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CSIRO-Monash Superannuation Research Cluster

Post-retirement wealth and its effect on health and wellbeing

Cluster Project 9 Research leader: Prof Anthony Harris

Presenters: Profs Anthony Harris and David Johnston



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Post-retirement wealth and its effect on health and wellbeing

- Principal Researchers: Professors Anthony Harris:
Michael Shields: David Johnson

Program objectives

- To estimate how individual wellbeing changes with retirement and whether the retirement effects are related savings levels, the level of pension flows and their stability
- To establish how retiree health and healthcare use and cost are causally affected by wealth and income levels from pensions

Project 1: Stock market induced wealth fluctuations and health and wellbeing over the life course

Project 2: Wellbeing effects of retirement and the mediating role of income

- Use Australian longitudinal data to estimate the impact of pension adequacy on health, wellbeing, and health behaviour post retirement

Project 3: The role of cognitive decline and financial literacy in the financial decision making of Australians

- (i) identifying the Australian population sub-groups most at risk of financial illiteracy and poor financial decision making; (ii) estimating the effect of financial literacy on the success of retirement planning and the accumulation of retirement wealth; (iii) estimating the effect of mental health conditions and cognitive ability on financial literacy and stock market participation

Project 4: Health expenditure by the elderly

- Use administrative data on expenditure by the elderly on Medicare and hospitals in NSW to estimate health care costs by age, condition, and health status from linked survey data

Project 5: Policy simulations on ageing, health and pensions

- Use the other projects to simulate a cohort from pre-retirement through to old age.
- individual and household forecasts of income and health in older age
- simulate the effect of increased pensions on the demand for health and personal services;
- effect of health decline on expenditure relative to pension income



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Speakers: David W. Johnston, Michael A. Shields



Stock Market Performance and the Health and Wellbeing of Australians: A Lifecycle Perspective

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Motivation

A central task of economists is to understand how individuals react to income and wealth changes that are induced by shocks to individual or family circumstances, government policies, and to movements in the macroeconomic environment.

On-going debates:

- (1) To what extent does ‘money’ buy happiness, and is there a saturation point?
- (2) Does the health of the population move pro- or counter-cyclically?

Identification difficulties:

- (A) Reverse causation – money improves health and wellbeing, but health determines money
- (B) Unobservable individual-specific characteristics and traits that determine both
- (C) Error in measuring income and wealth; error in measuring health and wellbeing

Solution: Use exogenous variation(s) in economic circumstances to aid identification

Main Challenge:

To isolate the effect of (unexpected) stock market changes on health and wellbeing, independent of other economic and political (time-varying) events

Objective

Using over 120,000 pooled observations of adults (25-74) drawn from the Household, Income and Labour Dynamics in Australia Survey (HILDA) collected over the period 2001-12, we map in stock market index data by date of interview. We estimate the effect of stock market movements on subjective wellbeing and both physical and mental health. We differentiate between overall life satisfaction, financial satisfaction and employment satisfaction, and importantly by lifecycle stage and gender. By comparing survey respondents interviewed in the same quarter and location, we attempt to isolate the causal effect of the stock market.

Recent International Literature

Fiuzat et al. (2010). United States stock market performance and acute myocardial infarction rates in 2008-2009.

Deaton (2011). The financial crisis and the well-being of Americans.

Ma et al. (2011). Stock volatility as a risk factor for coronary heart disease death.

Ratcliffe and Taylor (2012). Who cares about stock market booms and busts? Evidence from data on mental health.

Murgea and Reisz (2012). Does the market make us happy? The stock market and well-being.

Gili (2012). The mental health risks of economic crisis in Spain: Evidence from primary care centres.

Cotti et al. (2013). The Dow is killing me: Risky health behaviours and the stock market.

Engelberg (2013). Worrying about the stock market: Evidence from hospital admissions.

McInerney et al. (2013) Recession depression: Mental health effects of the 2008 stock market crash.

