



Jonathan Cribb  
Anna Henry  
Heidi Karjalainen

10<sup>th</sup> July 2024

@TheIFS

# How do those already out of employment fare when the state pension age rises?



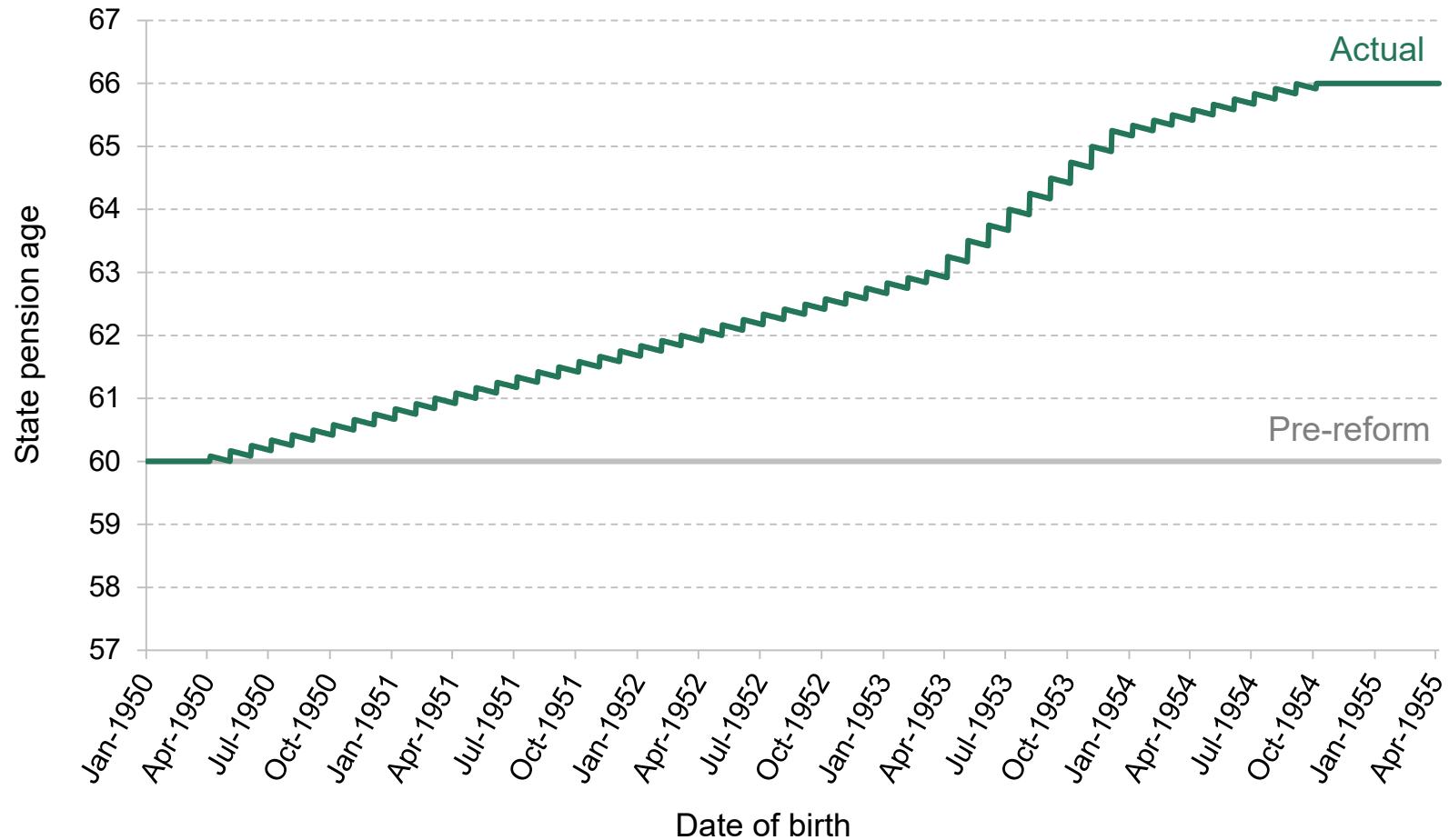
Economic  
and Social  
Research Council

# Introduction and motivation

- State pension age for women has gradually increased from 60 to 66
- Women who have turned 60 but not reached state pension age now:
  - Cannot receive a state pension
  - Face the working-age tax and benefit system for longer
- Previous work shows substantial impact on incomes and poverty
  - How does this affect expenditure and wellbeing?
- We focus on women who had left employment before 60
  - Who do not delay retirement as a result of the reform

# Increase in female state pension age

## UK state pension age for women by date of birth



- English Longitudinal Study of Ageing (ELSA)
  - Biennial, longitudinal survey running since 2002–03
  - Rich data on incomes, wealth, work, health, other demographics
  - Representative of England’s age 50+ population
- Sample:
  - We use data from 2008–09 to 2018–19; SPA was 60 at the start and just over 65 by the end of the data
  - Women aged 58 to 65: 7,281 observations
  - Those not in paid work at age 58: 2,611 observations

# Outcomes: How are people faring?



- We examine a range of different outcomes:
- **Employment and income**
- **Expenditure**
  - ELSA contains questions on household expenditure on a range of non-durable goods and services (but not all expenditure)
  - We look at weekly expenditure on: food in home (excluding alcohol and tobacco), food out, leisure, gas and electricity, clothing
- **Life satisfaction**
  - Score between 0-10 measuring how satisfied a person felt the previous day

shares

- Basic TWFE model

$$Y_{it} = \beta \text{overSPA}_{it} + \sum_{a=1}^A \theta_a \cdot [\text{age}_{it} = a] + \gamma_t + \delta X_{it} + \varepsilon_{it} \quad (1)$$

