Tackling trends in Inequality and Access to Higher Education in Scotland

Anton Muscatelli
Key Points

- Increasing inequality has been a key issue across industrialised as well as developed economies.
- Some theories suggest a close linkage between economic growth, investment in education and inequality trends.
- Issues surrounding social mobility and inheritance as a driver of inequality also linked to education.
- Scotland is assessing the importance of improving access to higher education as a route to greater equality, and indeed to promote ‘inclusive growth’.
Top 1 per cent income share. Selected countries, 10 year moving average. Source: World Top Incomes Database and authors' calculations. Muscatelli an Duncan (2014)
Alternative Explanations of Growing Inequality

• International Trade and Globalisation
• Changes in bargaining power and the power of different interest groups
• The race between education and technology
Goldin and Katz (2008)- The race between education and technology

- First, human capital is a key determinant of economic growth.
- Second, technological progress is ‘skills-biased’.
- Third, Investments in human capital through education should help moderate earnings inequality. Conversely, a slowdown in the growth in education participation in the light of a steady pace of technological change should see an increase in inequality.
- Fourth, the USA had a relative leadership in universal education in the 20th century (the Human Capital Century). A position it gradually lost over time.
Goldin and Katz - implications

• Growth driven by technology not matched by human capital investment will increase inequality
• Returns to education should increase when inequality rises
• In the middle of the 20th century, income inequality in the United States fell dramatically, consequent to schooling reforms which increased publically funded primary and high school provision to all citizens, regardless of gender or income. In contrast, in Europe, where school access was not freely provided to low-income children, inequality remained high. In recent years, this trend in education has turned, with many European nations providing increased access relative to the United States, and income inequality in Europe rising more gradually than in the United States.
### Schooling of 14- to 18-Year-Olds in Great Britain and the United States: 1870 to 1960

<table>
<thead>
<tr>
<th>Year</th>
<th>British Schooling Attendance Rates (in percent)</th>
<th>US High School Enrollment and Graduation Rates (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14-year-olds</td>
<td>17-year-olds</td>
</tr>
<tr>
<td>1870</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1900 / 02</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>1911 / 12</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>1931</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1936 / 38</td>
<td>38</td>
<td>4</td>
</tr>
<tr>
<td>1950</td>
<td>100&lt;sup&gt;b&lt;/sup&gt;</td>
<td>10.5</td>
</tr>
<tr>
<td>1956</td>
<td>100</td>
<td>n.a.</td>
</tr>
<tr>
<td>1957</td>
<td>100</td>
<td>9.0</td>
</tr>
<tr>
<td>1960 / 62</td>
<td>100</td>
<td>15</td>
</tr>
</tbody>
</table>

- Goldin and Katz table 1.1
Goldin and Katz Chart

Europe and the US 1955/56

Full-Time Secondary School Enroll. Rate, 15 – 19 Yrs

[Bar chart showing enrollment rates for various countries, with categories for Full Time Technical and Full Time General.]
Public spending on tertiary education and private net benefits

Private net benefits to tertiary education (Net present value, 2007 USD)

Public expenditure per tertiary student (present value, 2007 USD)
Importance of Widening Access to Scotland

First Minister set up the Commission for Widening Access in Higher Education in Scotland:

“I want us to determine now that a child born today in one of our most deprived communities will, by the time he or she leaves school, have the same chance of going to university as a child born in one of our least deprived communities.”

Nicola Sturgeon, First Minister of Scotland, 26 November 2014
The Size of the Challenge: University Applications

![Graph showing application rates over time for different quintiles and the Scotland average.](image-url)
The size of the challenge: entrants to HE

Scottish domiciled first degree full time entrants to Scottish HEIs - SIMD Comparison - Ten Year Trend

- Percentage from 20% least deprived areas
  - 31.9% (2003-04)
  - 29.2% (2013-14)

- Percentage from 20% most deprived areas
  - 10.9% (2003-04)
  - 13.7% (2013-14)
Distribution of populations by SIMD and Universities

