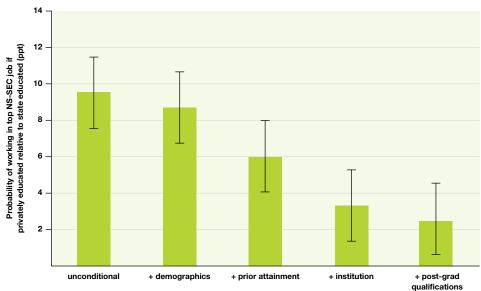


Lindsey Macmillan, Claire Tyler and Anna Vignoles, investigate the relationship between graduates' family background and their access to high status occupations. The UK government has stated that its aim is to create a society in which each individual, regardless of background, has an equal chance of realising their potential (Cabinet Office, Opening Doors Breaking Barriers: A Strategy for Social Mobility). This research attempts to unpick the complex mix of factors that could contribute to graduates' entry into top jobs, including the role played by social and professional networks.

Figure 1 Relationship between private school attendance and working in a top NS-SEC occupation



High status occupations by family background

This analysis of entry into high status occupations uses the Destination of Leavers from Higher Education (DLHE) longitudinal surveys carried out by the UK Higher Education Statistical Agency (HESA). This tracks graduates leaving higher education in 2006/07 and follows them up until three and a half years after graduation in 2010. Information is available on the family background of the graduate, including their parents' class, the average participation in higher education in their neighbourhood (POLAR3) and whether they were state or privately educated in secondary school. It also gives the occupation of the graduate three and a half years after graduation.

A high status job is defined as a top NS-SEC (National Statistics Socio-economic Classification)² occupation. For this analysis we also consider differences in occupations within the top NS-SEC, grouping together higher managerial jobs (NS-SEC 1.1), those entering into business, legal or life-science professions and those working in other professions including scientists, educational occupations and built environment jobs (architecture, surveyors).

A benefit of the linked HESA-DLHE data is that there is a wealth of information on the higher education of the graduates including their degree classification, the subject they chose to study at university, their UCAS tariff point score (A-level grades) and the university they studied at. This is particularly important for ascertaining whether entry

into the top occupations by background is primarily driven by selection into certain subjects or universities at 18 or whether a socio-economic gradient in access remains when allowing for differences in prior attainment and institution attended.

The private school advantage

Figure 1 presents the additional advantage of attending a private school compared to a state school in terms of the likelihood of working in a top NS-SEC occupation 3.5 years after graduation. The five columns build the model in stages, initially reporting the raw association only, accounting for other family background measures (parental class and neighbourhood higher education participation quintiles) before allowing for other factors including gender and ethnicity, prior attainment differences (UCAS tariff, degree subject and classification), institution effects (which university they attended and in what region) and finally post-graduate qualifications.

In the first model, privately educated graduates are 9.5 percentage points more likely to work in a top NS-SEC occupation 3.5 years after graduation (baseline 30 per cent) compared to a state educated graduate. Controlling for gender and ethnicity does little to reduce this effect, but adding prior attainment reduces this to six percentage points. Even when accounting for differences in how well the graduates have done in terms of attainment there is still a sizeable difference in entry to top occupations by the type of school attended.

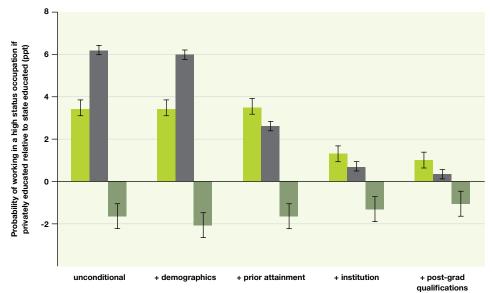
Taking account of where the graduate

A privately educated graduate is 2.5 percentage points is more likely than a state-school graduate to be working in a top occupation 3.5 years after graduation.



Figure 2 Relationship between private school attendance and working in a high status occupation





went to university reduces this estimate by another 45 percent: the choice of institution is clearly a large part of the story of why more private school graduates work in top occupations. However, even after allowing for institution, there is still a significant difference in the predicted probability of working in a top occupation for private school graduates compared to state school graduate.

Comparing a like-for-like privately educated graduate to a state school graduate with the same prior attainment from the same institution and the same post-graduate qualifications, the private school graduate is 2.5 percentage points (on a baseline of 30 per cent) more likely to work in a top NS-SEC occupation 3.5 years after graduation than the state school graduate.

