



# How elite universities shape upward mobility into top jobs

Seth Zimmerman examines evidence that shows  
business-focussed degree programmes have a large  
effect on attaining high-income jobs

**G**raduates of top universities hold a large share of leadership positions in big firms. At the same time, elite universities are aiming to expand access to middle- and low-income students. Yet, it is unclear whether the benefits of attending top universities accrue to students from poor backgrounds. This column examines new evidence from Chile and finds that admission to highly selective, business-focused degree programmes has very large effects on the rates at which male students from wealthy backgrounds attain top jobs and incomes, but little or no effect for female students and non-wealthy male students.

Do elite universities help students from modest backgrounds make it to the top of the economic ladder? This is an old question in the social science literature (eg. Sorokin 1925, Miller 1949, Useem and Karabel 1986, Temin 1999), the stakes of which have grown in recent years as top income shares have increased (Atkinson *et al.* 2011, Alvaredo *et al.* 2013). It is a fact that graduates of top universities hold large shares of leadership positions in big firms (Capelli and Hamori 2004), and that top universities around the world count expanding access to middle- and low-income students among their core institutional goals (eg. Lewis 1997).

Yet, it is unclear whether universities play a causal role in helping students reach top jobs, and, if they do, whether the benefits of attendance accrue to students from poor backgrounds. The challenge in sorting out universities' causal role is that the traits rewarded in college admissions—intelligence, determination, family wealth—are also rewarded in the workforce (eg. Dale and Krueger 2002). Universities that admit the best students may have the best outcomes for graduates even if they play no causal role themselves.

In a [recent paper](#), I present new evidence from Chile that indicates that admission to highly selective, business-focused degree programmes has very large effects on the rates at which students attain top jobs and top incomes, but that these benefits accrue only to male students from wealthy backgrounds – not to female students, nor to non-wealthy male students (Zimmerman forthcoming). I isolate the effect of admission using discontinuous

admissions rules: at each programme, admission depends on a composite score of grades and entrance exams. Applicants just above the admission cut-off are very similar to those just below, except that they get in and students below do not.

Figure 1 shows that, for students on the edge of admission to elite business programmes between the mid-1970s and early 1990s, getting one more question right on an entrance exam has big effects on the chance of reaching, by the 2010s, an income in the top 0.1% of the income distribution (upper panel) and of becoming a top manager at a publicly-traded firm (lower panel). Pooling all students together, the discontinuous jump at the admissions cut-off shows that admission raises rates of top income attainment by 51% and leadership by 44%.

*One policy lesson to be drawn is that convincing low-SES students to enrol in selective universities may not by itself be enough to expand access to top jobs and top incomes*

