



Curtin University

New Estimates of Long-term Earnings

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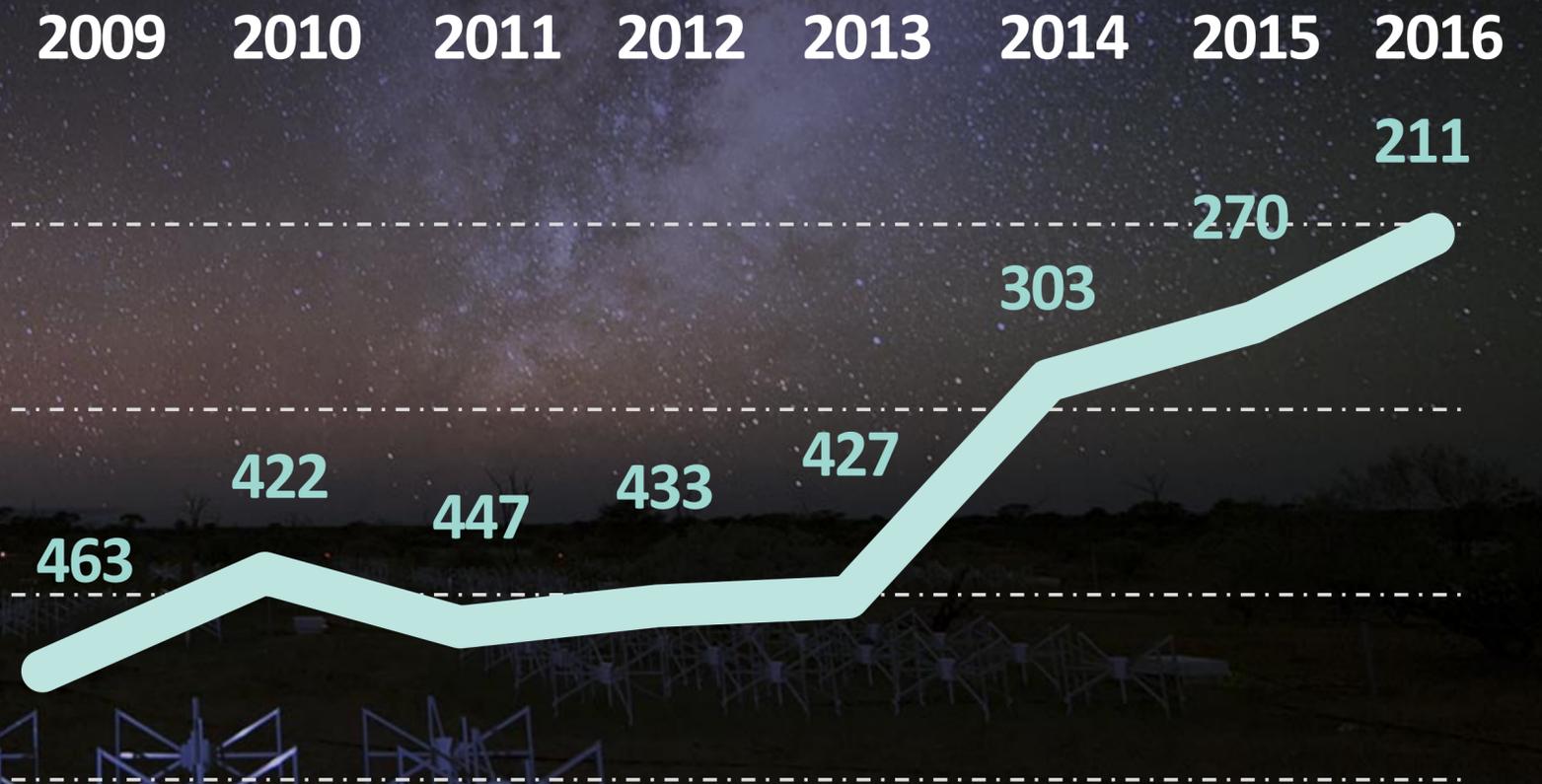


Curtin Today

-  Approx. 58,000 students (38,000 EFTSL); 30% of students are international
-  9th largest university in Australia
-  Approx. 4,240 equivalent full-time staff; largest single-site employer in WA
-  Destination of choice for WA university applicants with 51% domestic market share
-  Major campuses in Perth, Kalgoorlie, Singapore and Malaysia

Global Rankings – ARWU

2016 Nature Index - *'Curtin fastest moving & most collaborative of Australian unis'*



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Women in Social Economic Research Cluster

Women in Social Economic Research (WiSER) is committed to producing high quality quantitative and qualitative feminist research on a broad range of issues that women identify as important to their capacity for achieving equity and autonomy.



