State pension age increases and the circumstances of older women

Neil Amin-Smith
joint with Rowena Crawford

ELSA Wave 8 Launch Event
17th October 2018
Motivation and overview

Population ageing means (state) pension eligibility ages are rising in many advanced economies, likely to continue doing so.

UK state pension age for women has been rising since 2010 and will continue to do so for both men and women.

→ important to know the effect this is having on those affected.
State pension age increases and the circumstances of older women

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Reform details

Female state pension age

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The period of increase is covered by ELSA waves 5 to 8
Motivation and overview

→ Can look at the activities and circumstances of women 60-63 both under and over SPA during this period.

ELSA covers a broad range of areas

• Previous work focused on labour supply and income
• We look at health, time use, caring responsibilities, social participation
• Can also use ELSA to look at activities by subgroup:
  – Knowledge of SPA
  – Credit constrained
  – Economic situation at age 58
Outline

Why change in SPA may affect behaviour

Empirical methodology

Effect on employment and variation across groups

Effect on other outcomes
Outline

Why change in SPA may affect behaviour

Empirical methodology

Effect on employment and variation across groups

Effect on other outcomes
Why might we expect the SPA reform to affect labour supply?

1. **Change in lifetime wealth**
   - Change in total state pension benefits and in contributions
   - Anticipated upon announcement?

2. **Change in incentives to work**
   - Those over SPA not liable for employee NI contributions
   - Better out-of-work benefits when above SPA

3. **Credit constraints**
   - Those without access to other funds may need to work if no SP income

4. **Signalling effect**
   - SPA = appropriate age at which to retire?
Why might we expect the SPA reform to affect activities and circumstances?

Income

- Removal of state pension income
- Changes to employment income (if change behaviour)
- Changes to other benefit claiming/eligibility

Wider set of outcomes e.g. time-use, or physical/mental health

- Could relate to employment responses
- Or to changes in income and wealth
- Other, less easily identifiable, channels
Outline

Why women with higher SPA might behave differently

Empirical methodology

Effect on employment – variation across groups

Effect on other outcomes
Employment, wave 4 vs wave 8

- Wave 4:
  - Year 58: 60%
  - Year 59: 61%
  - Year 60: 62%
  - Year 61: 63%
  - Year 62: 64%
  - Year 63: 65%
  - Year 64: 63%
  - Year 65: 60%

- Wave 8:
  - Year 58: 70%
  - Year 59: 71%
  - Year 60: 72%
  - Year 61: 73%
  - Year 62: 74%
  - Year 63: 75%
  - Year 64: 72%
  - Year 65: 70%

LEGEND:
- Green = below SPA
- Blue = above SPA
- Light green = mix of below and above SPA
Econometric specification

We follow methodology used in Cribb et al (2016)

Compare similar women (aged 60-63) above and below the SPA

Gradual roll-out of the reform and repeated nature of ELSA data → greater sample size and can control for time and cohort effects

\[
Y_{it} = \beta_1 SPA_{it} + \sum_a \delta_a \cdot (age_{it} = a) + \gamma_t + \beta_2 C_i + \beta_3 X_{it} + \epsilon_{it}
\]

\( Y_{it} = \) outcome \hspace{1cm} \( X_{it} = \) vector of controls \hspace{1cm} \( \gamma_{it} = \) time dummies (quarters)

\( C_i = \) financial year of birth \hspace{1cm} \( SPA_{it} = \) under state pension age
Outline

Why women with higher SPA might behave differently

Empirical methodology

Effect on employment and variation across groups

Effect on other outcomes
### Effect on employment of being under SPA

<table>
<thead>
<tr>
<th></th>
<th>In work (last month)</th>
<th>Working full-time</th>
<th>Working part-time</th>
<th>Partner’s employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average marginal effect</strong></td>
<td>10.1ppt***</td>
<td>8.7ppt***</td>
<td>4.4ppt*</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Standard error</strong></td>
<td>(2.1)</td>
<td>(2.1)</td>
<td>(2.5)</td>
<td>(2.4)</td>
</tr>
<tr>
<td><strong>Proportion among women aged 60-63 below SPA in 2016-17</strong></td>
<td>50%</td>
<td>19%</td>
<td>31%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Proportion among women aged 60-63 below SPA in 2016-17.
How does response vary by knowledge of SPA?

