

# Changing levels of inequality where age and gender intersect

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Presentation for the

**International Association for Feminist Economics Conference**

**27 July 2019, Glasgow, UK**



**Women in Social & Economic Research**

## Introduction:

- With population ageing, what happens in older age groups is becoming more important
- The distribution of economic resources in older age groups has profound effects, including over life expectancy itself
- Age, gender and class intersect in key ways that make the issues associated with later life inequality particularly important for women:
  - economic resources are a key determinant of when widowhood occurs; an event that has critical impacts on the wellbeing of many women
  - women's greater longevity means that their access to resources in old age is especially important
  - the secondary dependencies that are experienced by many women in couple households tend to persist and be amplified in old age

## Introduction:

- The topic of later life economic inequality is under-researched
- 2 recent studies have documented a growth in later life inequality in the US
  - links to increased wage inequality in preceding periods
  - and to increased workforce participation in older age groups (high wage workers are working longer)
- However, key research gaps remain
  - no gender analysis of the trends in later life inequality
  - few non-US studies, and thus an absence of studies of institutional factors, such as those associated with retirement income systems

## Introduction:

- Our research is exploring the recent pattern and trend in later life income inequality in Australia.
- It aims to generate insights to how later life income inequality is affected by
  - the institutions of a retirement income system
  - the changing pattern of women's workforce participation and earnings

## Background: The institutional and labour market context:

- **Australia's retirement income system features a 3 Pillars Approach:**
  - A targeted government **Age Pension**
  - Mandated contributions to individual **superannuation** accounts since 1992 (now 9.5% of earnings)
  - Generous tax concessions to **private retirement savings** and superannuation
- **Current policy aims to increase the importance of superannuation and reduce reliance on the Age Pension**
- **Women's rate of participation** in paid work grew from about a third (34.2%) to half (49.8%) between 2006-07 and 2016-17

## Data and Methods

- **Data:** Australian Bureau of Statistics, Survey of Income and Housing, 2011-12 and 2015-16
- **Sample:** Men and women (60+) in mixed-sex couple households
- **Methods:** Decomposition of changes in household income inequality, as measured by (trimmed)  $CV^2$  to isolate the effect of changes in:
  - different key sources of retirement income (State Age Pension vs private superannuation)
  - women's income
  - the correlation of men's and women's income within households

## The decomposition equations

$$\begin{aligned} CV_h^2 &= (S_a(\mu_a/\mu)^2 CV_a^2 + S_o(\mu_o/\mu)^2 CV_o^2 + [S_a(\mu_a/\mu)^2 + S_o(\mu_o/\mu)^2]/\mu^2) \\ &+ (S_a(\mu_a/\mu)^2 + S_o(\mu_o/\mu)^2 - 1) \end{aligned}$$

$$CV_h^2 = (S_m^2 CV_m^2 + S_f^2 CV_f^2 + 2\rho_{mf} S_m S_f CV_m CV_f)$$

**Table 1: Income Inequality Amongst Men and Women in Older Couple Households, Australia, 2011-12 to 2015-16**

PART A	INCOME GROUPS											
	Age Pensioners			Other Retirees			All Retiree Households			All Households		
	p90/ p10	p50/ p10	CV <sup>2</sup>	p90/ p10	p50/ p10	CV <sup>2</sup>	p90/ p10	p50/ p10	CV <sup>2</sup>	p90/ p10	p50/ p10	CV <sup>2</sup>
<b>Men</b>												
2011-12	2.69	1.27	0.358	10.15	3.76	0.664	4.30	1.43	0.728	6.59	1.76	0.942
2015-16	2.66	1.37	0.284	26.33	9.57	0.646	4.08	1.52	0.636	6.61	1.92	0.772
% change 12-16	-0.9%	7.5%	-20.8%	159.5%	154.7%	-2.8%	-5.2%	5.7%	-12.6%	0.4%	9.4%	-18.0%
<b>Women</b>												
2011-12	2.65	1.65	0.243	57.88	16.40	0.926	5.20	2.31	0.633	12.06	3.90	0.924
2015-16	2.65	1.58	0.251	160.42	34.00	0.968	5.68	2.77	0.597	14.28	5.22	0.752
% change 12-16	0.2%	-4.1%	3.1%	177.2%	107.3%	4.5%	9.2%	19.9%	-5.7%	18.4%	33.7%	-18.6%
<b>Households</b>												
2011-12	2.13	1.28	0.170	5.80	2.33	0.525	3.12	1.41	0.478	4.59	1.58	0.596
2015-16	2.18	1.36	0.144	8.30	3.44	0.543	3.02	1.48	0.432	4.31	1.64	0.516
% change 12-16	2.3%	6.2%	-15.5%	43.0%	48.0%	3.5%	-3.2%	5.2%	-9.6%	-6.1%	4.0%	-13.5%