**Figure 1a. Effect of admission on top income and leadership attainment**

A. Top 0.1% income

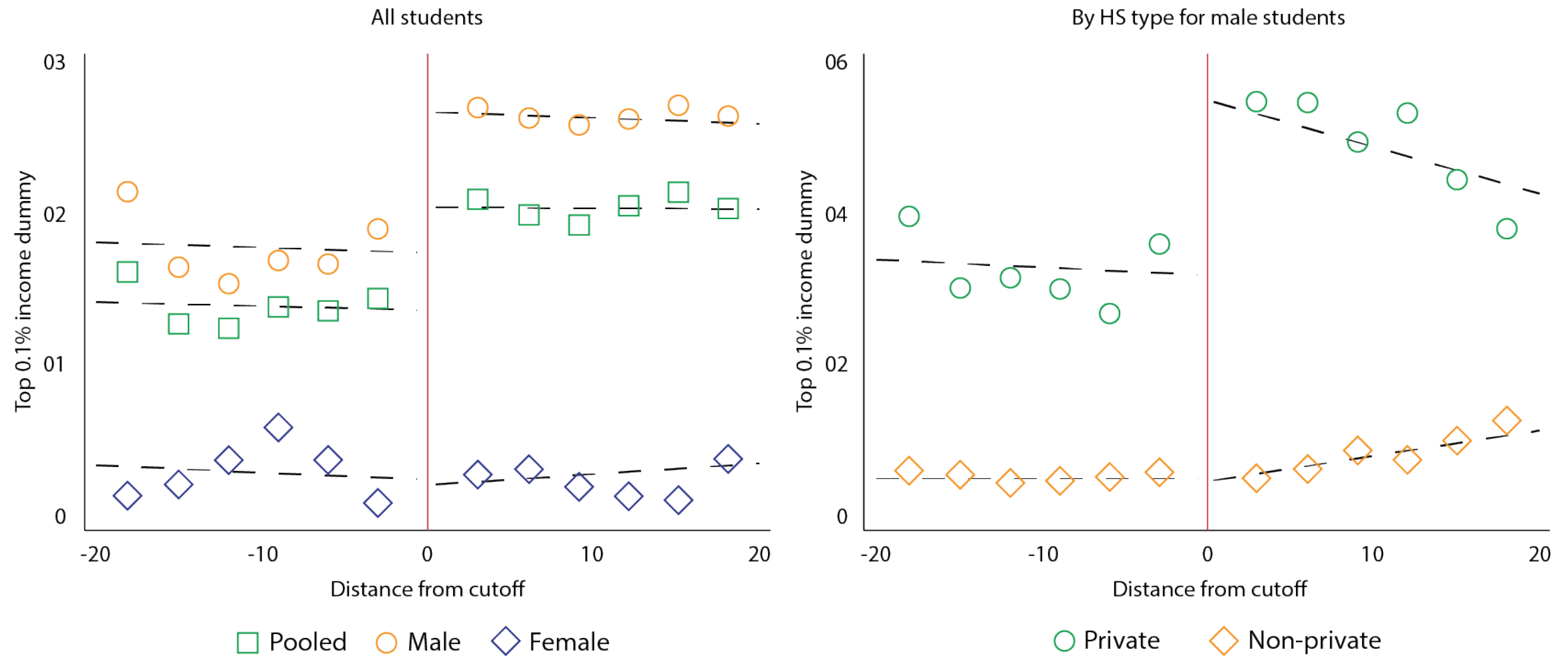
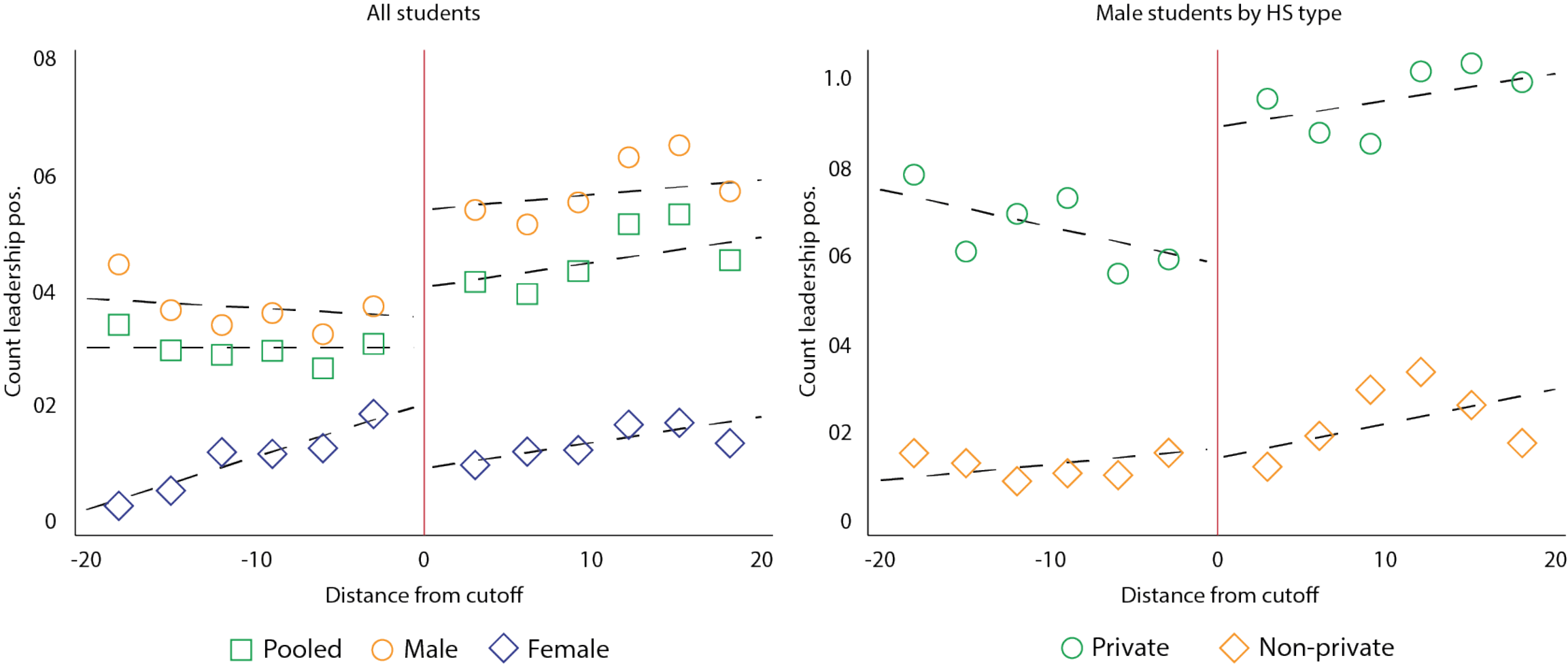