Deaton (2011) – US Gallup Poll Data

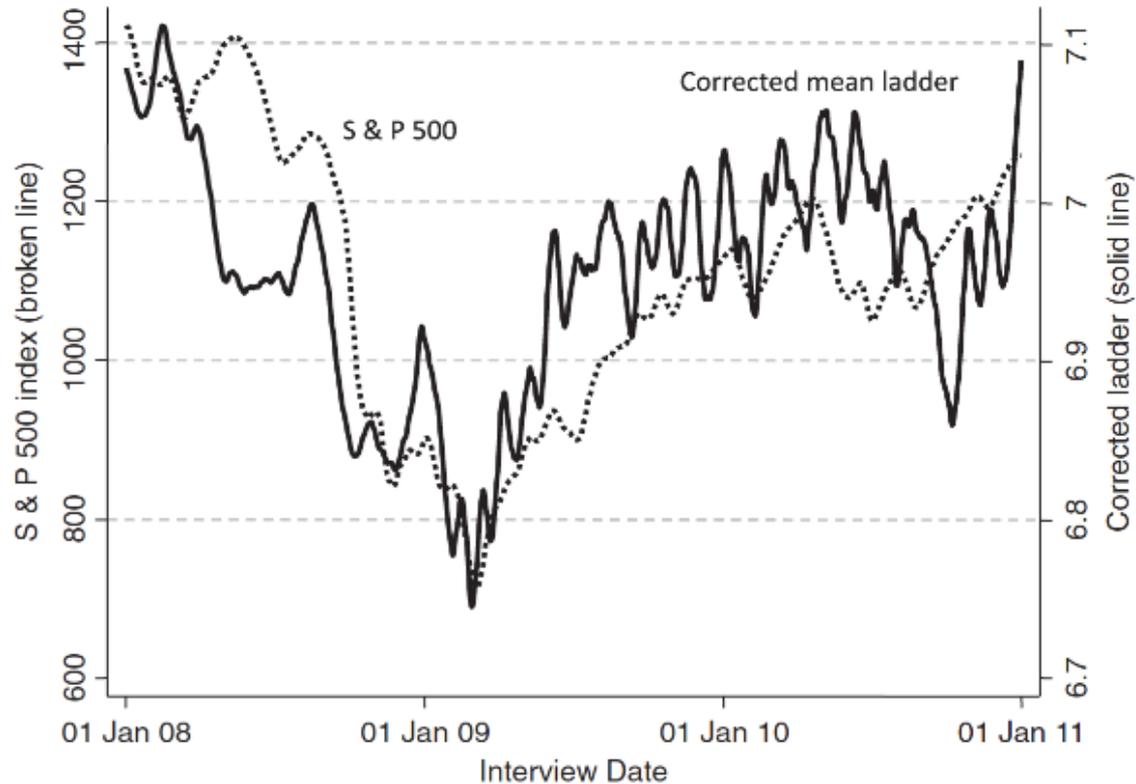
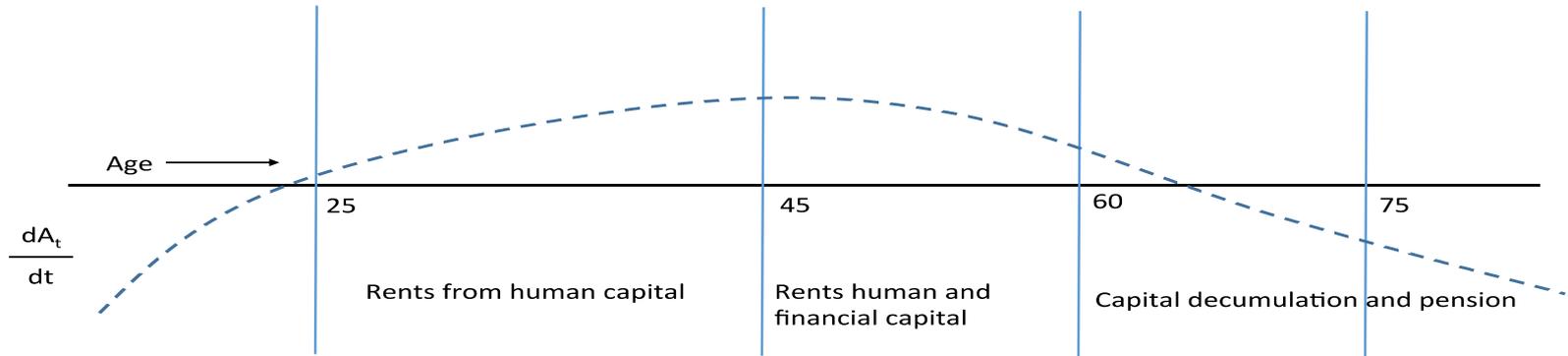
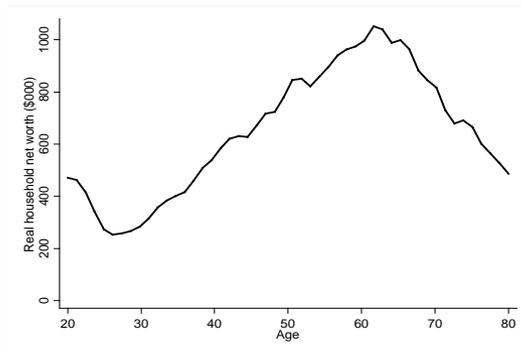