**Table 2: The impact on later-life household income inequality of changes in income across different income streams**

	<b>ACTUAL</b>	<b>SIMULATED</b>			
	(1) Actual $CV_h^2$	(2) Hold mean & dispersion of group 1 income constant ( $CV_h^2$ )	(3) % Difference  (2/1)	(4) Hold mean & dispersion of group 2 income constant ( $CV_h^2$ )	(5) % Difference  (4/1)
<b>A. Retired Couple Households</b>		Age Pensioner Households		Other Retired Households	
<b>2011-12 (n=1279)</b>	0.479				
<b>2015-16 (n=2091)</b>	0.432	0.520	16.9%	0.384	-11.2%
<b>A. All Older Couple Households</b>		Non-Retired Households		All Retired Household	
<b>2011-12 (n=2055)</b>	0.636				
<b>2015-16 (n=3199)</b>	0.516	0.547	5.6%	0.567	9.9%

## Discussion:

- The current prominent role of a state age pension in the Australian retirement income system appears to have substantially moderated the impact of superannuation on household income inequality amongst older couple households
- The pattern of change in incomes indicates that older households towards the centre of the income distribution have achieved relatively large gains (most likely through increased superannuation that has not threatened Age Pension entitlements)
  - However, low-income households have fallen behind, and this is a key risk for the later-life inequality

**Table 3: The impact on later-life household income inequality of changes in women’s income**

	<b>ACTUAL</b>	<b>SIMULATED</b>			
	(1) Actual $CV_h^2$	(2) Hold mean & dispersion of women’s income constant  ( $CV_h^2$ )	(3) % Difference  (2/1)	(4) Hold mean, dispersion & correlation of women’s income constant ( $CV_h^2$ )	(5) % Difference  (4/1)
<b>A. All Older Couple Households</b>					
<b>2011-12 (n=1279)</b>	0.596				
<b>2015-16 (n=2091)</b>	0.516	0.559	8.3%	0.526	2.0%
<b>A. Older Couple Households 60-64</b>					
<b>2011-12 (n=724)</b>	0.555				
<b>2015-16 (n=868)</b>	0.485	0.520	7.2%	0.483	-0.3%

## Discussion:

- The changes in women's incomes have also been positive for income equality across older couple households.
- However, the pattern of change in women's income was unevenly distributed across households, with the gains recorded in women's incomes being smaller in households with low- vs medium male income.
- Again, the reduction in inequality appears to have been brought about by changes in the relativity between mid- vs high-income households, rather than by gains recorded towards the bottom of the income distribution.

## Discussion:

- Going forward, the relatively high level of income inequality in the 60-64 age group could be a harbinger of negative changes in inequality. It will be important for future research to monitor these changes, and especially their effects on low-income households.
- The level of intra-household inequality also needs monitoring, as this is a key risk of a superannuation system.
- There are various other opportunities to improve on and extend the analysis presented in this paper.
  - Integrate data on assets and net worth to create a more comprehensive measure of economic resources
  - Extend the period of analysis, making use of earlier (and hopefully forthcoming) versions of the SIH.
  - Examine the influence on income inequality of changes in different types of income *within* each household.
  - All other suggestions are most welcome!