

Appendix: Age-based Targeting of Unemployment Benefits and Household Financial Stress

Outline

In this Appendix I briefly outline the econometric analysis that was used in the micro note.

I estimate the following OLS regression:

$$FINSTRESS_{it} = \beta OLDER_{it} + \gamma CONTROLS_{it} + \varepsilon_{it}$$

Where the dependent variable (*FINSTRESS*) is an indicator for whether household *i* reports being financially stressed in year *t*. This is a dummy variable which is equal to one if a household answers 'yes' to any 3 of the following 7 conditions (and is zero otherwise):

1. Could not pay gas, electricity or telephone bill
2. Could not pay the mortgage or rent on time
3. Asked family or friends for help
4. Asked for help from welfare organisations
5. Pawned or sold something
6. Went without meals
7. Unable to heat home

The key explanatory variable (*OLDER*) is a dummy indicator for whether the household head is a JSP recipient that is aged 55 or above. The control variables (*CONTROLS*) include:

- **Female:** a dummy for whether the household head is female or not.
- **Long-term health problem:** a dummy for whether the household head has a long-term health condition and/or disability or not.
- **Household disposable income:** the log level of the dollar value of household after-tax income.
- **Household size:** the log level of the number of people living in the household.
- **Household liquid assets:** the log level of the dollar value of household liquid assets. This variable is only available in the HILDA wealth modules (2002, 2006, 2010, 2014, 2018) and so the sample size is smaller for the regression analysis including household liquidity.

The error term (ε) consists of year fixed effects and a white noise term.

Results

The regression estimates indicate that older JSP recipients are 16 percentage points less likely to be financially stressed than their younger counterparts (column 1 in Table 1). Controlling for other observed household and personal characteristics, such as a long-term health condition or disability, the financial stress 'gap' between older and younger recipients increases to 18 percentage points (column 2). But the financial stress gap shrinks to 14 percentage points if we control for household liquid assets (column 3). This suggests that the controls mostly increase the financial stress gap between older and younger JSP recipients, but that a large part of the difference in financial stress by age group is explained by the availability of liquid assets, such as cash and bank deposits.

Table 1: Household Financial Stress Regression			
OLS Estimates			
	No controls	Controls	Controls + household liquidity
Older (aged 55+)	-0.16*** (-8.20)	-0.18*** (-9.49)	-0.14*** (-6.68)
Household liquid assets (log level)			-0.03*** (-4.83)
Female		0.03* (2.05)	0.04 (1.92)
Long-term health problem		0.08*** (4.12)	0.09 (1.80)
Household disposable income (log level)		-0.003 (-0.27)	0.02 (1.01)
Household size (log level)		-0.05** (-3.11)	-0.04 (-1.57)
R squared	2.1%	4.2%	9.2%
Observations	5,664	5,626	1,099

Notes: Sample includes all JobSeeker recipients. Constant and year fixed effects are omitted. Standard errors are two-way clustered by household and year. T-statistics in parentheses.
Sources: e61 Institute; HILDA Survey Release 21.0