Goals

To foster positive change in women's economic and social outcomes by:

- Extending economic theory and research
- Fostering interdisciplinary feminist research

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Inside the black box: Intra-household resource allocations of older couples

Project description

The context of this project is a policy environment that has encouraged private, individual superannuation and savings as the preferred approach for funding retirement. As a result, older individuals are increasingly tasked with managing financial and other resources to ensure the provision of their health, care and other needs. Decisions made in older couple households about the use of household resources are increasingly important for both the individuals in these households and the broader economy. Despite this little is known about the patterns of ownership and control of resources within older couple households, the methods by which older couples manage household resources, or the policy-relevant factors that link older couples' ownership, control and management of household resources with their health and well-being.

The broad aims of this research are to identify the effects of policy-relevant variables on the ownership, control and management of resources (income, wealth and time) within older couple households and to assess whether these variables serve to sustain or diminish gender inequalities within and outside the household. In detail, the project aims to:

Chief Investigators

- Professor Siobhan Austen
- Dr Astghik Mavisakalyan
- Associate Professor Helen Hodgson
- Professor Ross Taplin
- Adjunct Professor Rhonda Sharp (UniSA)
- Emeritus Professor Susan Himmelweit (Open University, UK)

Introduction to Long-term Earnings

- In privatised retirement income systems, individual's retirement wealth will depend heavily on their level of lifetime earnings.
- Thus, a first step in understanding intra-household gaps in retirement wealth is to understand the gender gaps in lifetime earnings.
- However, because long panels of data have been lacking, estimates of lifetime earnings have tended to rely on cross-sectional data for a single year, coupled with assumptions about earnings trajectories in different scenarios.
- These are useful but not ideal, given their sensitivity to assumptions made about, for example, the rate of earnings growth, work hours, career breaks and retirement.