- As well as age and time fixed effects, control for other characteristics: education, region, marital status, partner's age and education
- Exploits that fact that people born after April 1950 have a gradually higher state pension age
- Implement the **Borusyak, Jaravel, and Spiess (2024)** imputation method
- Key assumption: “common trends” i.e. without reform outcomes for 59 year olds would have changed in the same way as for 60+ year olds
- **We examine effect of being over SPA on income, household expenditure and wellbeing**
  - Focusing mostly on those not in paid work at age 58

# Individuals out of work at 58 remain out of work

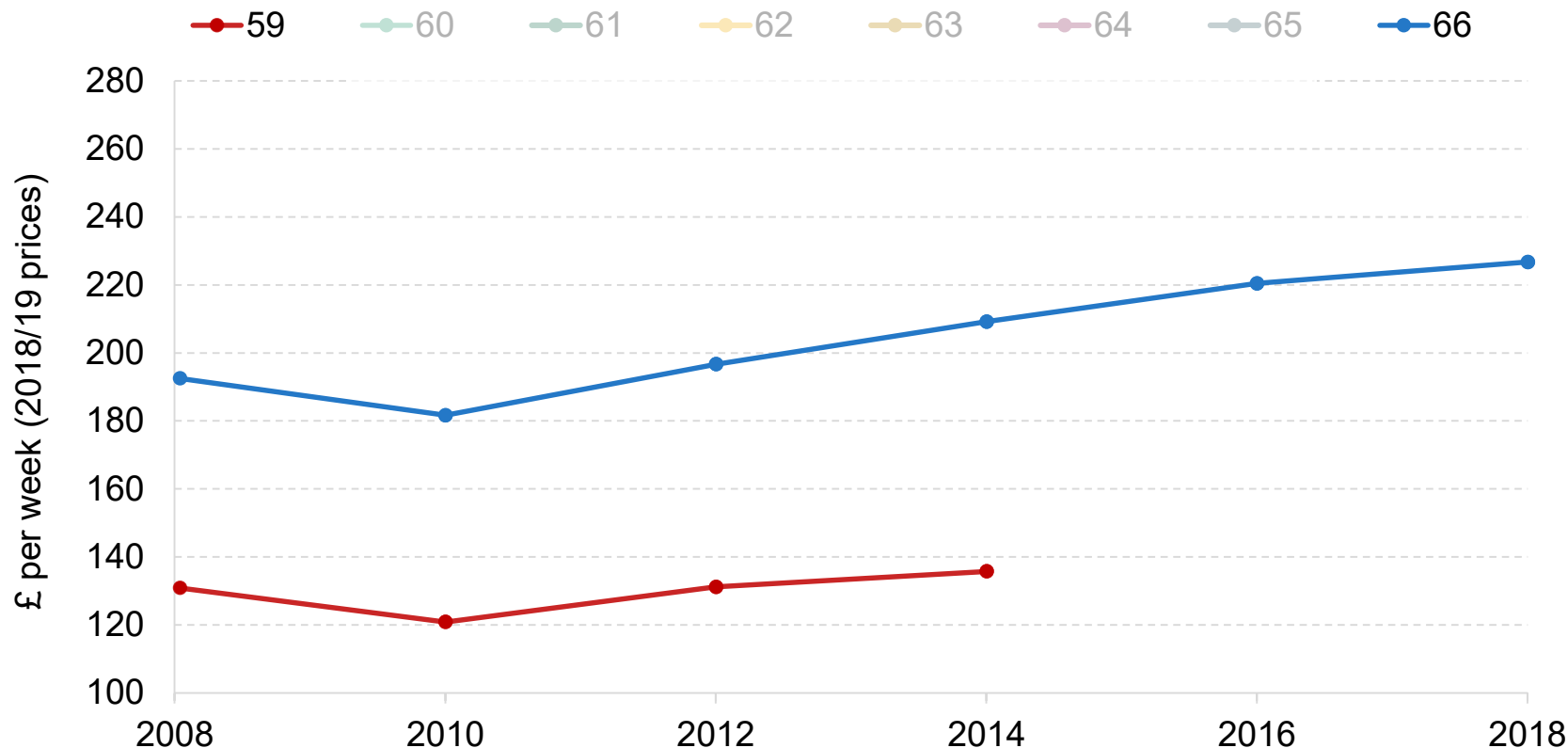
## Effect on employment of being above SPA

	All	In work at 58	Out of work at 58
Above SPA	-0.11***	-0.16***	0.01
95% confidence interval	[-0.16, -0.06]	[-0.21, -0.12]	[-0.04, 0.07]
Observations	7,281	4,580	2,611
Mean	0.49	0.74	0.05

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Results can be interpreted as the average percentage point difference in probability of employment between individuals above the SPA compared to those below the SPA, holding constant age, time and individual characteristics.

