Shifting into the lean and slippered pantaloon? Employment in the sixth age

Gemma Tetlow

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Recent evidence on employment of older people

- Trends in employment rates
- Who is more (and less) likely to be in work?
  - Gender, health, education level, wealth, family circumstances
- Transitioning to retirement:
  - How does it happen?
  - What precipitates (or delays) it?
- In particular:
  - Changes in hours and importance of self-employment
  - Response to financial and other incentives
  - Effect of some policy changes: reforms to disability-related benefits, increasing the female state pension age
Employment rates of older men have been increasing since the mid-1990s

% of men in employment, by age group

Source: Figure 1.1, Banks, Emmerson and Tetlow (2014).
Employment rates of older women have increased even more substantially

% of women in employment, by age group

Source: Figure 1.1, Banks, Emmerson and Tetlow (2014).
These trends have contributed to very stable fraction of adult population being in labour force

% of people in the labour force

Employment rates are strongly correlated with individual characteristics/circumstances

- Education
- Wealth
- Health
Definition of variables

- Using data from the English Longitudinal Study of Ageing (ELSA)
- Education
  - Low = left school at or before compulsory school leaving age
  - Mid = left full-time education after CSL but before age 19
  - High = left full-time education at age 19 or older
- Wealth
  - Total household non-pension wealth
  - Quintiles defined within each 5-year age group
- Health
  - Index estimated as first principal component from analysis of over 20 indicators of objective and subjective health
  - Quintiles defined across all age groups
- Part-time work: less than 35 hours per week (usual hours)
More highly educated are more likely to work

% of men working, 2012–13

Source: Chandler and Tetlow (forthcoming).
More highly educated are more likely to work

% of women working, 2012–13

Source: Chandler and Tetlow (forthcoming).
Lowest and highest wealth most likely to be out of work before the state pension age

% of men working, 2012–13

Source: Chandler and Tetlow (forthcoming).
Employment is strongly related to health

% of men working, 2010–11

<table>
<thead>
<tr>
<th>Health Level</th>
<th>55-59</th>
<th>60-64</th>
<th>65-69</th>
<th>70-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Chandler and Tetlow (forthcoming).</td>
<td></td>
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<td></td>
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</table>
Employment rates are strongly correlated with individual characteristics/circumstances

- **Education**
  - More highly educated are more likely to be in work
  - Especially beyond state pension age

- **Wealth**
  - Before state pension age: “inverse-U” relationship
  - After state pension age: wealthier more likely to be in work

- **Health**
  - Healthier more likely to be in work

- **Employment rates of some groups already much lower than average by age 50**
  - Understanding/addressing low participation rates for these groups will require looking at behaviour pre-50
  - Least healthy, low educated women, lowest wealth
Moving into retirement

• How do people transition from “work” to “retirement”?
  – How important is part-time work?
  – How important is self-employment?
  – Do workers move jobs in order to reduce their hours of work?

• When do people exit the labour force?
  – What factors influence this?
  – Are different factors important for different people?
Part-time work and self-employment play a significant role in the retirement pathway...

Subsequent employment trajectories for men aged 50–54 working full-time in 2002–03

Source: Chandler and Tetlow (forthcoming).
...with part-time work being more important for women

Subsequent employment trajectories for women aged 50–54 working full-time in 2002–03

Source: Chandler and Tetlow (forthcoming).
How flexible is the UK labour market?

- Reducing hours of work is likely to be easier in a flexible labour market
  - i.e. variety of “job packages” available
- Indicator of flexibility: are people able to change hours within the same job or do they change jobs to achieve reduced hours?
- Using data from the English Longitudinal Study of Ageing (ELSA)
  - Waves 1–5 (2002/03 to 2010/11)
  - Focus on those who work in consecutive waves
  - Reduction in hours defined as usual hours being at least 5 hours per week shorter than reported in previous wave
Reducing hours of work is associated with moving jobs...