Approach, Data and Measures

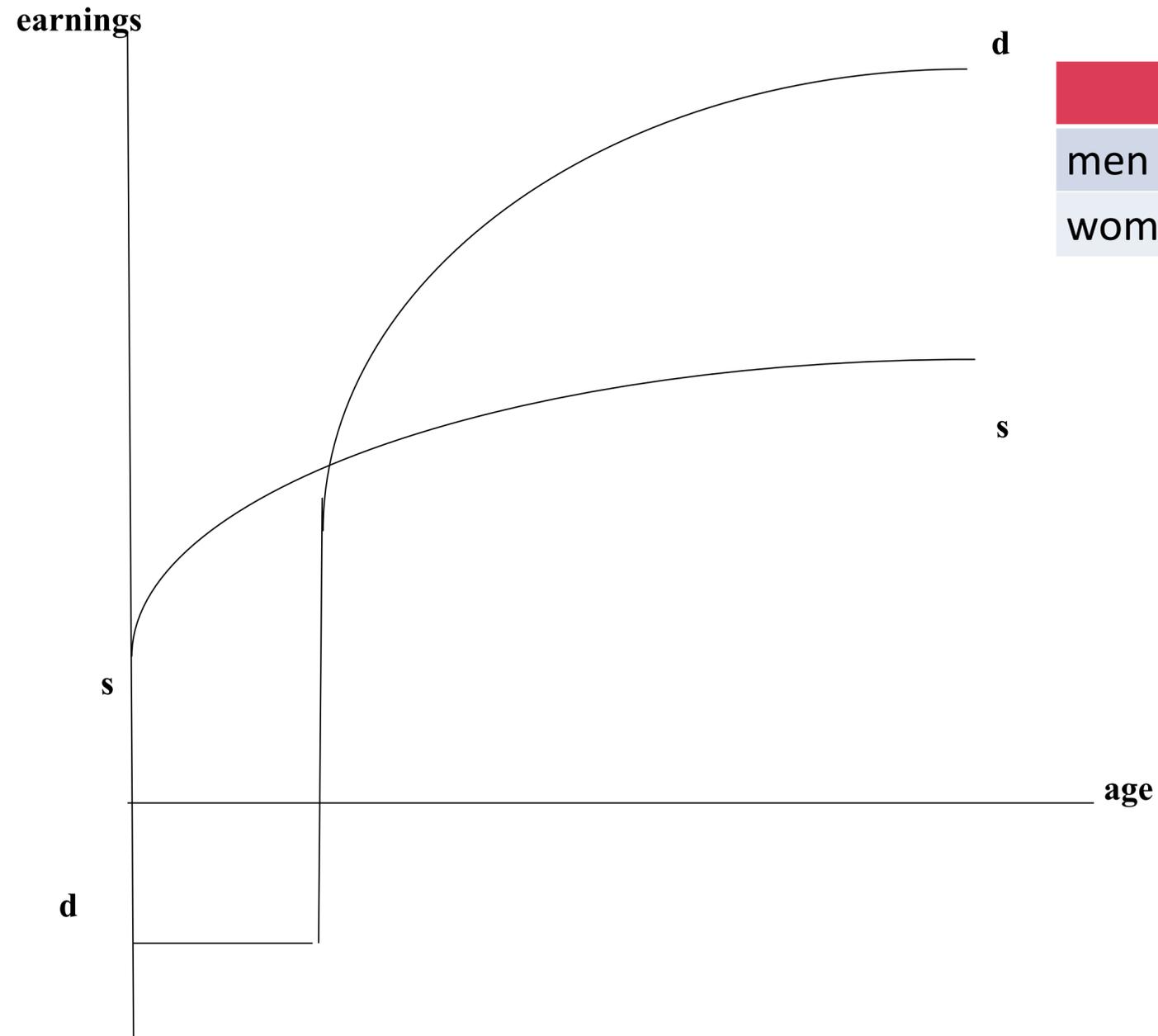
- This paper uses data from the Housing, Income and Labour Dynamics in Australia (HILDA) survey to generate new measures of long-term earnings and to examine the pattern of long-term earnings by gender, as well as by education and parenthood.
- The HILDA survey is a longitudinal survey that commenced in 2001. Covering a large and representative sample of the Australian population, each year the survey includes a question on annual earnings.
- We sum each individual's earnings over the 15 years from 2001 to achieve a measure of 'long-term' earnings.
- Whilst 15 years is far short of a standard working life, the sum of an individual's earnings over this extended period provides more accurate guidance on his or her lifetime earnings than do any estimates derived from a single year's data.
- Using descriptive methods we compare the average and median long term earnings of men and women in five broad educational groups.
- Using OLS regression methods we explore the drivers of long-term earnings for all Australian men and women. The analysis includes variables relating to the individuals' education, age, and marital and parenthood status



Useful Insights Provided by Data on Long-term Earnings

- In addition to the provision of important background data on retirement wealth, our estimates of long-term earnings provide new insights on:
 - The private rate of return to education
 - Levels of gender inequality across the life-course

Estimates of the private rate of return to education can be achieved by comparing the direct and opportunity (or indirect) costs of a degree, vs the financial benefits (which are defined by incremental earnings). Most studies rely on cross-sectional data from a single year to estimate the age-earnings profiles of graduates and non-graduates

