Retirement Adequacy Goals Revisited

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Agenda

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1. Recap
    - What is a Retirement Adequacy Goal (RAG)?
    - What did we learn from the first wave?
2. The second wave study
    - Why?
    - What were the results (consumption? goals? influencers?)
    - The shift from the first to the second wave
3. Moving forward

Recap

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What is a Retirement Adequacy Goal?

- Indication of how much is needed to retire comfortably
- Used in
  - Retirement fund benefit design
  - Investment strategies for DC funds
  - Personal financial planning
- Often expressed as RRs which may be net or gross of tax
- SA practice: 75% ("net" but in fact gross)

South African estimates: framework

- Calculate targets for one- and two-adult working households
- Adequate means maximum of income required to:
  - smooth consumption at retirement
  - secure a minimally socially acceptable standard of living
- Goals expressed as:
  - Wealth-earnings ratios
  - Gross of tax replacement ratios
- First wave: IES 2005/2006

Consumption change

- Need to compare like households
- Use tree techniques to group "otherwise equivalent" working and retired households and control for complex interactions.
- First wave: used CHAID

Category	Change at and in retirement
Non-health consumption	No change
Health consumption	Increase at retirement for some households
Non-retirement savings	No change

First wave conclusions

- One-size-fits-all inappropriate
  - Complex function of:
    - Retirement age (↓)
    - Household composition
    - Income (↓)
    - Home ownership (↑)
    - Age
    - Sex of household head
    - Rural/urban
- 100% NRR much more realistic than 75%

The second wave

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Why a second wave was necessary

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- Economic assumptions
  - Interest rates
  - Inflation (HC vs non-HC)
- Older Person's Grant
- Tax rules
  - MS
  - Tertiary rebate
  - Retirement fund contributions
- Updated household data set (IES 2010/2011)

Consumption change revisited

- Considered 2 313 working households and 125 retired and semi-retired households
- Pensioners wealthier than working households
- XAID used

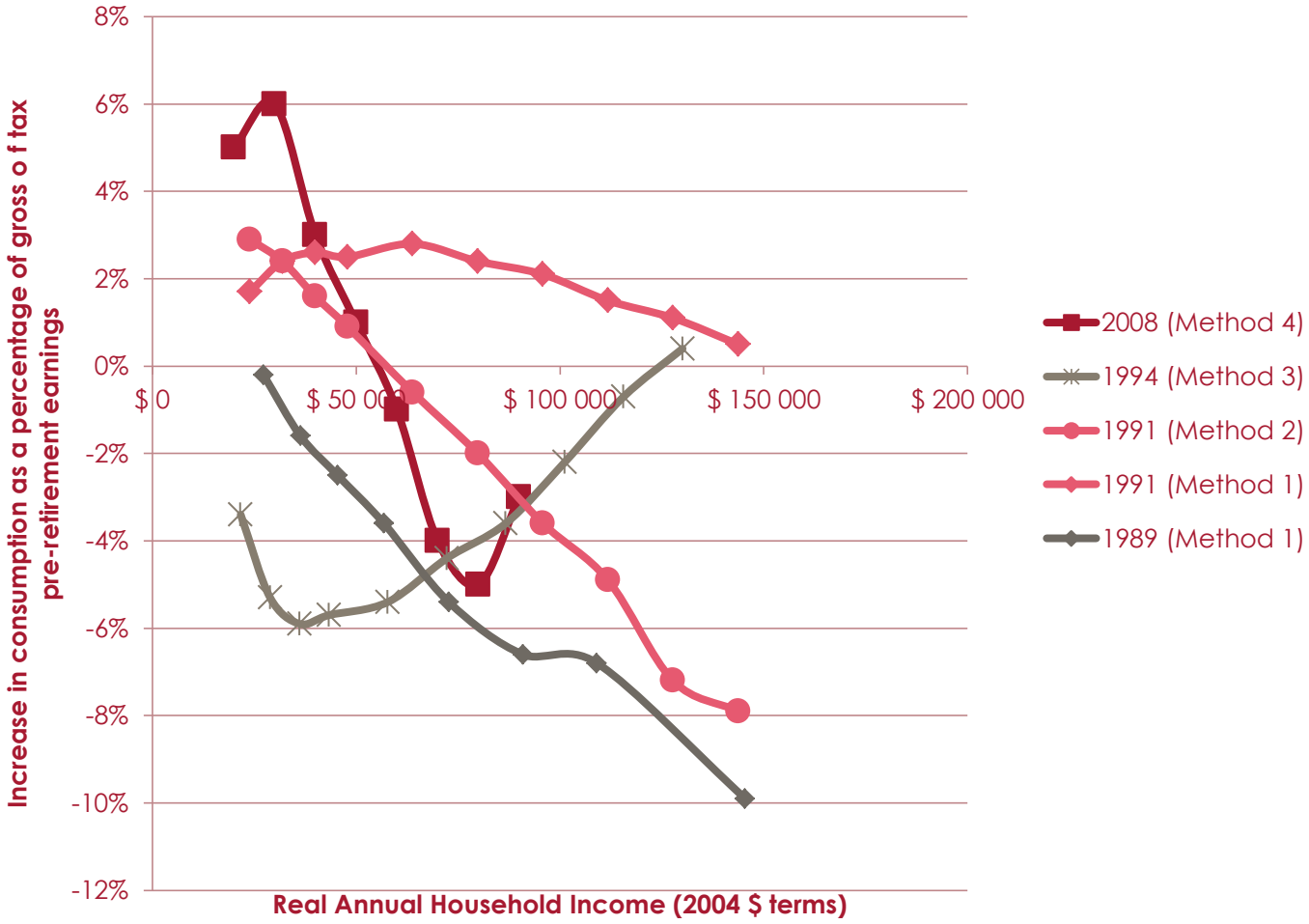
So, do pensioners consume less?

