The impact of increased conditionality for out-of-work lone parents
Evidence from the UK Labour Force Survey
Outline of presentation

• Quick background to the changes to Income Support
• Previous literature on policy evaluation
• Theoretical considerations
• Empirical method
• Data
• Results
• Summary
Background

Income support before reform

- Introduced in April 1988 to give support to those with low incomes and those not expected to work (lone parents, carers, disabled).
- Until Nov 2008, lone parents with youngest child age less than 16 were entitled to IS.
- There were no job search requirements for eligibility.

Income support after reform

- From Nov 2008 a lone parent with youngest child aged 12 and over will no longer be entitled to IS but will instead have to claim JSA.
- This signaled an increase in the conditions placed on claimants in return for benefits. To claim JSA you must be both available for and actively seeking work.
- Originally LPO should be extended to LP with youngest child age 7 but at the June budget, the Government announced the extension to lone parents with youngest child age 5.
Aim of the analysis

- The study assesses whether the first phase of the reform (affecting lone parents with youngest child aged over 12 and over) was successful in increasing the employment rate.
- The results can be useful when evaluating whether to extend conditionality to lone parents with younger children

(Can have problems with *external validity*. However, it is believed that the results are at least indicative of the effects of increasing conditionality for lone parents with younger children)
Studies on impact of increased conditionality - I

- Main obstacle:
  - Changes in financial incentives and changes in conditionality have often gone hand in hand => it has been difficult to isolate the impact of each of these policy instruments.
- Literature can be split into:
  1. Those evaluating changes to financial incentives for lone mothers (e.g. evaluating introduction of Working Families Tax Credit in 1999)
  2. Those evaluating changes in conditionality for those closer to the labour market (e.g. evaluating introduction of JSA in 1996)
  3. Those evaluating changes in conditionality for those further from the labour market, for instance lone mothers (US evidence and evaluation of the age-eligibility rule of withdrawing IS when the youngest child turns 16).
Studies on impact of increased conditionality - II

• Re 1) Lone parents respond to changes in financial incentives.
  • WFTC increased lone parent employment with 3-7 percentage points (Gregg and Harkness (2003), Gregg et. Al (2009), Francesconi and Van der Klaauw (2004)).

• Re 2) Effect of increased job search requirements is ambiguous.
  • Job centre Plus has positive effect on job entry outcomes (Karagiannaki (2007)).
  • Introduction of JSA increased off-flow from the claimant count (Manning (2005), Petrongolo (2009)).
  • No evidence of higher job search effort and higher job finding rates (Manning (2005)).
  • Negative impact on post unemployment earnings, did not help claimants into lasting jobs. Increased the incidence of other benefits (Petrongolo (2009)).

• Re 3) Low income families can be pushed further from the labour market
  • Reforms in US led to higher number of disconnected families (Blank and Kovac (2008)).
  • Age-eligibility rule of IS led to 3 percentage point increase in employment but also a 4.2 percentage point increase in health benefit claims (Soobedar (2009)).
What have we learned?

• Lone parents respond to financial incentive
• Increasing conditionality can have ambiguous effects.
  • The intended effect of increasing job search effort and job finding rate.
  • The unintended effect of reducing job search effort for some individuals – moving them off benefits because they do not meet the requirements or induce them to apply for other benefits.

• Have to think about whether the reform has the desired employment effects or whether it shifts people to other benefits or to temporary jobs.
• The intention with the IS reform was both to move people into jobs but also to induce them to claim the “right” benefit.
Theoretical considerations - I

• Build on search theory
  • Intensity of job search determines how long workers stay unemployed and in turn can be affected by changes in the level and duration of benefits
  • Jobseekers look for the best work at the highest pay.

• Introducing conditionality / search requirements
  • Increases job search effort, reduces reservation wage and increases job finding rates.
  • Might induce the unemployed to reduce search effort.

• Impacts formalised in model from Manning (2005).
  • The model implies that the level of job search requirements is important for determining whether the unemployed choose to increase or decrease their job search.
Theoretical considerations - III

- No eligibility criteria
- Rise in benefit level $b$, raises utility
- There is optimal search level $s$, so utility does not increase with search level

Source: Reproduced with few adaptations from Manning (2005)
Theoretical considerations - IV

- Eligibility criteria added
- Benefit level now conditional on search effort being above certain level, $S^*$. 
- For search effort below $S^*$, the unemployed will receive $b_L$. 

Source: Reproduced with few adaptations from Manning (2005)
Empirical method

• We want to measure the effect of treatment on our treatment group.
• Our outcome variable is the employment state
• Uses difference-in-difference method (DiD) as it addresses the issue of the missing counterfactual by exploring the presence of a control group.
• In a regression framework we control for a wide range of characteristics.
Assumptions

• DiD valid if treatment and control group follow same time trend. We test this by including *group-specific time trend*.
• Dependent variable is a binary variable. Use the Linear Probability Model but test that the results are robust by estimating a *Probit model*.
• Tests for spurious policy effects by estimating model with different policy quarters.
• Check robustness by use of other control groups.
• Tests whether impact is higher for lone mothers with low qualifications.
Data - I

- Uses the quarterly, individual Labour Force Survey.