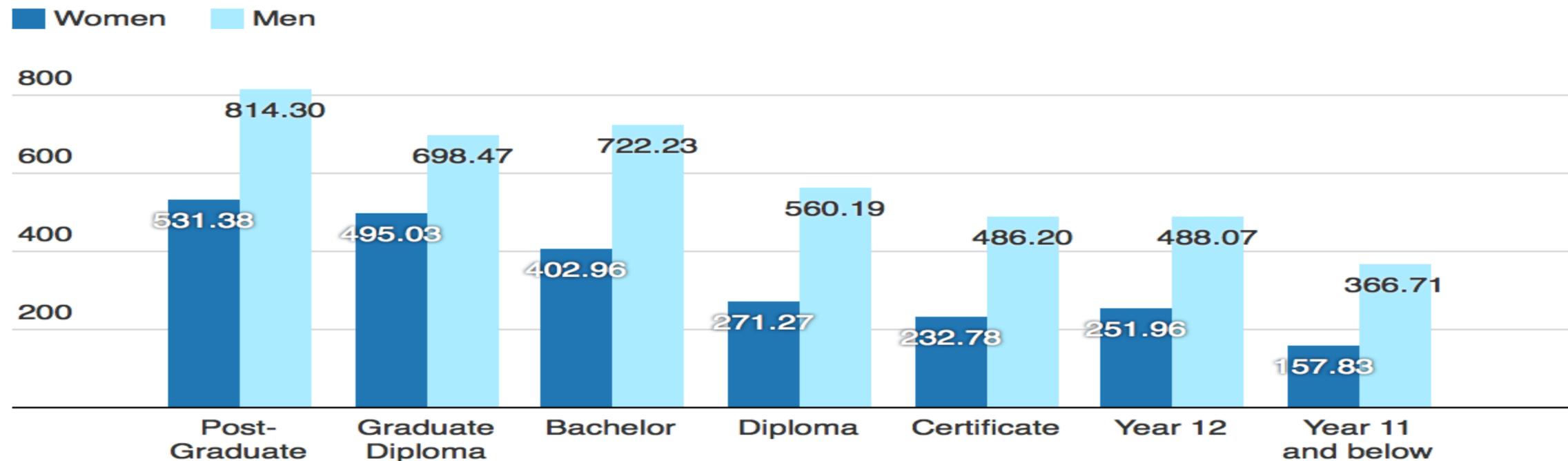


	1981	1986	1991	1996	2001	2006
men	13.1	17.5	17.6	18.4	19.6	15.3
women	18.0	20.3	18.7	19.3	19.0	17.3

Long-term Earnings and Education

- Our data confirms that there are large differences in long-term earnings between graduates and non-graduates. However, it also shows how estimates of private rates of return can be misleading

Median long-term earnings of Australian women and men, by educational category



sum of annual earnings for 2001-2015 ('000)