Category	Change at and in retirement
Non-health consumption	Decrease for some households …at age 46
Health consumption	Increase for some households…at age 41
Non-retirement savings	No change

- No!

- Changes in consumption patterns seem to be a response to lifecycle events other than retirement

Better than the alternative?



Source: AON/GSU RETIRE project

Second wave RAGs

- 749 households
- 75% GRR inadequate for 90% of households where both spouses retire at the same time(without salary support)

Formula A	Retirement age	Single females	Single males	Couples (no salary support)	Couples (with salary support)
Wealth earnings ratios	60	14.4-17.0	12.6-14.7	14.4-17.7	12.7-16.9
	63	13.4-15.9	11.6-13.5	13.6-16.4	11.5-15.6
	65	12.8-15.5	11.2-13.2	13.1-15.9	10.7-14.6
	67	12.1-14.6	10.5-12.5	12.4-15.2	10.0-13.8
	70	11.0-13.2	9.5-11.3	11.3-14.0	8.9-12.6
GRRs	60	79.5%-94.8%	81.6%-94.6%	80.4%-100.2%	69.4%-94.4%
	63	79.4%-94.7%	80.9%-94.1%	80.8%-99.6%	67.5%-93.2%
	65	80.5%-96.8%	82.1%-97.4%	81.3%-101.4%	66.6%-94.0%
	67	79.5%-94.8%	81.6%-94.6%	80.4%-100.2%	69.4%-94.4%
	70	79.2%-96.2%	80.8%-96.4%	81.0%-102.8%	63.7%-92.7%

What we learned from Formulae A & B

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- Non-retirement savings were set to zero after retirement
- Formula A (crowding out): non-retirement savings were crowded out by consumption in retirement
- Formula B (old habits die hard): non-retirement savings were nil in retirement without allowing for a change in consumption
- Difference gives insight into how goals change depending on household attitudes to debt and saving

Savings and debt habits shift goals

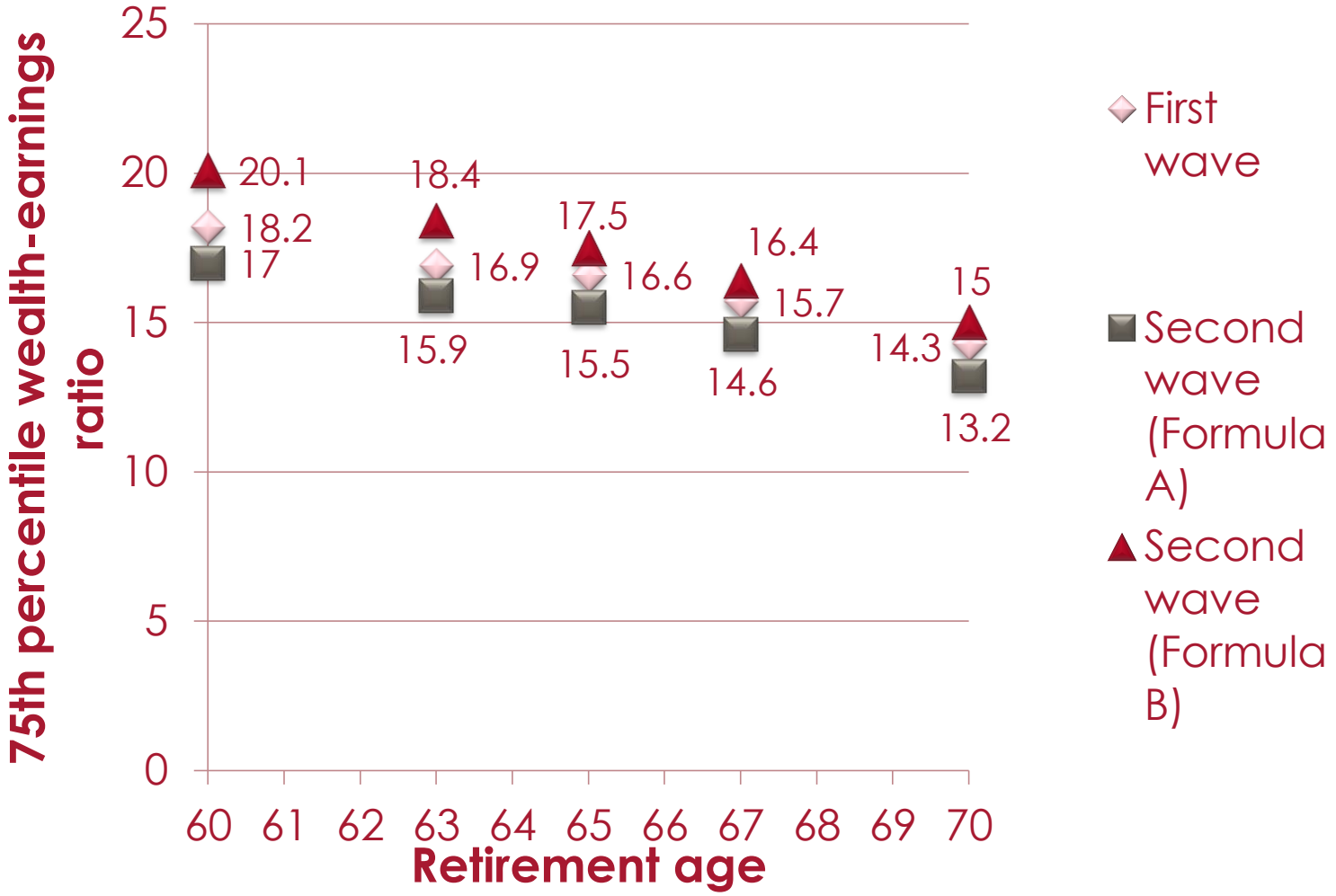
		Reduction in target due to living within the household income (Households that underspend only)	Increase in target due to overspending (Households that overspend only)
Change	Single females	4.6	4.8
	Single males	3.6	6.8
	All couples	5.2	10.4
	Total	4.2	7.2
N	Single females	134	26
	Single males	365	35
	All couples	167	22
	Total	666	83