Fig. 10 Corrected mean ladder and S&P 500 index.

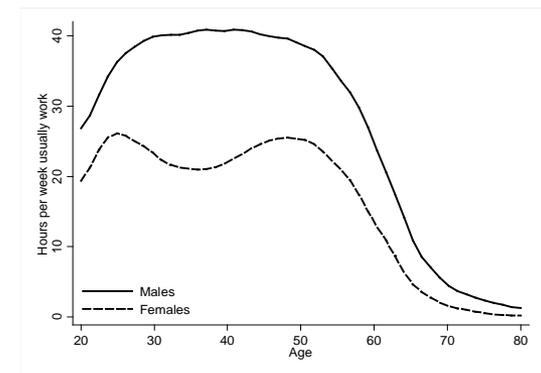
Changes in Assets over the Lifecycle: A Stylised View



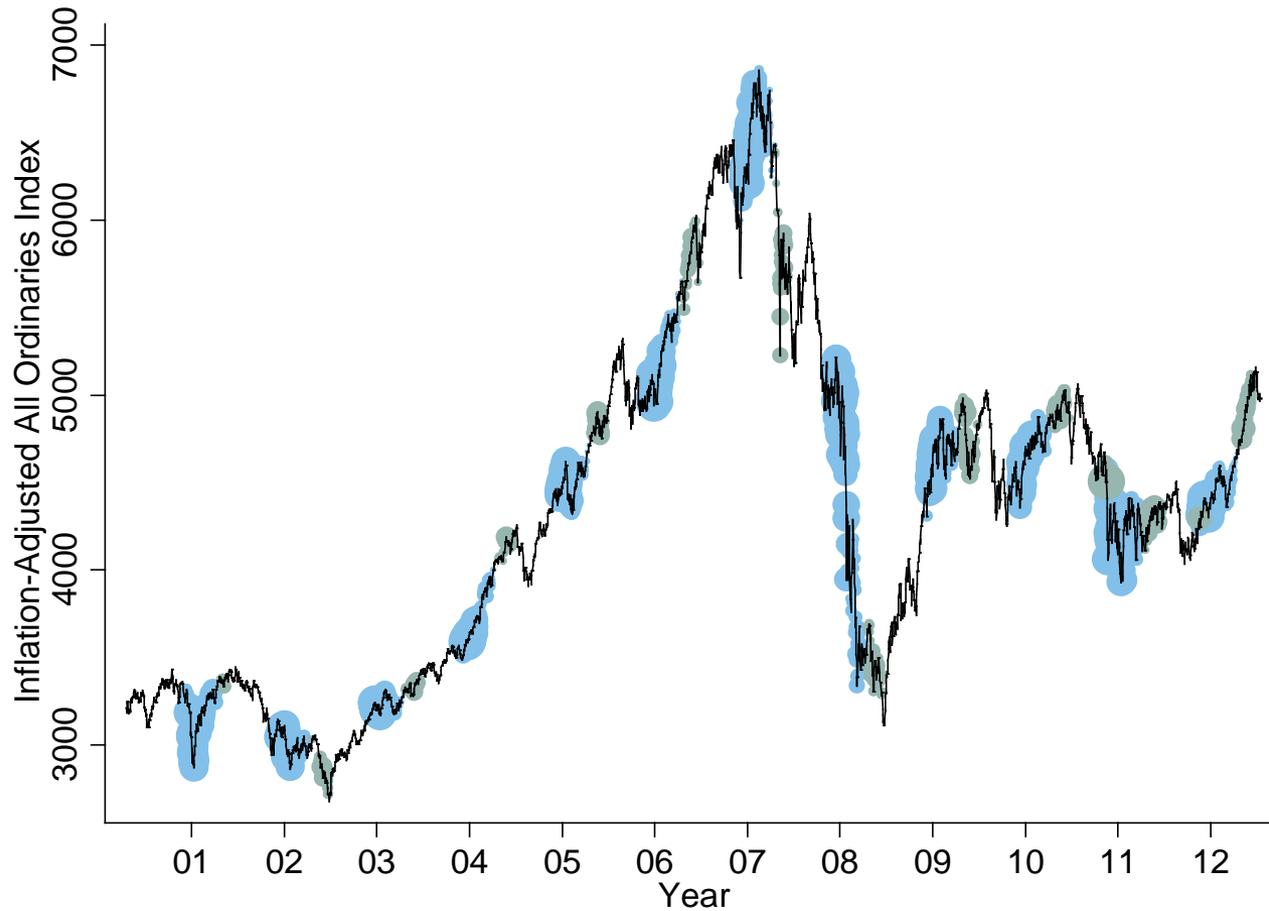
Wealth



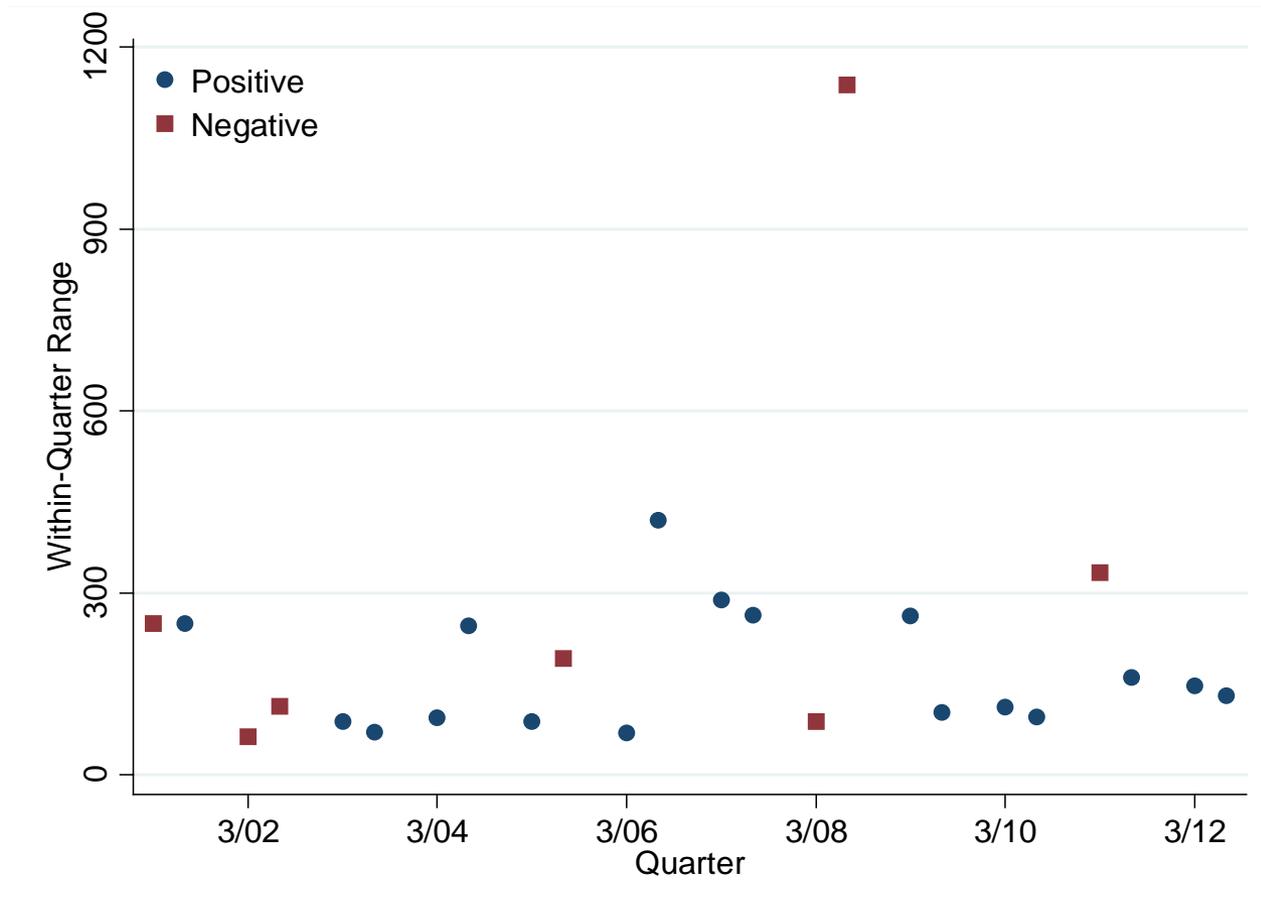
Labour Supply



HILDA sampling and the inflation adjusted All Ordinaries Index



Variation used to identify effect of stock market performance on wellbeing



Effects of stock market performance on overall life satisfaction

	Men	Women
Full Sample	0.022	0.011
Investor HH	0.032	0.012
Not an investor HH	0.016	-0.007
Time Period 2001-2006	-0.006	0.011
Time Period 2007-2012	0.028	0.013
Time Period 2007-2012 (-Q3/08)	0.043	0.029

- Gender gap in life satisfaction (-0.141 for males)
Married/cohabiting premium (+0.562)
- Gender differences: Relatively more households in which the male makes the decisions regarding “savings, investment and borrowing”.

Effects of stock market performance on wellbeing domains (2007-2012)

	Men	Women
Financial Satisfaction		
Age 25-44	0.051	-0.011
Age 45-60	0.061	0.029
Age 61-75	-0.011	-0.021
Employment Satisfaction		
Age 25-44	0.048	0.035
Age 45-60	0.022	0.008
Age 61-75	-	-
Health Satisfaction		
Age 25-44	0.031	0.012
Age 45-60	0.050	-0.005
Age 61-75	0.027	0.008

Conclusions

1. Australians' life satisfaction and mental health are affected by movements in stock market performance
2. This effect is statistically significant but modest, but larger for those with exposure
3. This effect is not found for females, or for retirement aged males
4. Clear that the stock market acts as a leading economic indicator
 - Employment expectations for younger males
 - Financial expectations for middle-aged males
5. A more tentative conclusion is that Australians have placed greater weight on stock market performance in forming their economic expectations after the GFC