# For women out of work early, income falls as SPA increases

Mean income of women (out of work at 58) over time, by single year of age

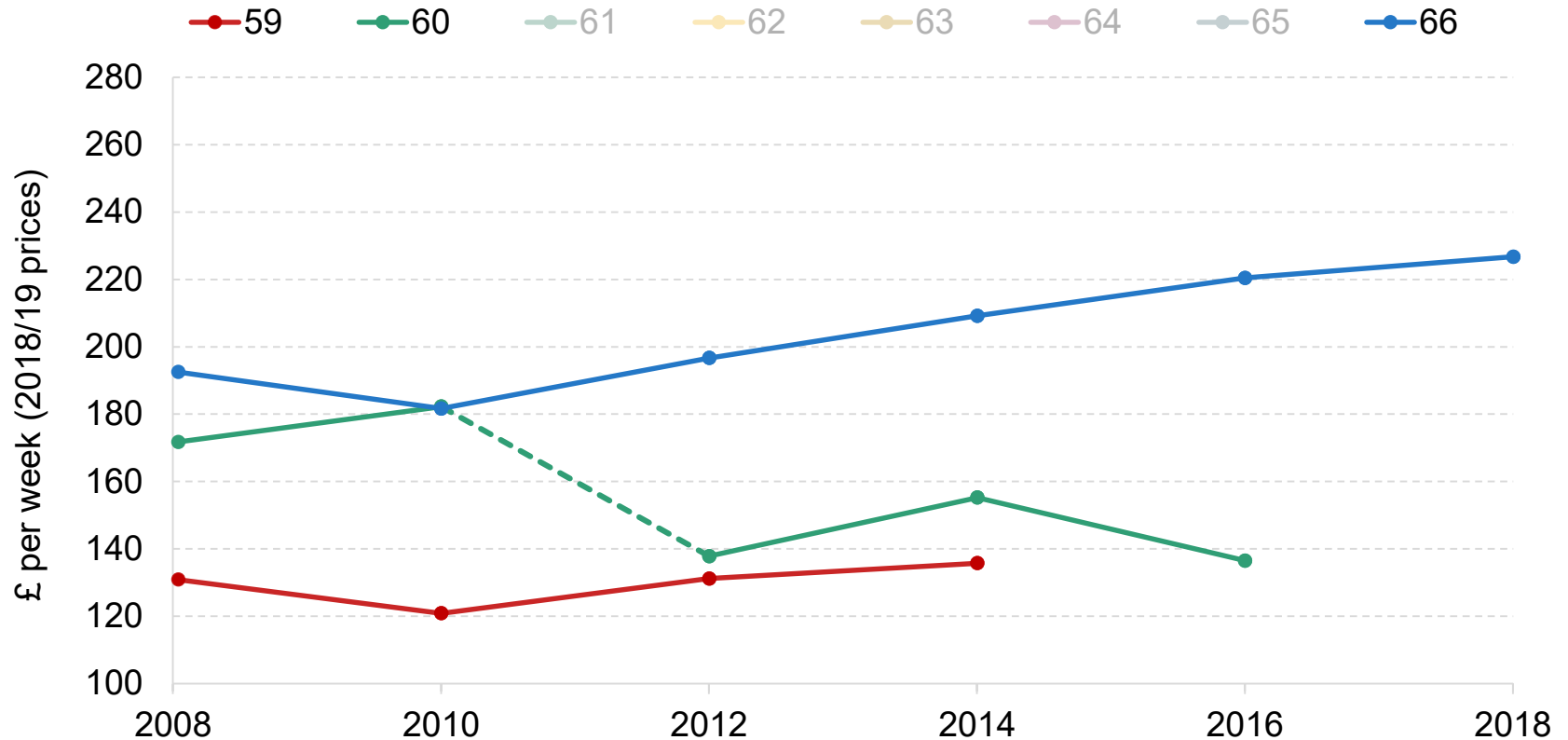


Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.



# For women out of work early, income falls as SPA increases

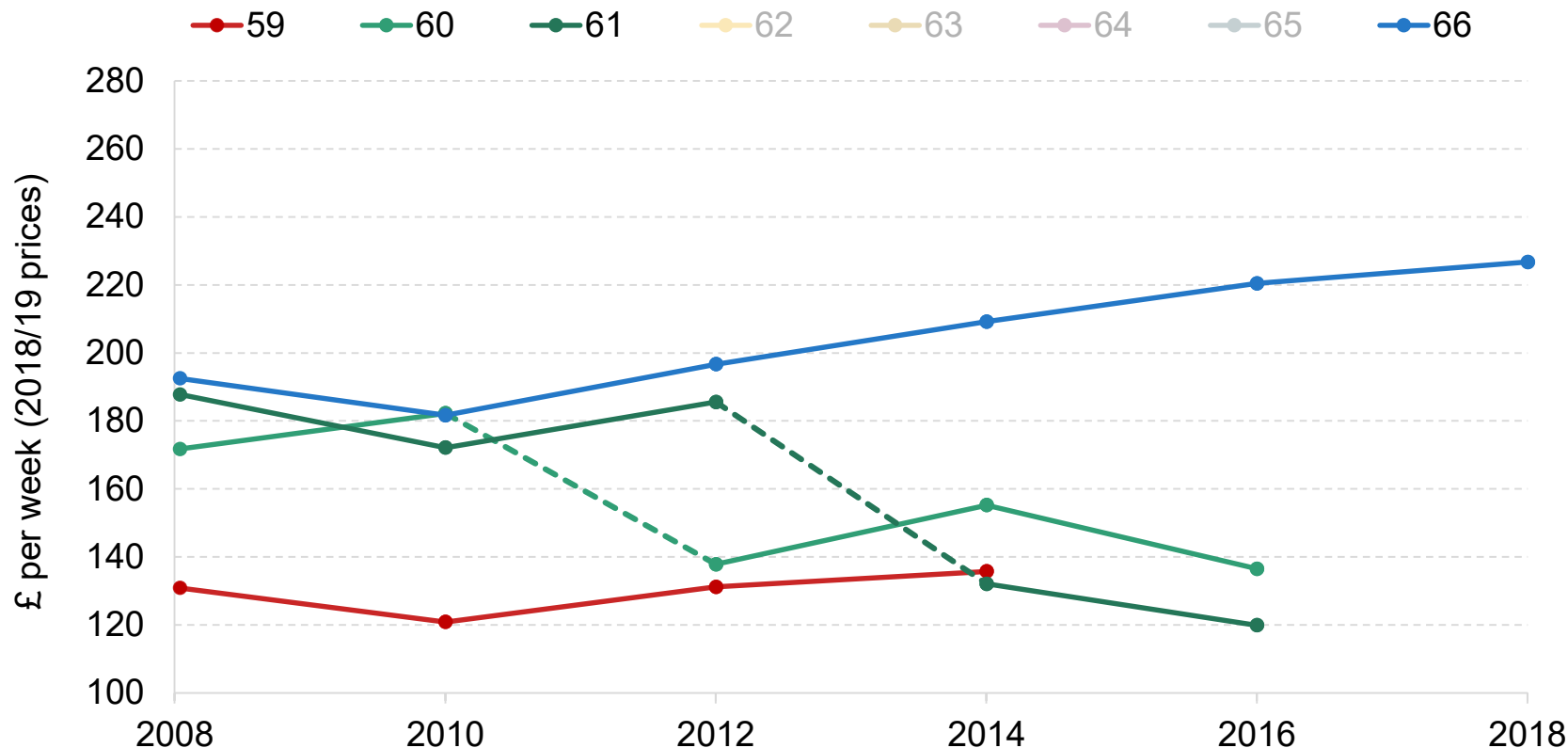
Mean income of women (out of work at 58) over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.