When we delve into the different types of high status occupations, we see that the positive effect associated with a private education varies by the type of job that the graduate works in. Figure 2 plots the same models as Figure 1, splitting the outcome variable into three categories. For those entering into higher managerial occupations, prior attainment seems to have little to do with privately educated individuals being more likely to work in these top jobs; although where they went to university does account for a large part of the story. After accounting for differences in the higher education institution attended and postgraduate qualifications, a privately educated graduate is still one percentage point more likely to work in a higher managerial occupation 3.5 years after graduation

(baseline 6.1 per cent) than a similarly well-educated state school graduate.

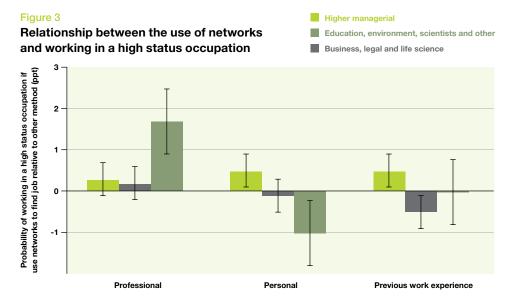
Privately educated graduates are also far more likely to work in top professional jobs (business, legal and life-science) than state school graduates with raw differences of 6 percentage points (baseline 10.5 per cent). Most of this relationship however is accounted for by the prior attainment of these graduates and the institution that they attended, although there remains a significant advantage to attending a private school in terms of working in one of these top professions even after controlling for these factors and post-graduate qualifications.

Interestingly, if we consider the other professions in the top NS-SEC (such as scientist, architect or head teachers), graduates in these jobs were more likely to be state school educated than those working in lower NS-SEC occupations. This could indicate that the highestattaining state school pupils are selecting into different types of careers compared to privately educated graduates (differing intrinsic motivation) or they are sorted into these alternative professions due to the increased likelihood of the privately educated graduates getting the higher managerial and top professional jobs.

The role of networks

To assess the role that networks play in helping graduates access top occupations, we can see how the graduate found out about their current job. We consider three specific networks: professional networks (professional,





Networks matter but are not the main reason why privately educated graduates are more likely to enter top jobs.



work or educational contacts), personal networks (family, friends or social networks) and previous work experience compared to using any other form of information.

When we add networks to our model we see that they do have a positive and independent effect on the likelihood of working in a top NS-SEC occupation 3.5 years after graduation. Access to networks, particularly professional networks, matters over and above graduate's family background: those using a professional network are 5.3 percentage points more likely to work in a top NS-SEC occupation at 3.5 years after graduation.

Looking specifically at privately educated graduates, networks do have a positive effect, but it does not remove the private school effect which remains identical indicating that networks are not the main reason why private school graduates have an additional advantage over state school graduates.

However, observation reveals that the types of networks that graduates have access to have some influence on the type of top occupation that the graduate is in 3.5 years after graduation. Figure 3 shows that personal networks and previous work experience matter more for higher managerial occupations, whilst professional networks are significant predictors of working in a lower profession.

Conclusions

This research suggests that attending a private school has an additional advantage, over and above, demographic differences, the prior attainment of graduates, their choice of institution and selection into post-graduate education.

These findings are stark: note that we are comparing the private school graduate to

a more a-typical state school graduate in that they would have already selected into a particular group of A-levels, a particular degree subject and a particular institution to make them comparable with the privately educated student. Although networks do not account for this difference, they have an independent effect over and above this private school advantage.

This leaves questions unanswered as to why there is this additional and persistent advantage to attending a private school. We suggest that possible explanations may include differences in unmeasured human capital (non-cognitive skills), differences in cultural capital (conversation topics in interviews) and differences in financial capital allowing the privately educated graduate a longer period of job search.

² The NS-SEC was developed from the Goldthorpe Class Schema, measuring employment relations and conditions of occupations. See http://www.ons.gov.uk/ons/guide-method/ classifications/current-standard-classifications/soc2010/ soc2010-volume-3-ns-sec--rebased-on-soc2010--user manual/index.html

The full working paper can be found at http://repec.ioe.ac.uk/REPEc/pdf/gsswp1315.pdf

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Further reading

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