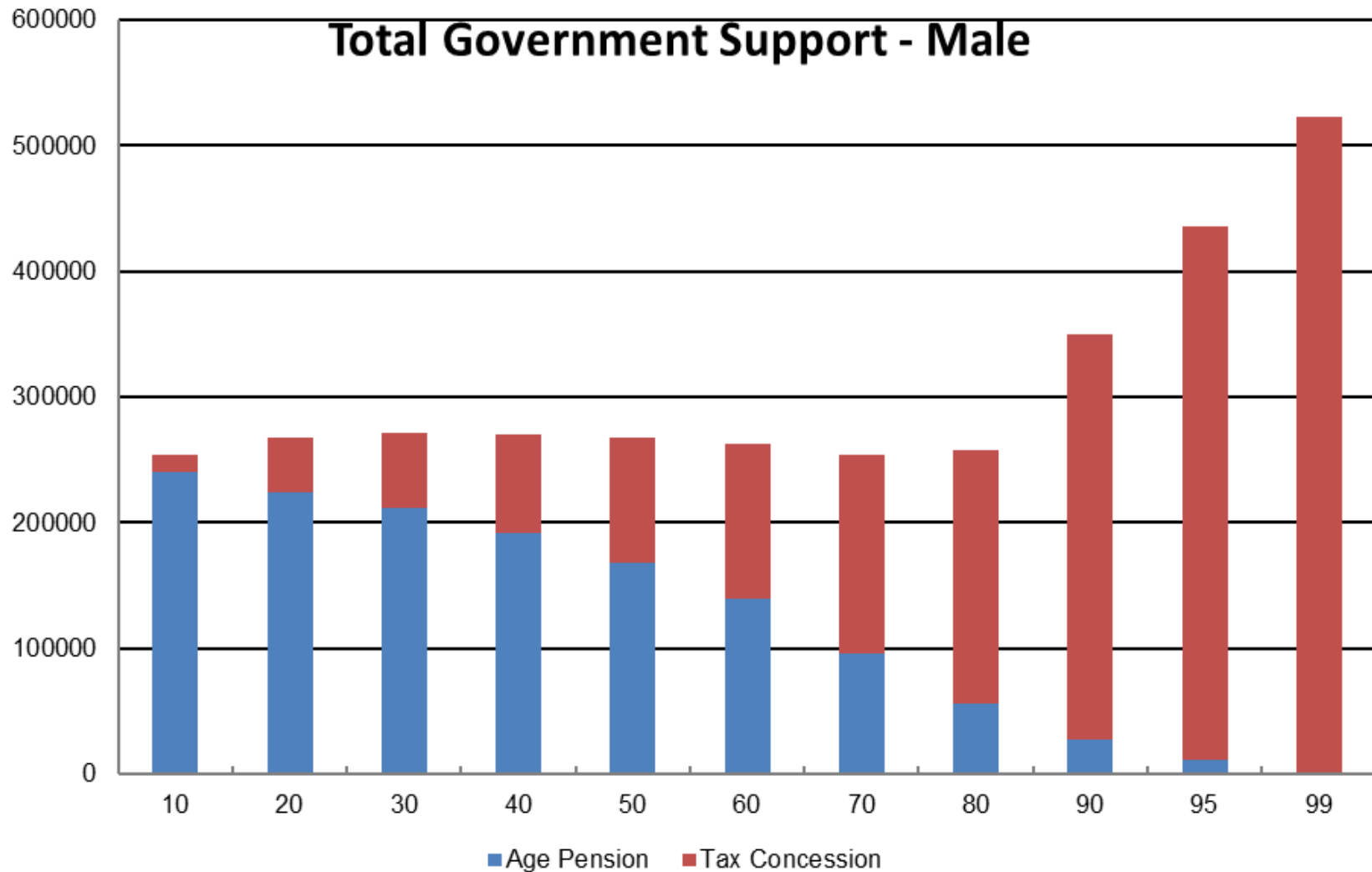
## Non-Super Assets as Proportions of Total Financial Assets, 55-60 year olds, ABS SIHC 2009-10

Percentile	Total to Super Ratio	Non-super assets as % of total
10	1.1664	14.26%
20	1.2182	17.91%
30	1.2700	21.26%
40	1.3219	24.35%
50	1.3737	27.20%
60	1.4255	29.85%
70	1.4787	32.37%
80	1.6857	40.68%
90	2.1532	53.56%
95	2.8827	65.31%
99	4.6506	78.50%