# For women out of work early, income falls as SPA increases

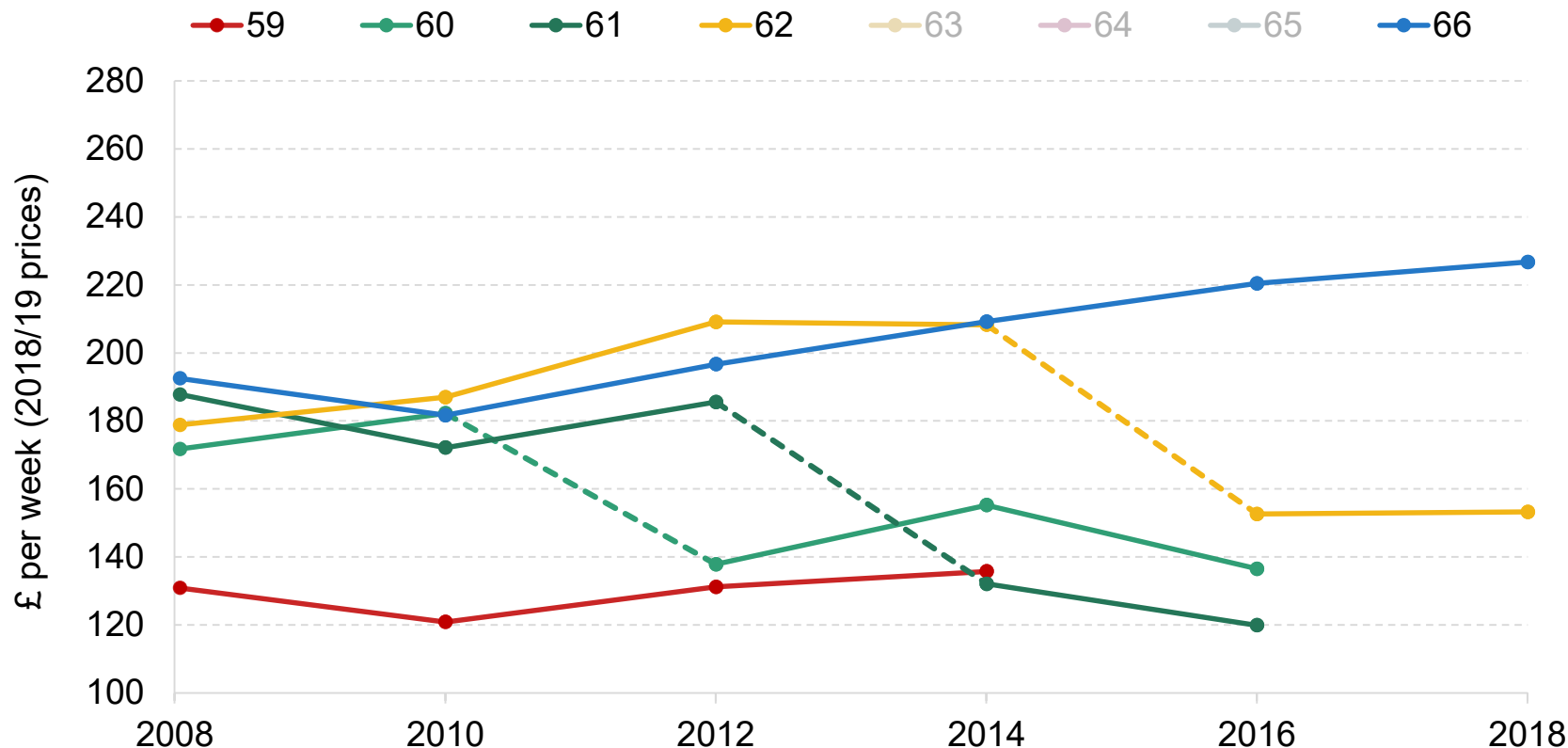
Mean income of women (out of work at 58) over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.