Influencers

Formula A (Crowding out)	Formula B (Old habits die hard)
Dwelling value (+)	Dwelling value (+)
Household composition	Household composition
	Income (-)
	Medical scheme member (+)
	Retirement savings rate (+)
	Education (+)

- "Investing" in your home is not going to reduce what you need in retirement
- Saving more for retirement is of limited benefit if you don't consume less
- Being more educated doesn't mean you will spend less

Shifting the goalposts: single females



Change analysis: females

	65
First wave	16.6
Update of economic assumptions	17.9
Increase in minimum income level	17.9
Tax changes	16.9
New goal estimation sample	15.5
New age and work-related expense (Formula A result)	15.5
Formula B result	17.5
Change between studies (Formula A)	-1.1
Change between studies (Formula B)	0.9

Shifting the goalposts: single males

Change analysis: males

	63	65
First wave	13.2	12.9
Update of economic assumptions	14.1	13.7
Increase in minimum income level	14.1	13.7
Tax changes	13.7	13.4
New goal estimation sample	13.6	13.3
New age and work-related expense (Formula A result)	13.5	13.2
Formula B result	11.7	12.9
Change between studies (Formula A)	0.3	0.3
Change between studies (Formula B)	-1.5	0.0

Shifting the goalposts: couples

Change analysis: couples

	65
First wave	14.8
Update of economic assumptions	15.9
Increase in minimum income level	15.9
Tax changes	16.6
New goal estimation sample	16.0
New age and work-related expense (Formula A result)	15.9
Formula B result	13.6
Change between studies (Formula A)	1.2
Change between studies (Formula B)	-1.2

What caused the shift?

What	Direction (who)	How much
Economic assumptions	+	0.6-1.5
Tax	+ (Couples)	0.7-0.9
	- (Singles)	0.3-1.0
New data sample	- (Single females and couples)	0.5-1.7

- Uneven effect of tax change
- Data sample effect due to decreased consumption for all households but effect for males dampened by massive increase in dwelling values

Moving forward

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Limitations

- Sample relatively small
- No self-employment
- Both adults must be working
- Multi-generational households removed
- Unable to analyse movements at a household level

Consistent findings and implications

- Goals are extremely complex
- Higher levels of income are associated with lower goals
- Higher dwelling values are associated with higher goals
- 75% GRR inadequate for many households (90% Formula A and 40% Formula B)

New insights (1)

- Tree methodology producing stable results
- Results sensitive to debt and savings decisions at retirement
  - Very important part of retirement planning and education
  - Saving rates have dropped considerably
  - Saving rates for single females have dropped the most and they have the highest goals
  - And there is evidence of savings substitution to finance retirement saving

New insights (2)

- It shouldn't surprise us that when tax rules change, goals will change, but:
  - Goals would be lower if households saved when their tax bill was reduced
  - Tax is difficult to predict and plan for

The end…

…for now