Pre-reform period

2005Q1 2008Q3 2008Q4 2009Q3 2009Q4

Phase 1 (Nov 2008): Changes to IS for lone parents with youngest child aged 12 and over

Phase 2 (Oct 2009): Changes to IS for lone parents with youngest child aged 10 and over
Data - II

**Treatment group**
- Analysis of lone mothers
- No full time students.
- Youngest child age 12-15
- Age restricted to 27-59

**Control group**
- Control group is lone mothers
- No full time students
- Youngest child aged 5-10.
- Age restricted to working age

These restrictions leaves a total sample of treated and non-treated lone mothers of 36,330.
Age profile of lone mothers by age of child

- under 18
- 18-24
- 25-39
- 40-65

LP youngest child 12-15
LP youngest child <12
LP youngest child 5-10
Employment rate of lone mothers

- LP with youngest child age 12-15
- LP with youngest child age under 12
- LP with youngest child age 5-10
## Simple difference-in-difference estimate

Employment rates (per cent) and changes over time (p values in brackets)

<table>
<thead>
<tr>
<th>Category</th>
<th>Avg. employment rate pre treatment (2007q4-2008q3)</th>
<th>Avg. employment rate post treatment (2008q4-2009q3)</th>
<th>Difference</th>
<th>Difference-in-difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lone mother child age 12-15</td>
<td>70.4</td>
<td>73.4</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Lone mother child age 5-10</td>
<td>60.3</td>
<td>58.2</td>
<td>-2.1</td>
<td>5.1 (0.001)</td>
</tr>
<tr>
<td>Single women no children</td>
<td>77.9</td>
<td>76.4</td>
<td>-1.5</td>
<td>4.4 (0.000)</td>
</tr>
<tr>
<td>Women in couple child age 12-15</td>
<td>82.5</td>
<td>82.0</td>
<td>-0.5</td>
<td>3.5 (0.010)</td>
</tr>
</tbody>
</table>
### Probability of being employed. P- values in brackets

<table>
<thead>
<tr>
<th></th>
<th>LPM I</th>
<th>LPM II</th>
<th>LPM III</th>
<th>Probit model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong> [Lone mother (child 12-15) x post-reform (2008q4)]</td>
<td>0.042*** (0.000)</td>
<td>0.043*** (0.000)</td>
<td>0.027* (0.076)</td>
<td>0.058*** (0.000)</td>
</tr>
<tr>
<td>Lone mother (child 12-15)</td>
<td>0.049*** (0.000)</td>
<td>0.050*** (0.000)</td>
<td>0.036** (0.001)</td>
<td>0.064*** (0.000)</td>
</tr>
<tr>
<td>Dummy for 2008q4</td>
<td>-0.019** (0.010)</td>
<td>-0.009 (0.251)</td>
<td>-0.005 (0.635)</td>
<td>-0.011 (0.257)</td>
</tr>
<tr>
<td>Age</td>
<td>0.061*** (0.000)</td>
<td>0.059*** (0.000)</td>
<td>0.059*** (0.000)</td>
<td>0.067*** (0.000)</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.001*** (0.000)</td>
<td>-0.001*** (0.000)</td>
<td>-0.001*** (0.000)</td>
<td>-0.001*** (0.000)</td>
</tr>
<tr>
<td>Number of children under 19</td>
<td>-0.067*** (0.000)</td>
<td>-0.068*** (0.000)</td>
<td>-0.067*** (0.000)</td>
<td>-0.081*** (0.000)</td>
</tr>
<tr>
<td>Qualification dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethnicity dummies</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Probability of being employed. P-values in brackets - continued

<table>
<thead>
<tr>
<th></th>
<th>I LPM</th>
<th>II LPM</th>
<th>III LPM</th>
<th>IV Probit model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having a health problem</td>
<td>-0.354*** (0.000)</td>
<td>-0.351*** (0.000)</td>
<td>-0.351*** (0.000)</td>
<td>-0.408*** (0.000)</td>
</tr>
<tr>
<td>Local unemployment rate</td>
<td>No [-0.756*** (0.000)]</td>
<td>-0.774*** (0.000)</td>
<td>-0.969*** (0.000)</td>
<td></td>
</tr>
<tr>
<td>Local inactivity rate</td>
<td>No [-0.582*** (0.000)]</td>
<td>-0.577*** (0.000)</td>
<td>-0.737*** (0.000)</td>
<td></td>
</tr>
<tr>
<td>Government office region</td>
<td>No Yes Yes Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time trend (time x lpdum (12-15))</td>
<td>No No 0.002 (0.124)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>No No -0.000 (0.613)</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>36,330 36,330 36,330 36,330</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data is from the individual Labour Force Survey
Note: The control group is lone mothers with youngest child age 5-10.
*= significant at 10%; **=significant at 5%; ***=significant at 1%
Robustness

• The probit model yields coefficients very similar to the coefficients from our preferred specification using the LPM.
• Our identifications strategy does not pick up spurious policy impacts as estimations using hypothetical policy quarters shows statistically insignificant coefficient to the treatment dummy.
• Changing the pre-policy reform period included in the estimations does not yield different results.
• Attempts to run the regression using different control groups failed, as the other control groups (single women – no children and women in couples with same age children) followed a significantly different time trend.
• Estimates for lone mothers with low qualifications only show an increase in the impact. There is an increase in the probability of employment of 5.4 percentage points.
Summary

- Our preferred specification suggests that the reform has increased the probability of employment by 4.3 percentage points.
- An increase in the employment rate of lone parents with youngest child age 12-15 of 4.3 percentage points translates into getting an additional 16,000 lone mothers into work.
- The evidence provide positive evidence for the potential impact of extending stricter conditionality regimes to other groups further from the labour market – for instance to lone parents with younger children.
- Financial incentives and conditionality both have a role to play.