# For women out of work early, income falls as SPA increases

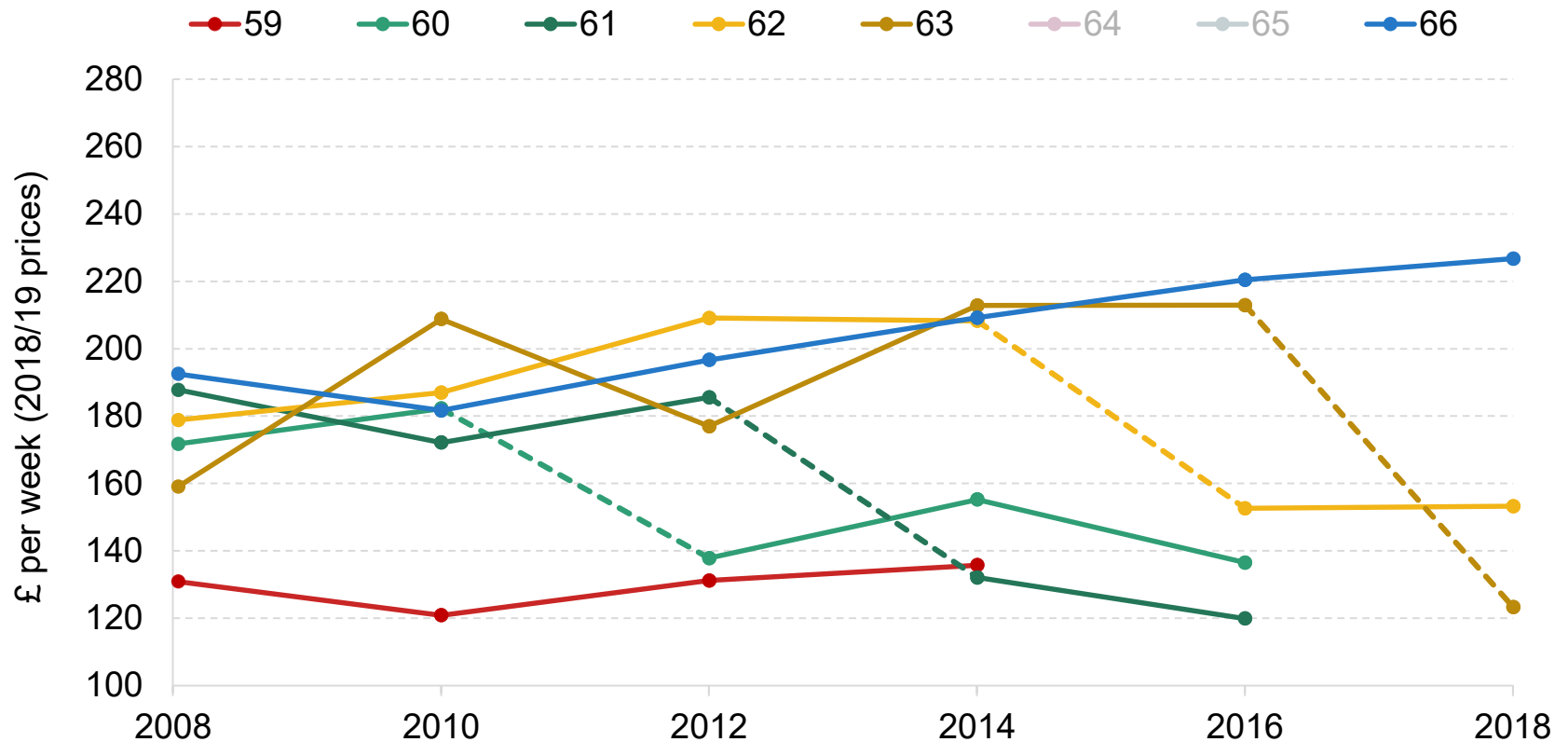
Mean income of women (out of work at 58) over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.

# For women out of work early, income falls as SPA increases

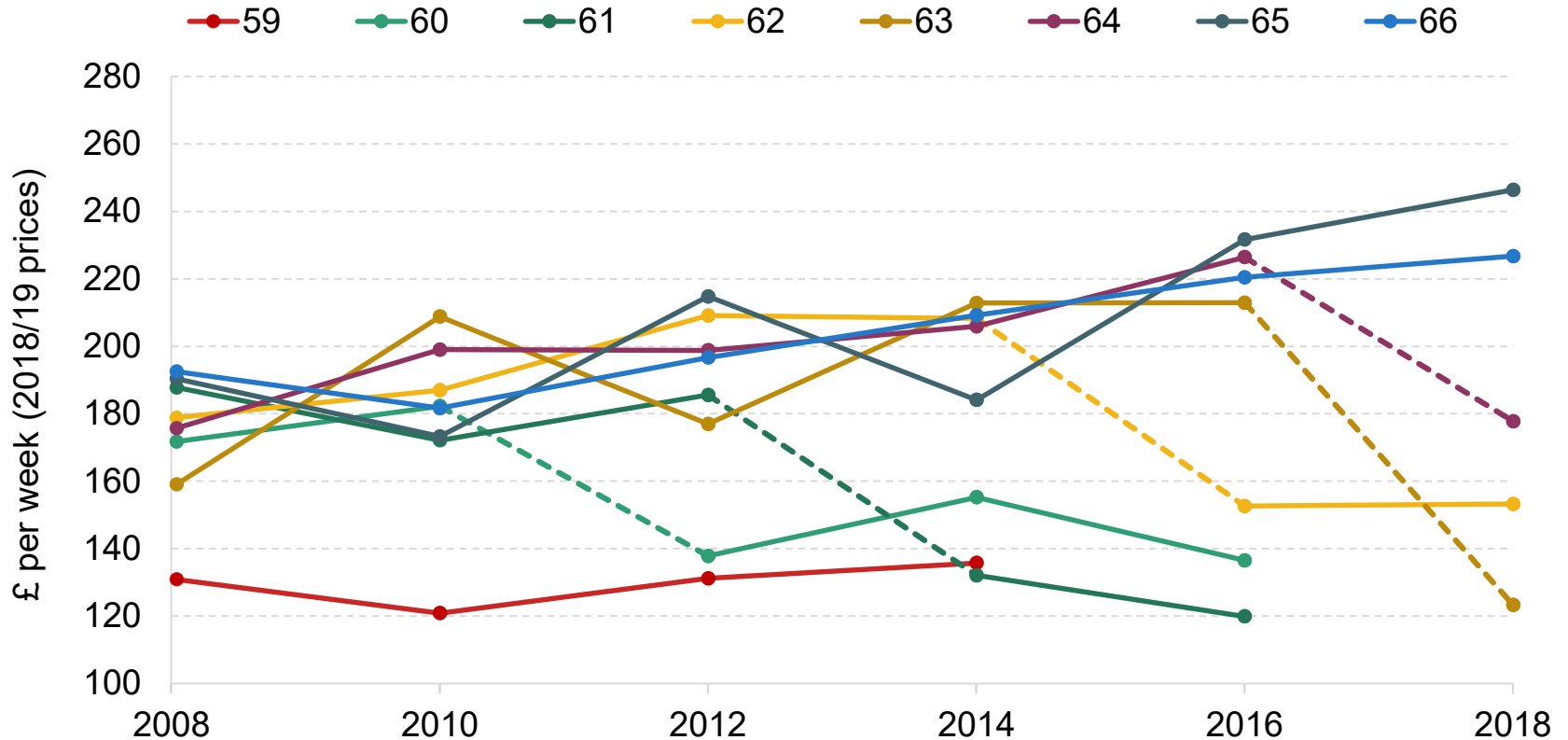
Mean income of women (out of work at 58) over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.

