Beyond school leaving age: the first five years

Presentation to the ACEVO Commission on Youth Unemployment, 11th October 2011

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Funded by the Nuffield Foundation (grant ref EDU/39082)
Motivation

- Youth unemployment, and NEEThood more generally, have increasingly attracted policy concern in the UK and abroad.

- However, our understanding of the issue has, in part, been hampered by data limitations:
  - The definition of ‘NEET’ includes a wide variety of labour market experiences, ranging from ‘gap years’ to deep disconnect from the labour market.
  - Standard statistics generally summarise outcomes at a point in time (e.g. the unemployment rate) or over a specified period (e.g. time spent unemployed in the previous year). These discard important information on labour market dynamics, for example the order in which events occur.

- We address this limitation by using a holistic technique that can capture the full richness of an individual’s labour market history
  - This allows an evaluation of an individual's labour market success that goes beyond the consideration of a single event in isolation.

- We use this technique to create a typology of labour market trajectories for young individuals aged between 16 and 21.
We examine the labour market history in the 5 years following the end of compulsory education.

Labour market status is classified as: employed; in full-time education; unemployed not in full-time education; and ‘other NEET’.

We split the conventional definition of NEET into unemployed and ‘other NEET’ to better understand whether different reasons for non-employment lead to distinct trajectories.
Methodology: optimal matching

- Optimal matching measures ‘dissimilarity’ by the number of necessary operations to transform sequence A into sequence B. Cluster analysis is then used to group similar sequences together.
- This approach allows to consider the labour market trajectory in its full richness. In contrast to other descriptive statistics, it captures a trajectory’s dynamics, including the type, length, order and timing of spells.
- Although a statistically-driven approach, some judgement is needed in the selection of the number of groups and their interpretation.

Quintini, G. and T. Manfredi (2009)
The youth in our sample

- Over 4,000 individuals are observed to turn 16 between 1991 and 2008 in the nationally representative British Household Panel Survey (BHPS) data set.

- Results are based on just under 1,400 individuals observed for five consecutive years from the end of compulsory schooling. Attrition from the survey does not alter the qualitative findings.

- Labour market status is defined according to individuals’ self-reported main activity. This comes reasonably close to national statistics on youth labour market outcomes (e.g. NEET)
E.g. 1: FTE with a ‘gap year’

Stacking trajectories in a group horizontally gives an immediate picture of the type of histories identified.

Plotting only the 10 most frequent trajectories can help obtain a cleaner picture.

The bottom row plots the conventional statistics summarising outcomes at a point-in-time and over a defined period.
E.g.2: NEET from 16

Graphs for all the 14 groups identified can be found in the Annex.
E.g.3: Withdrawals from the labour market
### Size of the groups and outcomes

<table>
<thead>
<tr>
<th>Description of trajectory (See Annex for details)</th>
<th>Accumulating human capital</th>
<th>Successful school to work transition</th>
<th>Possible cause for concern</th>
<th>Ballpark number of 16 year olds entering each trajectory each year ('000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT education throughout</td>
<td>25.3%</td>
<td></td>
<td></td>
<td>190</td>
</tr>
<tr>
<td>FT education with gap year 'Express'</td>
<td>9.9%</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Partial recovery</td>
<td></td>
<td>55.6%</td>
<td></td>
<td>420</td>
</tr>
<tr>
<td>Long-term worklessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEETS from 16</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>NEETS from 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawals from the labour market</td>
<td></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35.2%</strong></td>
<td><strong>55.6%</strong></td>
<td><strong>9.1%</strong></td>
<td><strong>760</strong></td>
</tr>
</tbody>
</table>

- Estimates of the size of the groups assume survey attrition is random and should therefore be considered as indicative.

- Approximate numbers entering each trajectory are based on ONS mid-2010 Population estimates of individuals aged 16.
Next steps

- The next phase of this project will explore the characteristics of the individuals in each group.
- We will then conduct analysis to determine which characteristics might best predict whether an individual is likely to head down a given labour market trajectory.
- Annex A after this slide provides illustrations of each of the 14 groups of labour market histories identified.

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FTE – 25.3% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education

EM
NT
UN
FTE
Express (1) – 21.9% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education
Express (2) – 12% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed (EM)
- Other NEET
- Unemployed (UN)
- FT Education (FTE)
Express (3) – 12.9% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed (EM)
- Other NEET
- Unemployed (UN)
- FT Education (FTE)
Express (4) – 4.3% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education

EM NT UN FTE
Express (5) – 4.6% of youth

Share of individuals in each state over time

Time spent in each state

- Employed (EM)
- Other NEET (NT)
- Unemployed (UN)
- FT Education (FTE)
FTE w/ gap year (1) – 3.5% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education
FTE w/ gap year (2) – 4.6% of youth

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education

EM
NT
UN
FTE
FTE w/ gap year (3) – 1.9% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education
NEETS from 16 – 2.1% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed (red)
- Other NEET (blue)
- Unemployed (green)
- FT Education (purple)
NEETS from 18 – 1.6% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education

Y0 Y1 Y2 Y3 Y4 Y5

Y0 Y1 Y2 Y3 Y4 Y5

Y0 Y1 Y2 Y3 Y4 Y5

Y0 Y1 Y2 Y3 Y4 Y5
Withdrawals from the labour market – 1.2% of youth

- All trajectories
- 10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed (EM)
- Other NEET (NT)
- Unemployed (UN)
- FT Education (FTE)
Partial recovery – 2% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed
- Other NEET
- Unemployed
- FT Education
Long-term worklessness – 2.3% of youth

All trajectories

10 most frequent trajectories

Share of individuals in each state over time

Time spent in each state

- Employed (red)
- Other NEET (blue)
- Unemployed (green)
- FT Education (purple)

Long-term worklessness - 2.3% of youth