Source: authors' calculations from HILDA data

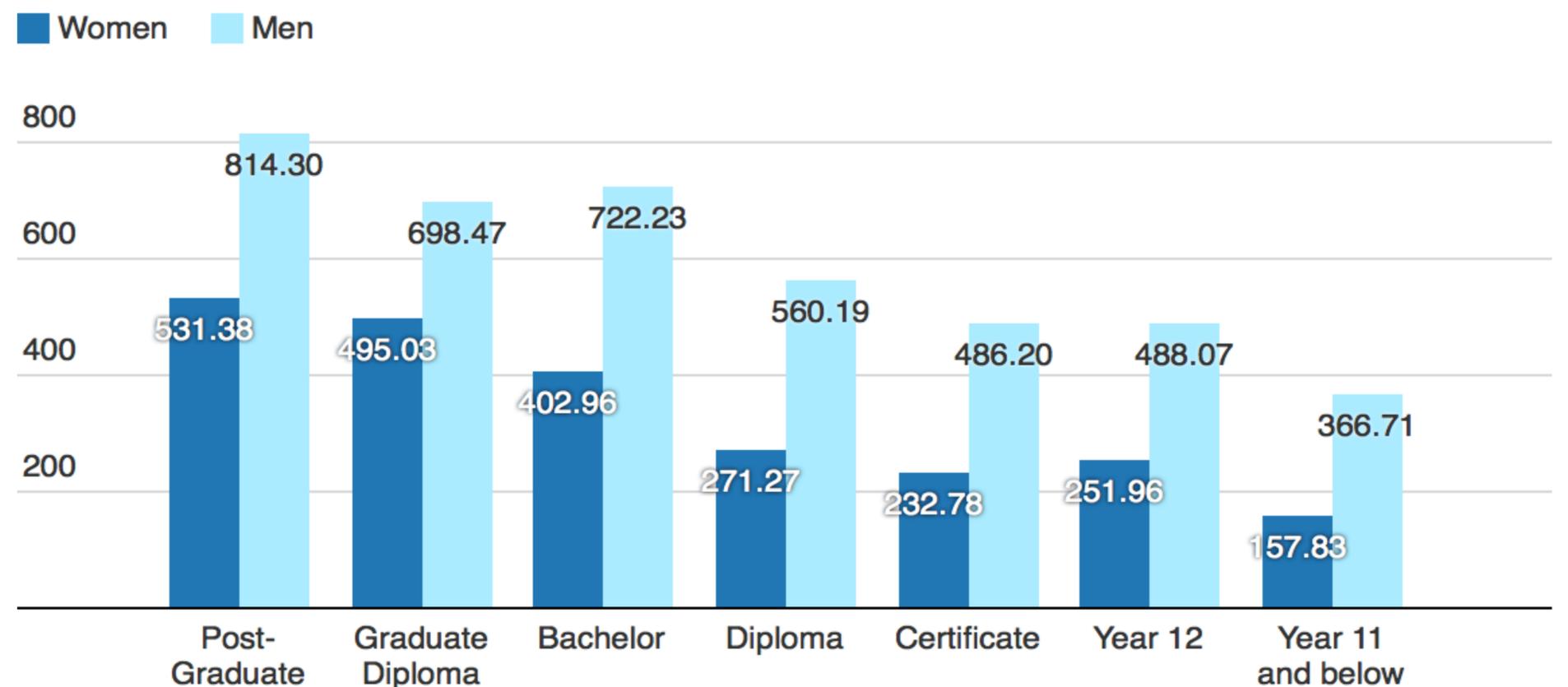
Long-term Earnings and Education

- Clearly, post-school qualifications are associated with substantially higher long-term earnings.
 - The median gross 15 year earnings of men with post-graduate qualifications in 2001 were 66.8% larger than those of men who had a Year 12 qualification.
 - Amongst women, the gap in gross earnings between those with post-graduate versus Year 12 qualifications in 2001 – measured at median values – was 110.9%.
- Women with university qualifications attain much higher long-term earnings than women without post-school education, suggesting a substantial ‘payoff’ from education.
- **However**, the long-term earnings of women with university fall well short of men with the same qualification,
 - Women’s median long-term earning are only 55.7% of those attained by men in the same educational group.
 - The median long-term earnings of women with a Bachelor degree is actually *lower* than those attained by men with *Year 12* qualifications.
- These results remind us not confuse a high rate of return to education with high earnings

Long-term Earnings and Gender

- Our data also provide new insights on gender gaps in earnings
- Women’s median long-term earnings are only 49.6% of men’s (*whilst their average pay is about 83% of men’s*)
- Similar patterns apply in each of the sub-groups defined by educational qualifications and is particularly large between men and women with less than Year 12 qualifications.
- These results show how gender gaps in earnings arise from the *combined* effect of the GPG, gaps in work hours and different patterns of labour force participation