# For women out of work early, income falls as SPA increases

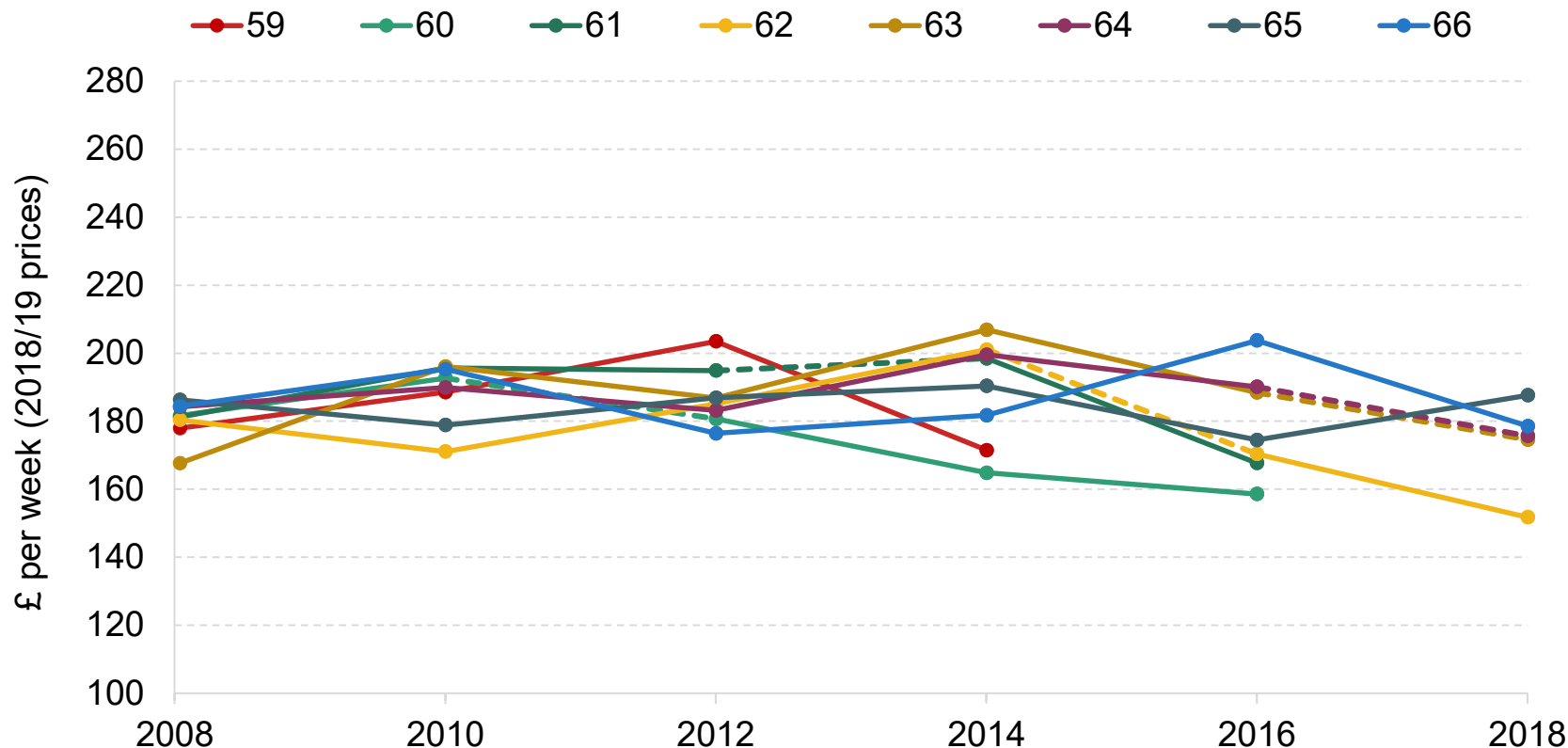
Mean income of women (out of work at 58) over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Income is given in 2018/19 prices and is winsorized to the 95th percentile.

# For women out of work early, expenditure is less responsive to SPA increase

Mean household expenditure over time, by single year of age



Note: The lines are dashed from the last year in which all women of that age were over the SPA until the first year in which all women of that age were under the SPA. Only including households of women who are out of work at age 58. Household expenditure excludes durables and transfers. Expenditure is given in 2018/19 prices and is winsorized to the 95th percentile.