Scottish domiciled first degree full time students starting in 2013-14

- 20% Most Deprived Areas
- Middle
- 20% Least Deprived Areas

<table>
<thead>
<tr>
<th>HEI</th>
<th>20% Most Deprived Areas</th>
<th>Middle</th>
<th>20% Least Deprived Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Scottish HEIs</td>
<td>13.7%</td>
<td>57.2%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Aberdeen, University of</td>
<td>4.3%</td>
<td>52.3%</td>
<td>43.6%</td>
</tr>
<tr>
<td>Abertay Dundee, University of</td>
<td>15.2%</td>
<td>61.8%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Dundee, University of</td>
<td>14.7%</td>
<td>56.6%</td>
<td>28.6%</td>
</tr>
<tr>
<td>Edinburgh Napier University</td>
<td>11.4%</td>
<td>60.2%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Edinburgh, University of</td>
<td>6.0%</td>
<td>55.0%</td>
<td>39.0%</td>
</tr>
<tr>
<td>Glasgow Caledonian University</td>
<td>22.8%</td>
<td>55.6%</td>
<td>21.6%</td>
</tr>
<tr>
<td>Glasgow School of Art</td>
<td>14.4%</td>
<td>58.8%</td>
<td>26.8%</td>
</tr>
<tr>
<td>Glasgow, University of</td>
<td>13.4%</td>
<td>52.7%</td>
<td>33.9%</td>
</tr>
<tr>
<td>Heriot-Watt University</td>
<td>8.5%</td>
<td>58.0%</td>
<td>33.5%</td>
</tr>
<tr>
<td>Highlands and Islands, University of the</td>
<td>11.8%</td>
<td>73.2%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Queen Margaret University, Edinburgh</td>
<td>10.7%</td>
<td>61.6%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Robert Gordon University</td>
<td>6.3%</td>
<td>58.6%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Royal Conservatoire of Scotland</td>
<td>8.2%</td>
<td>59.8%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Scottish Agricultural College</td>
<td>5.5%</td>
<td>71.7%</td>
<td>22.8%</td>
</tr>
<tr>
<td>St Andrews, University of</td>
<td>5.2%</td>
<td>43.0%</td>
<td>51.8%</td>
</tr>
<tr>
<td>Stirling, University of</td>
<td>11.7%</td>
<td>54.0%</td>
<td>34.3%</td>
</tr>
<tr>
<td>Strathclyde, University of</td>
<td>11.7%</td>
<td>54.0%</td>
<td>34.3%</td>
</tr>
<tr>
<td>West of Scotland, University of the</td>
<td>24.4%</td>
<td>58.8%</td>
<td>16.8%</td>
</tr>
</tbody>
</table>
Barriers to entry include:

- School attainment
- Deprivation and the impact on non-cognitive skills (including effects in early years)
- Subject choice and school guidance
- Admissions Policies (especially in high-demand universities/courses)
- Difficulty in alternative routes into Higher Education (eg through FE and articulation into HE)
- Progression and retention whilst in HE (cultural barriers)
- Financial Barriers (although no tuition fees in Scotland); debt aversion
Widening access programmes already include

- Summer Schools/Top-Up Programmes
- REACH for the high-demand professions
- Widening Access Bursaries
- Support programs within HE
So how do we make progress?

1. Need for better data on socioeconomic characteristics (SIMD or something better?)
2. Better contextualised admissions
3. Greater involvement of HE in Schools to build aspirations, provide advice etc
4. Providing greater articulation routes
5. Scale up initiatives which work well (eg summer schools) – focus public funding on these
6. What about funding of student support?
7. Other funding issues (eg postgraduate education)
8. How do we tackle attainment and subject choice issues?
Will we solve all the problems

We need to remember that access to HE is only one piece of the puzzle in social mobility:

• Access from FE/HE to job market
• Can we deal effectively with barriers in early years and early schooling
• Can we target our policies to individual need?
• How do we deal with possible ‘displacement effects’ from targeting policies on the lowest socioeconomic groups
Final word: it’s about both economics and social justice

“We do this because it is the right thing to do. It's part of our DNA. The culture at Glasgow is rooted historically in the importance of social justice and we want to give students from all backgrounds, regardless of means, access to the very best university education.

But it also makes good economic sense and it contributes actively to the Scottish Government's inclusive growth agenda. Only by tapping all the available talent in the country and by breaking down social barriers can we boost economic performance”

Agenda – The Herald 17 January 2016
INSPIRING PEOPLE FOR OVER 550 YEARS