Job and hours changes among those who stay in work

<table>
<thead>
<tr>
<th>%</th>
<th>Men 50–59</th>
<th>Women 50–59</th>
<th>Low educated</th>
<th>Mid educated</th>
<th>High educated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stayers, no reduction</td>
<td>60.9</td>
<td>65.6</td>
<td>65.9</td>
<td>65.3</td>
<td>58.7</td>
</tr>
<tr>
<td>Movers, no reduction</td>
<td>13.9</td>
<td>13.3</td>
<td>12.1</td>
<td>14.1</td>
<td>12.3</td>
</tr>
<tr>
<td>Stayers, reduction</td>
<td>16.8</td>
<td>14.7</td>
<td>14.4</td>
<td>13.5</td>
<td>20.2</td>
</tr>
<tr>
<td>Movers, reduction</td>
<td>8.5</td>
<td>6.5</td>
<td>7.6</td>
<td>7.1</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
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<th>Women 50–59</th>
<th>Low educated</th>
<th>Mid educated</th>
<th>High educated</th>
</tr>
</thead>
<tbody>
<tr>
<td>P(Move</td>
<td>No reduction)</td>
<td>0.19</td>
<td>0.17</td>
<td>0.16</td>
<td>0.18</td>
</tr>
<tr>
<td>P(Move</td>
<td>reduction)</td>
<td>0.34</td>
<td>0.31</td>
<td>0.35</td>
<td>0.34</td>
</tr>
<tr>
<td>P(Reduce</td>
<td>No move)</td>
<td>0.22</td>
<td>0.18</td>
<td>0.18</td>
<td>0.17</td>
</tr>
<tr>
<td>P(Reduce</td>
<td>move)</td>
<td>0.38</td>
<td>0.33</td>
<td>0.38</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Source: Banks, Blundell and Emmerson (2012).
...this result is robust to controlling for other characteristics

OLS regression of change in hours of work (among those who remain in work)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Low educated</th>
<th>Mid educated</th>
<th>High educated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any job change</td>
<td>-2.03</td>
<td>-0.74</td>
<td>-1.51</td>
<td>-1.51*</td>
<td>-0.99</td>
</tr>
<tr>
<td>Change employer</td>
<td>-0.91</td>
<td>-1.83</td>
<td>-2.66**</td>
<td>-0.53</td>
<td>-1.33</td>
</tr>
<tr>
<td>Move to self-empl</td>
<td>-5.28</td>
<td>-3.00</td>
<td>1.89</td>
<td>-0.25</td>
<td>-9.22***</td>
</tr>
</tbody>
</table>

Notes: Each column reports the results from a separate OLS regression. Also control for age, sex, marital status, education, health and physical nature of job. * indicates significance at the 10% level; ** at 5%; *** at 1%.

Source: Banks, Blundell and Emmerson (2012).
How flexible is the UK labour market?

• Reducing hours of work is likely to be easier in a flexible labour market
  – i.e. variety of “job packages” available

• Indicator of flexibility: are people able to change hours within the same job or do they change jobs to achieve reduced hours?

• Using data from the English Longitudinal Study of Ageing (ELSA)
  – Waves 1–5 (2002/03 to 2010/11)
  – Focus on those who work in consecutive waves
  – Reduction in hours defined as usual hours being at least 5 hours per week shorter than reported in previous wave

• Moving jobs is significantly associated with reducing hours of work: suggests labour market has some rigidities
  – Self-employment particularly important for high educated in reducing hours of work
What factors precipitate labour force exit?

- Numerous factors are known to be important
  - Health
  - Financial incentives
  - Family circumstances: including joint retirement of couples
  - Reaching state pension age
  - Demand-side factors
Least healthy exit work more quickly

Employment rates in subsequent years, among those initially working (men, initially aged 50–54)

Source: Chandler and Tetlow (forthcoming).
Least healthy exit work more quickly

Employment rates in subsequent years, among those initially working (women, initially aged 50–54)

Source: Chandler and Tetlow (forthcoming).
Financial incentives matter

• Pensions (state and private) provide incentives to exit work at specific points

• Stock and Wise (1990) proposed the “option value” approach to modelling these incentives
  - Basic idea: want to continue working if it gives you the “option” of accruing greater pension rights that are worth more than any pension foregone by continuing to work/not draw

• Estimated this model using ELSA data (2002/03 to 2010/11)
  - Outcome of interest: leaving paid work between t and t+2
  - As a function of: period t characteristics and forward-looking option value measured in period t
Forward-looking financial incentives matter