---

# Regression results

---

# Income results: Individual



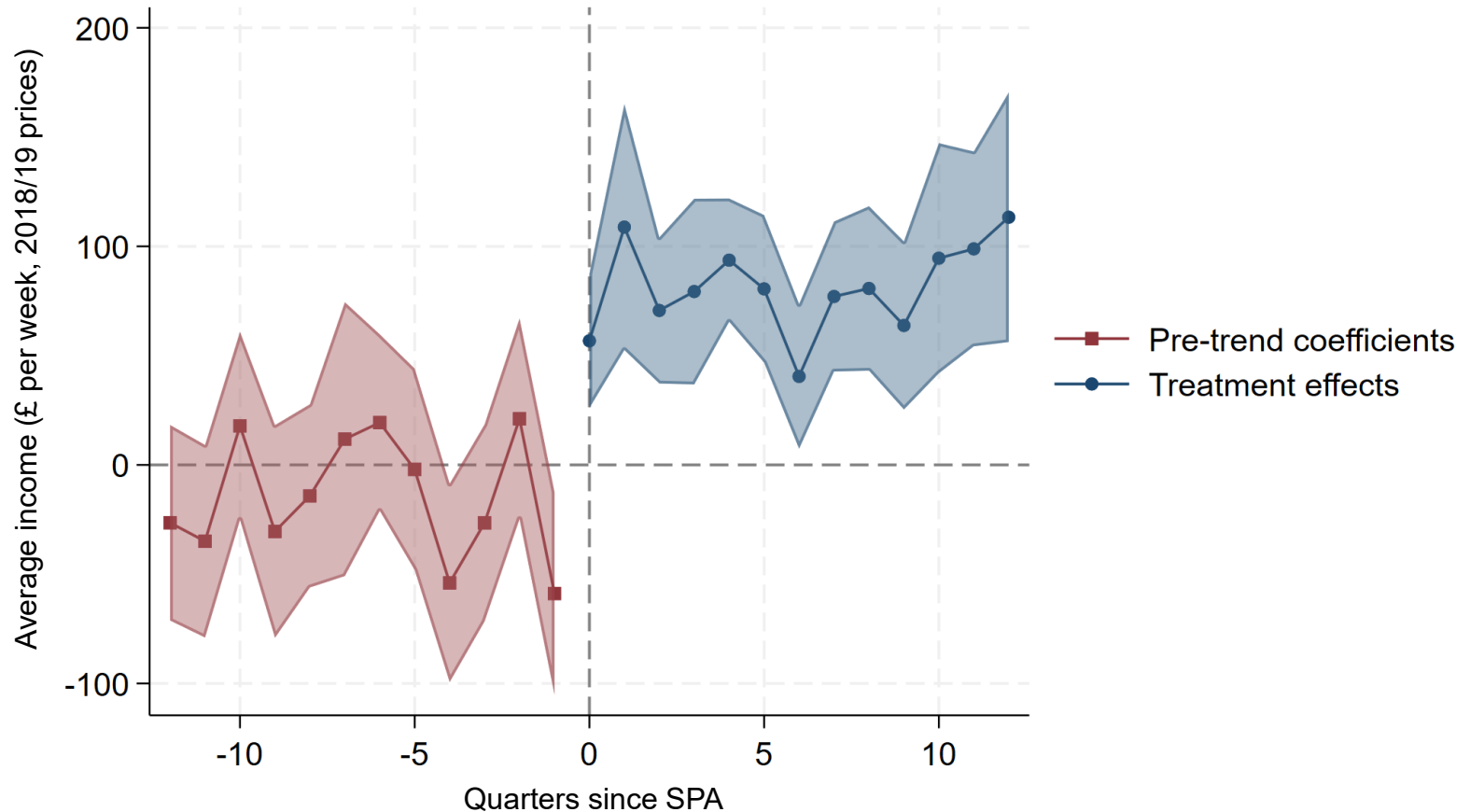
## Total individual income

	All	In work at 58	Out of work at 58
Above SPA	47.7***	42.2***	81.1***
95% confidence interval	[22.0, 73.4]	[14.0, 70.4]	[47.5, 115]
Observations	7,258	4,568	2,600
Mean	253.2	304.1	165.8

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Income is given in £ per week, in 2018/19 prices. Results can be interpreted as the average pound difference in income between individuals above the SPA compared to those below the SPA, holding constant age, time, and individual characteristics. Income includes that from: employment, self-employment, private pension, state pension, state benefits. Income is winsorized to the 99<sup>th</sup> percentile. Mean is calculated amongst women aged 58-66.



# Individual income: Not in work at 58



Graph shows the average change in weekly individual income, holding constant age, time, and individual characteristics. Income includes that from: employment, self-employment, private pension, state pension, state benefits. Income is winsorized to the 99<sup>th</sup> percentile.

# Income results: Including Partner



## Income including partner

	All	In work at 58	Out of work at 58
Above SPA	43.6*	5.62	97.0**
95% confidence interval	[-3.00, 90.1]	[-52.7, 63.9]	[12.4, 182]
Observations	7,257	4,567	2,600
Mean	623.2	684.1	518.7

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Income is given in £ per week, in 2018/19 prices. Results can be interpreted as the average pound difference in income between individuals above the SPA compared to those below the SPA, holding constant age, time, and individual characteristics. Income includes that from: employment, self-employment, private pension, state pension, state benefit and asset income. Income is winsorized to the 99<sup>th</sup> percentile. Mean is calculated amongst sample of women aged 58-65.