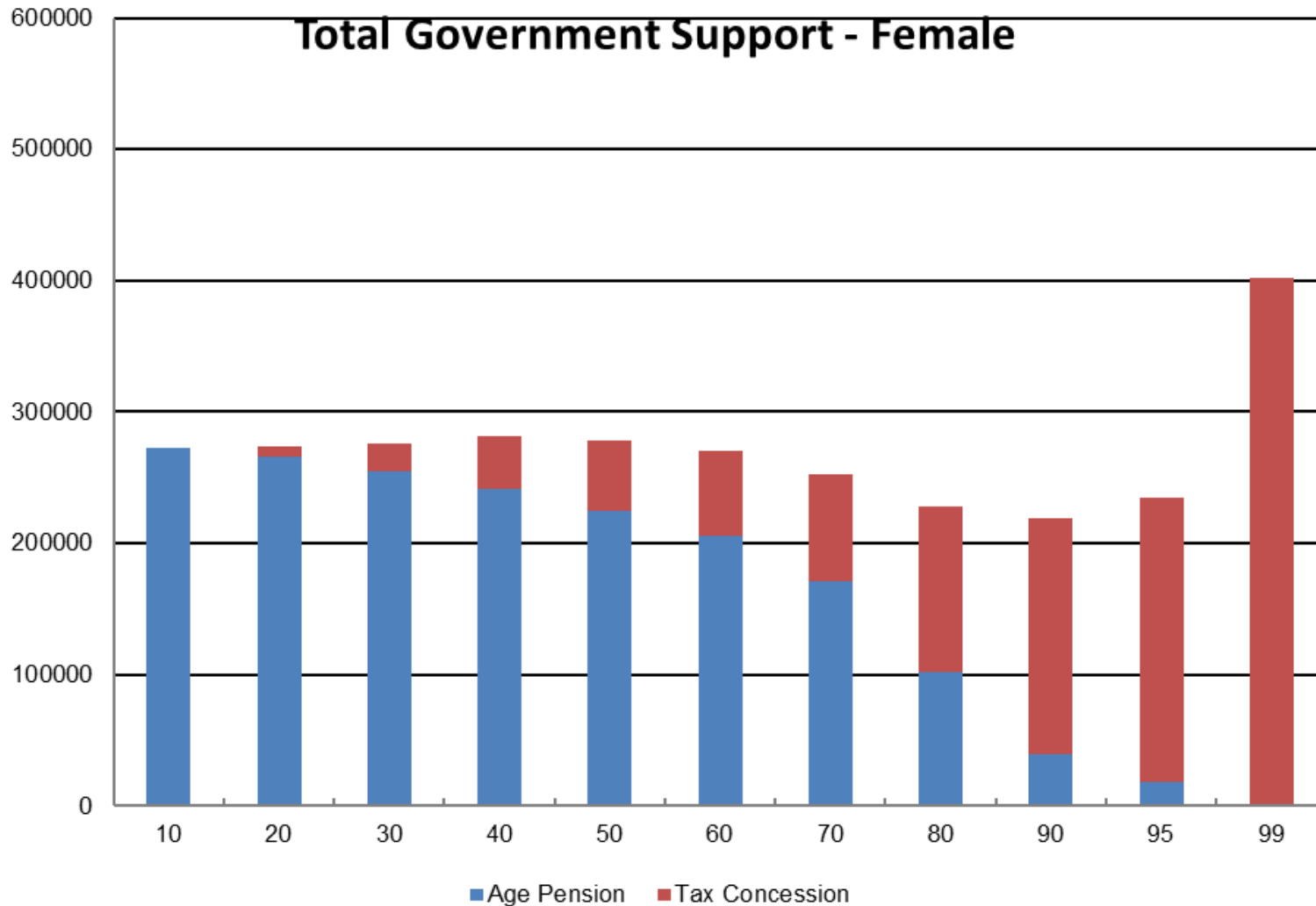
# Projection Assumptions

- Starting year: 2010
- Age at commencement: 30
- Retirement age: 67
- Male life expectancy: 88 years
- Female life expectancy: 90 years
- Investment Return (after fees but before tax) : 6.5% p.a.
- Inflation: 2.5% p.a.
- AWE inflation: 4.14% p.a.
- Long term bond rate (used in discounting): 5% p.a.
- Wage growth is adjusted through the period in which the SG rate increases.
- The top income group, i.e. the 99<sup>th</sup> percentile, is assumed to withdraw only the interest earnings from fixed income investment, whereas the other income groups withdraw at a rate that reduces the balance to 0 in the year they die.
- For all income groups all accumulated superannuation is invested in allocated pensions with withdrawals slightly above the legislated minimum rates.
- Concessions on fund earnings tax in retirement phase are not included in the model.

# RIMHYPO projection, cohorts 30 in 2010



# RIMHYPO projection, cohorts 30 in 2010



# QUESTIONS