Probit regression of leaving work between t and t+2

<table>
<thead>
<tr>
<th></th>
<th>Marginal effect</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option value</td>
<td>−0.006***</td>
<td>0.001</td>
</tr>
<tr>
<td>Health index (linear)</td>
<td>−0.020***</td>
<td>0.002</td>
</tr>
<tr>
<td>Couple</td>
<td>0.028***</td>
<td>0.009</td>
</tr>
<tr>
<td>Partner working</td>
<td>−0.041***</td>
<td>0.008</td>
</tr>
<tr>
<td>Net wealth</td>
<td>0.002</td>
<td>0.004</td>
</tr>
<tr>
<td>Low education</td>
<td>−0.024**</td>
<td>0.010</td>
</tr>
<tr>
<td>Mid education</td>
<td>−0.016</td>
<td>0.010</td>
</tr>
<tr>
<td>Self-employed</td>
<td>−0.037***</td>
<td>0.010</td>
</tr>
</tbody>
</table>

- 1 s.d. increase in option value reduces 1-year retirement probability by 2.8 ppts (baseline probability = 8.6%)
- Some evidence that response to financial incentives is different across health groups: exploring further in ongoing work

Source: Table 4.1, Banks, Emmerson and Tetlow (2014).
What do we know about the effect of policy changes?

Two examples:

1. Reforms to disability-related benefits
2. Increasing the female state pension age
Reforms to disability-related benefits

• 1995: Incapacity Benefit replaced Invalidity Benefit
  – Less generous to new claimants
  – “Own occupation” test replaced with “any occupation” test
  – Principally reduced on-flow

• 2003 onwards: Pathways to Work and Employment Support Allowance
  – Increased conditionality
  – Increased support
  – Increased financial incentives to return to work
  – Aimed to increase off-flow
Increases in employment rates coincide with policies that reduced disability benefit claiming

% of men receiving disability benefits (LH axis) and in employment (RH axis)

- % IVB/IB/ESA, ages 55-59
- % IVB/IB/ESA, ages 60-64
- % working, ages 55-59
- % working, ages 60-64

Source: Figures 1.1 and 2.3, Banks, Emmerson and Tetlow (2014).
Increasing the female state pension age

- Started to increase from 6 April 2010
  - Affects women born after 5 April 1950
- Not only affects age at which women can start to receive state pension
  - Knock-on effects on other aspects of tax and benefit system: including employee National Insurance and Pension Credit
- Receipt of state pension income is unaffected by level of earnings
  - In theory, decision to leave work and decision to start claiming state pension should be independent
  - Effect of increasing SPA on employment rates could have been small?
- What effect did it have in practice?
Employment of 60 year old women has risen

Source: Figure 2.2, Cribb, Emmerson and Tetlow (2013).
Employment rate among 60 year old women estimated to have increased by 7.3 ppts

- Using data up to 2012 Q2
  - Female state pension age had risen to age 61
- Difference-in-differences estimation strategy
  - Controlling for underlying differences between different cohorts and any common time trends/shocks
- Employment rate of 60 year old women increased by 7.3 ppts
- Employment rate of affected women’s husbands also increased
  - By 4.2 ppts among husbands aged 55–64
  - Evidence of complementarities in leisure

Source: Cribb, Emmerson and Tetlow (2013).
...employment of 61 year old women seems to be rising too

Summary (1)

- Employment rates of older people have been increasing since mid-1990s
- Less likely to be in work are:
  - Women: although their employment rates are catching up to men’s
  - Lower educated
  - Less healthy: labour force exit happens before age 50 for those in the worst health
  - Relationship between wealth and work changes at SPA
- Transitioning to retirement
  - Significant minority of full-time workers experience periods of part-time work and/or self-employment before retirement
  - Part-time work especially prevalent among women
  - Self-employment more common among men
Summary (2)

• Many workers who reduce their hours do so by changing job
  – Suggests some rigidity in the labour market?
  – For high educated, switch to self-employment particularly important for reducing hours

• Find evidence that financial incentives to retire do matter
  – 1 s.d. increase in option value reduces 1-year retirement probability by 2.8 ppts
  – But health, family circumstances, and reaching state pension age (among other things) also matter

• Some recent policy changes have had a significant effect on employment rates
  – Reforms to disability-related benefits (though no evidence yet on the most recent reforms)
  – Increasing female state pension age
References

- Banks, Blundell and Emmerson (2012), “Pathways for changes in hours worked at older ages: the role of within-job and between-job changes”, mimeo