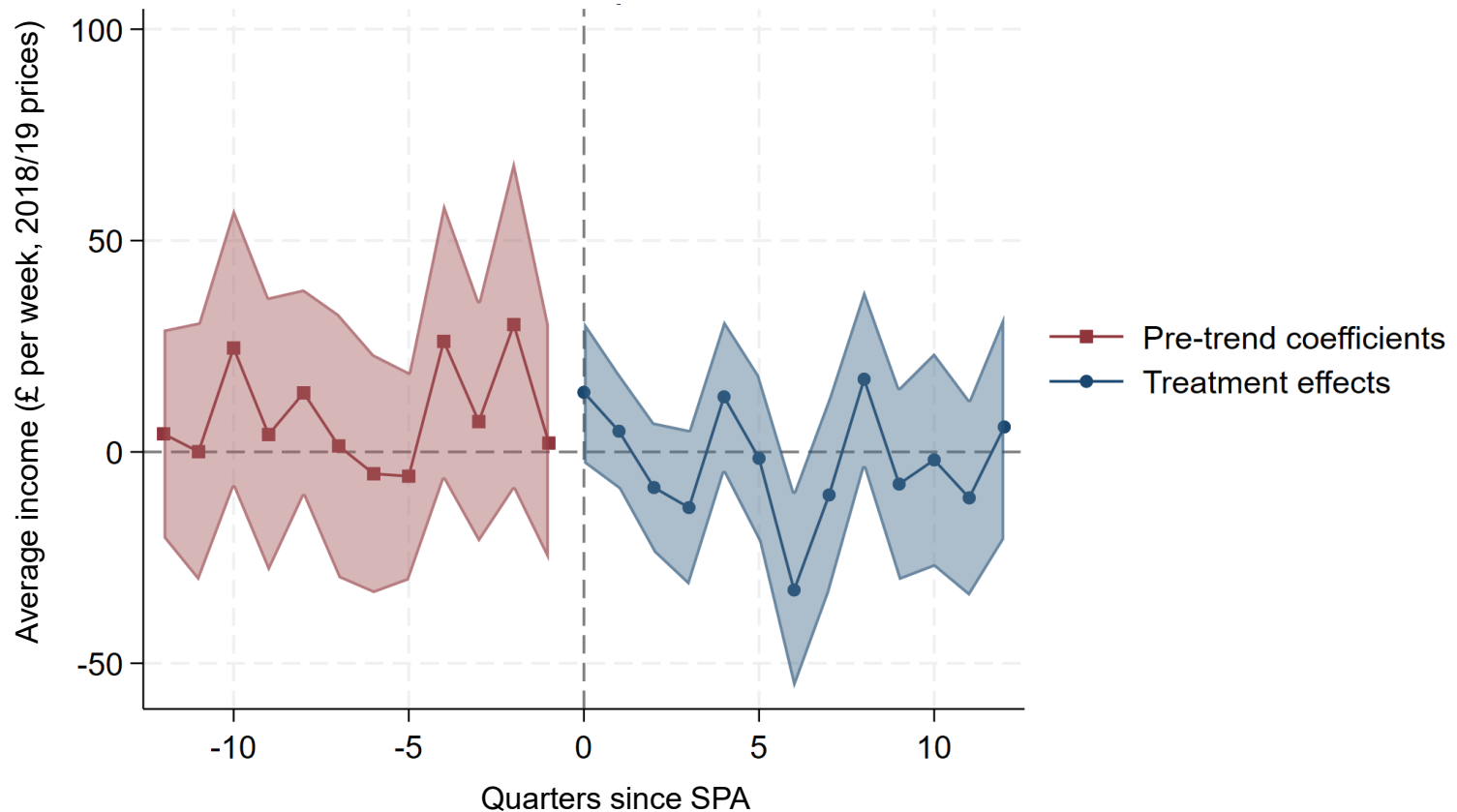
# Expenditure results

## Total expenditure

	All	In work at 58	Out of work at 58
Above SPA	-5.18	-3.12	-6.08
95% confidence interval	[-15.1, 4.80]	[-15.8, 9.61]	[-19.0, 6.84]
Observations	6,988	4,404	2,501
Mean	179.7	188.6	164.6

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Expenditure is given in £ per week, in 2018/19 prices. Results can be interpreted as the average pound difference in household expenditure between individuals above the SPA compared to those below the SPA, holding constant age, time and individual characteristics. Expenditure includes food in home, food out, leisure, gas and electricity, clothing. Expenditure is winsorized to the 99<sup>th</sup> percentile. Mean is calculated amongst sample of women aged 58-65.

# Expenditure: Not in work at 58



Graph shows the average change in weekly household expenditure, holding constant age, time, and individual characteristics. Expenditure includes food in home, food out, leisure, gas and electricity, clothing. Expenditure is winsorized to the 99<sup>th</sup> percentile.

# Expenditure results: by component



## Components of expenditure for those out of work at 58

	Food in home	Gas and electricity	Clothes	Food out	Leisure
Above SPA	-4.30	-3.48**	1.44	-0.80	0.93
95% confidence interval	[-12.1, 3.46]	[-6.70, -0.254]	[-3.91, 6.79]	[-3.97, 2.36]	[-3.56, 5.41]
Observations	2,602	2,517	2,596	2,606	2,604
Mean	84.5	28.5	19.3	13.3	17.0

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Expenditure is given in £ per week, in 2018/19 prices. Results can be interpreted as the average pound difference in expenditure between individuals above the SPA compared to those below the SPA, holding constant age, time and individual characteristics. 'Gas and electricity' also includes spending on oil, paraffin, coal and wood for the home. Expenditure is winsorized to the 99<sup>th</sup> percentile. Mean is calculated amongst women aged 58-65 who are not in work at age 58.

# Wellbeing results: Life Satisfaction



## Life satisfaction score

	All
Above SPA	0.32*
95% confidence interval	[-0.003, 0.64]
Observations	3,869
Mean	7.2

\*\*\*, \*\* and \* denote that the effect is significantly different from zero at the 1%, 5% and 10% level respectively. Results can be interpreted as the average change in life satisfaction score between individuals above the SPA compared to those below the SPA, holding constant age, time and individual characteristics. Life satisfaction score is on a scale from 0-10, with 0 indicating the individual did not feel satisfied at all yesterday, and 10 indicating they felt very satisfied. The sample size is smaller for this outcome as it is only asked from wave 6 of ELSA onwards (2010-11 onwards). Mean is calculated amongst sample of women aged 58-65. Insufficient sample size to estimate out of work at 58.

# Conclusions

- When the SPA increases, for women already out of the workforce and under the SPA:
  - Individual income is **lower**
  - Total income including partner is **lower**
  - Household expenditure largely **unresponsive**
  - Wellbeing shows signs of potential **decline**
    - Life satisfaction is worse

The Institute for Fiscal Studies  
7 Ridgmount Street  
London  
WC1E 7AE

[www.ifs.org.uk](http://www.ifs.org.uk)





# Expenditure shares

- Compare expenditure components in ELSA to Living Costs and Food Survey (LCFS)
  - Comparison group: 55-70 age group in 2018/19
- Expenditure categories in ELSA make up 37% of total spending in LCFS
- Main missing components
  - Transport (15%)
  - Rent (5%)
  - Packaged holidays (6%)
  - Furniture and other equipment (7%)

[back](#)