Median long-term earnings of Australian women and men, by educational category



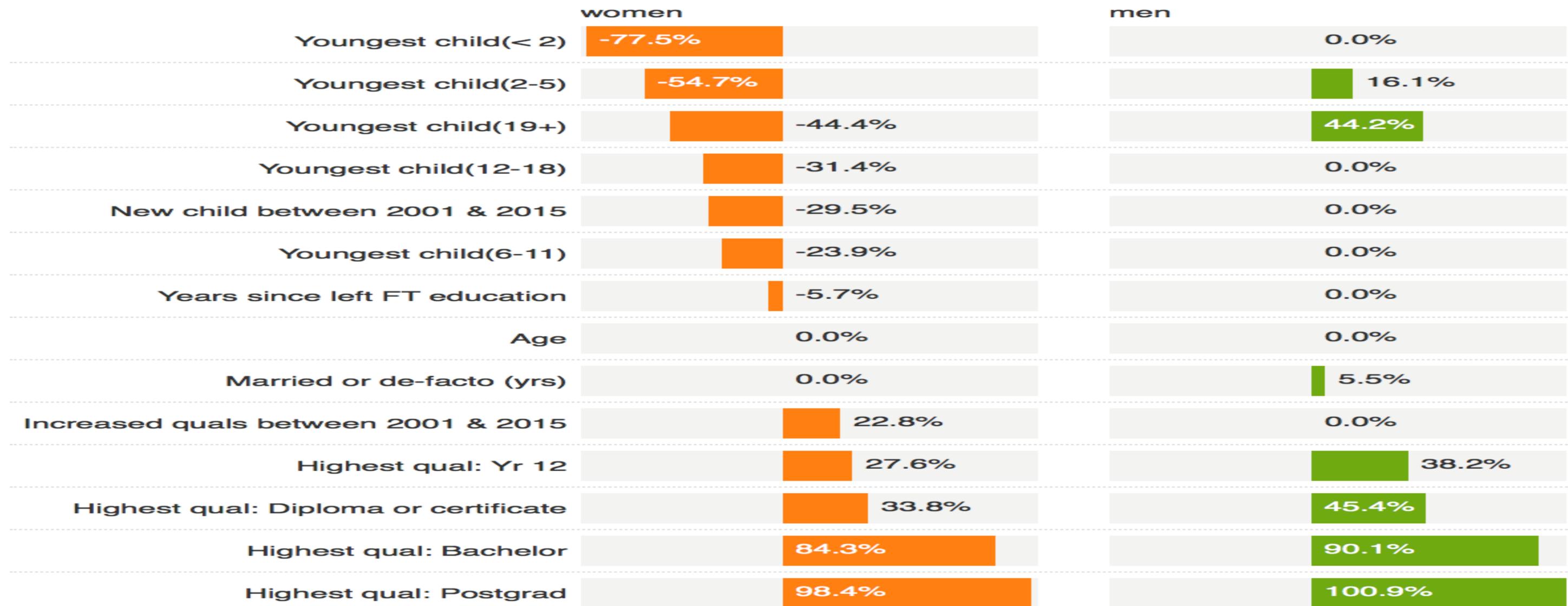
sum of annual earnings for 2001-2015 ('000)

Source: authors' calculations from HILDA data

Long-term Earnings and Gender

- Our regression results cast light on the sources of variation in long-term earnings of men and women

Percentage Change in the Long-Term Earnings of Australian Men and Women, by Contributory Factor



Results of OLS regression of log long-term earnings, summed over 2001-15
 Source: authors' calculations from HILDA data

Long-term Earnings and Gender

- Parenthood is the key source of difference in the long-term earnings of men and women.
 - Parenthood is generally weakly correlated with men's long-term earnings, but it is the source of substantially lower earnings for women.
 - For women, at mean values, having a child under the age of 2 in 2001 (as compared to no children) is associated with a 77.5% reduction in earnings over the subsequent 15 years.
 - For men, this factor is not a statistically significant source of variation in long-term earnings.
 - Women whose youngest child was aged 2-5 in 2001 have long-term earnings which are, at mean values, 54.7% lower than women who did not have a child in 2001.
 - In contrast, the long-term earnings of men whose youngest child was aged 2-5 are 16.1% *higher* than those of men without a child.

Long-term Earnings and Gender

These results cast new light on the magnitude of the impacts of parenthood on the relative financial situation of men and women.

- Numerous studies have explored the effects of parenthood on men's and women's wage rates, and on their chances of workforce participation.
- Our study adds to these by capturing the *combined* effects of the gender pay gap, career gaps and different hours of work.
- The magnitude of the effects that we uncover is concerning.
 - Lower long-time earnings translate into higher rates of economic dependency and vulnerability, especially in privatised retirement income systems.
 - When a large financial penalty is imposed on those who perform vital care roles, we place at risk all the long-run social and economic outcomes that rely on the provision of care.

In conclusion,

- Longitudinal data provides new opportunities to explore a range of critical economic and social policy issues
- The data confirm the large differences in earnings that are associated with education
- However, they highlight how rate of return data can be misleading
- The data also show how the gender division of paid and unpaid work associated with parenthood continues to drive a large gender gap in long-term earnings, even in countries such as Australia where women now outnumber men in the graduating classes of our universities.
- No society will continue beyond one generation if there are not persons who care for the young, and we need to provide conditions that allow those who do the work of caring to survive and thrive (Eva Feder Kittay, *Love's Labor*).
 - Addressing the vulnerabilities created for women in privatised retirement income systems must be a priority for both economic and social policy.



Thank you

Make tomorrow better.