E.g. Women who are surprised not to be eligible upon turning 60, will experience a shock to income (and lifetime wealth) at this point

- Might adjust labour supply in response

We use knowledge of SPA at age 58

<table>
<thead>
<tr>
<th>Actual SPA:</th>
<th>Didn’t know to within 3 months</th>
<th>Didn’t know to within 6 months</th>
<th>Didn’t know to within 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exactly 60</td>
<td>17%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>60-64</td>
<td>66%</td>
<td>56%</td>
<td>41%</td>
</tr>
<tr>
<td>65-66</td>
<td>67%</td>
<td>62%</td>
<td>36%</td>
</tr>
</tbody>
</table>
# Effect on employment of being under SPA

<table>
<thead>
<tr>
<th>Knows/doesn’t know to within three months</th>
<th>Knows/doesn’t know to within six months</th>
<th>Knows/doesn’t know to within 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average marginal effect (knows SPA)</strong></td>
<td>14.9ppt***</td>
<td>15.2ppt***</td>
</tr>
<tr>
<td><strong>Average marginal effect (doesn’t know SPA)</strong></td>
<td>6.2ppt**</td>
<td>4.2ppt</td>
</tr>
<tr>
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<td></td>
<td>2.4ppt</td>
</tr>
</tbody>
</table>

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State pension age increases and the circumstances of older women
How does employment response vary if credit constrained?

Those who have few other financial resources to draw on may respond differently – more likely to be moved to work?

We test three measures of being credit constrained

• Having net financial wealth < £2,000
• Having net financial wealth < £8,000
• Not owning own home

Counterintuitively, larger employment response to being below SPA among those not credit constrained

• In fact, results on knowledge of SPA offer some support to this finding
• Those with fewest resources least able to respond?
How does employment response vary by economic situation at age 58?

Whether individual was employed aged 58

• Being in work → larger (+ve) response to SPA increase
• Easier to find/stay in work if already/recently employed?

Whether in receipt of benefit income aged 58

• Smaller effect among those in receipt than those not
• Unsurprising? 1/3 of those on benefits at 58 receiving Disability Living Allowance and 1/4 incapacity benefit
Outline

Why women with higher SPA might behave differently

Empirical methodology

Effect on employment and variation across groups

Effect on other outcomes
Time use

Look at effect on:

- Whether has been on a holiday in past year
- Whether has a hobby/pastime
- Hours of television watched (per day)
- Whether provided any informal care (in past week)
- Whether provided >=35 hours of informal care (in past week)
- Whether looked after grandchildren (in past week)

Find no statistically significant effects

However:

- Effects could be spread across different activities → harder to pick up
- Outcome measures used are relatively coarse
Cultural activities

Construct a cultural activity score depending on how many of the following they do at least monthly:

- Go to a concert/theatre/opera
- Go to the cinema
- Go to a museum or gallery
- Eat out

Find a statistically significant fall in the score from being under SPA:

- By 0.08 on the four point scale
- Equivalent to an average 11% fall relative to baseline
Social isolation and loneliness

Number of times each individual sees friends per month

Loneliness

• Construct a scale based on whether respondent often feels: ‘lacking companionship’/’left out’/’isolated from others’/’lonely’

Social isolation

• Construct a scale based on relationship status/seeing family and friends/being a member of a club/organisation
## Social isolation and loneliness

<table>
<thead>
<tr>
<th></th>
<th>Meetings with friends per month</th>
<th>Loneliness</th>
<th>Social isolation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average marginal effect</strong></td>
<td>-0.42**</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Standard error</strong></td>
<td>(0.21)</td>
<td>(0.04)</td>
<td>(0.06)</td>
</tr>
<tr>
<td><strong>Mean among women aged 60-63 below SPA in 2016-17</strong></td>
<td>3.9</td>
<td>0.28</td>
<td>1.3</td>
</tr>
</tbody>
</table>

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Health

No significant effect on depression or quality of life (CASP-19 score)

• This could be due to multiple effects working in opposite directions

Significant 7 ppt reduction in moderate mobility problems

• Increase in paid work provides an impetus to keep active?
• No significant effect on severe mobility problems (these perhaps more fundamental?)

No significant effect on:

• Cognitive ability
• Self-reported health
Summary

SPA increase has led to 10ppt increase in employment

- Smaller effect among those with fewer financial resources
- No positive effect for those who didn’t know their true SPA, or those out of work or receiving benefits age 58

<table>
<thead>
<tr>
<th>Positive effect</th>
<th>No effect</th>
<th>Negative effect</th>
</tr>
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<tbody>
<tr>
<td>Moderate mobility problems ↓</td>
<td>Severe mobility problems</td>
<td>Seeing friends</td>
</tr>
<tr>
<td>Depression, loneliness, or social isolation</td>
<td>Cultural activities</td>
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<tr>
<td>Time use or caring activities</td>
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</table>

There may be longer-term effects that we cannot yet pick up, and effects may differ at higher ages (we only look at women below SPA aged 60-63)