

A·D·M·I·N

Administrative Data -
Methods, Inference & Network



Leading education
and social research
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The Role of Economic Modelling in Influencing Government Education Policy

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Making the case

- Economic modelling has had great influence on education policy
- Education research lends itself to economic analysis given the methodological and theoretical challenges inherent in the field

Methodological Robustness

- Economic analyses have been particularly influential partly because of quantitative methods used and also methodological robustness
- Econometric modeling approaches enable causal relationships to be drawn
 - Timing/Before-After methodology/Diff in Diff
 - Richness/structural models/IV

- How has economic modelling influenced policy?

Inter and intra generational analysis

- **Skills develop in early childhood**
- **Socio-economic gaps in cognitive and non-cognitive skills emerge early**
 - Carneiro and Heckman, 2004; Feinstein, 2003
- **Strong intergenerational component**
 - Ermisch and Francesconi (2001); Chevalier *et al.* (2007); Plug (2004); Sacerdote (2002); Brown et al. 2009; De Coulon, Meschi and Vignoles, 2008

Inter and intra generational analysis

- Role of education in promoting or preventing social mobility and inequality
 - Blanden et al, 2005; Blanden et al, 2007, 2008; Ermisch and Nicoletti, 2007; Eriksson and Goldthorpe, 2008.
- Education has had a disequalising impact on mobility
- Disproportionately benefited individuals from richer families
 - Blanden and Machin, 2005.

Policy impact

- Early intervention
 - 40% increase in primary expenditure since 97
 - positive impact on achievement
 - Machin et al. 2007
- Family intervention
 - intergenerational persistence of attitudes and aspirations
 - parenting programmes introduced
 - Goodman and Gregg, 2009

Rate of return analyses

- Policy-makers have scarce resources and must decide whether to spend more on the army, the NHS or the school system.
- Resource decisions are (partially) based on the economic value of potential investments.
- A key policy question is therefore what is the economic value of education?

Rate of return analyses

- Convincing methodologically and used to increase investment in education
- % of GDP spent on education rose
 - 5.2% in 1995 to 5.9% in 2006
- % of GDP spent on primary and secondary education increased
 - 3.6% in 1995 to 4.3% in 2006

Basic skill policy

- The UK has a poor record in terms of the basic skills of its adult population
 - Moser report, DfEE, 1999
 - Heavily cited work of Bynner, Layard, Vignoles and others that relied largely on NCDS data
 - Showed high proportion of individuals who lacked basic skills
 - Showed very high return to having good basic skills

Basic skill policy

- Policy response quite clear
- PSA targets to improve the basic skills of adults by 2010
- Skills for Life programme
- Train to Gain
 - Subsidised work related training for low skilled workers

Ignore at will: the case of NVQ2

- Academic level 2 qualifications yield sizable returns
- Some traditional level 2 vocational qualifications do yield sizeable wage returns
 - 13% for a BTEC First or General Diploma
 - 5-7% for a City and Guilds Craft qualification
- Wage returns to NVQs are negligible at levels 1 and 2

Ignore at will: the case of NVQ2

- Acquiring qualifications late leads to lower returns even for academic qualifications
- Even for young workers, NVQs do not perform as well as other VQs and certainly not as well as academic qualifications
- Still did not stop government endorsing a level 2 entitlement

A multi disciplinary approach

- Maternal employment
- Impact on family income, mothers
- Impact on children
 - Evidence from cohort studies suggested impact was relatively small although significant in first year of life
- Impact on policy to further encourage women back into work

Conclusions

- Impact of economic evidence base on education policy is profound
- Policy is of course only partially determined by evidence.....