Figure 1b. Effect of admission on top income and leadership attainment

B. Leadership positions

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However, splitting by gender shows that the overall effect comes from bigger gains for male students, coupled with no gains at all for women. Splitting further within male students shows that the only male students for whom admission raises rates of top attainment are those who attended high-tuition private high schools, which is best interpreted here as a proxy for family socioeconomic status (SES).

These are big effects. For example, the difference in the admissions effect for men versus women is equal to 36% of the gender gap in top income attainment for students at top programmes. The difference in the admissions effect by high-school type is equal to 54% of the gap between students at top programmes in those two groups.

Put another way, a back-of-the-envelope calculation suggests that the causal effects of admission to elite business programmes are large enough to account for 10-15% of the count of top positions held by all individuals who ever take the college admissions exam, despite the fact that students at top programmes make up less than 2% of exam-takers. In short, the causal effects of admission to elite business-focused degree programmes have big effects on the population of top income earners and corporate leadership at the national level, and expand, rather than reduce, gaps in top attainment by gender and socioeconomic status.

### **Why men from wealthy backgrounds gain more**

Why do men from wealthy backgrounds gain so much more than other students from attending top business-focused programmes? One possibility is that women and low-socioeconomic status men also benefit from top programmes, but start from too low a rung to reach the top of the income ladder. This does not seem to be the case: on average, admission does not raise income for these groups at all, while gains for high-SES men are large.

A second possibility is that women and low-SES men are less interested in careers in business. But these students go on to work in similar sectors to high-SES men. A third possibility is that high-SES men are better prepared to



succeed academically. But students from the best public schools in Chile—where college entrance exam scores are similar to those in best private schools—do not benefit from admission, and graduation rates for women are higher than those for men, even though labour market effects are smaller.

A comparison with medical degree programmes is informative. Medical degrees are similar to elite business degree programmes in that they admit only top-scoring students and in that earnings for those students are very high on average. They differ in that medical students are very unlikely to lead large companies or have incomes in the top 0.1% of the income distribution. As first shown in Hastings et al. (2013), admission to selective medical programmes leads to large earnings gains for low-SES students.

In particular, admission to top medical programmes closes gaps by SES and gender in rates of attainment of incomes on average and near, but not at, the top of the distribution—the top 10%, for example, but not the top 0.1%. This holds even though patterns of achievement by group are similar to those in business programmes. That elite education expands gaps by gender and SES appears to be a feature of business careers, not of academic content nor the Chilean economy as a whole. The returns to elite education for women and lower-SES men are not zero on all career paths, but are zero on the paths most likely to lead high-SES men to the very top of the income distribution.

One way that business careers may stand out from careers in other fields is in the importance of peer networks. Research on managerial behaviour at big firms shows that social ties between top executives play a role in determining firm behaviour (Fracassi and Tate 2012, Shue 2013, Fracassi 2016). If high-SES male students are better able to form valuable peer ties while at school, this could explain why they gain from admission while other students do not. Studies of friendship formation among college students (Marmaros and Sacerdote 2006, Mayer and Puller 2008) show that ties are more likely to form between demographically similar students. Relationships

with high-SES men may be especially valuable from the perspective of professional advancement, and may be most accessible for students already in that group.

The peer ties channel does appear to be important: high-SES men who gain admission to top business programmes become more likely to lead the same firms as other high-SES men who are their school peers, but not with non-peers or with peers from other backgrounds. Several studies have shown that peer ties affect early-career job-finding (Marmaros and Sacerdote 2002, Arcidiacono and Nicholson 2005). They also seem to affect who makes it to top jobs over the long run.

### **Conclusion and policy implications**

The conclusion that elite education expands gaps by SES and gender for students pursuing business careers comes from data on Chilean students who applied to college beginning in the 1970s and reached their career peaks by the 2000s and 2010s. How likely is it to generalise to other settings? Some simple descriptive statistics suggest that it may.

Adjusted for purchasing power, per capita income in Chile is similar to Eastern European states such as Poland (World Bank 2016). Chile is an unequal country, but not more so than many others. Top 1% shares are similar to the US, Colombia, and Argentina (Fairfield and Jorratt De Luis 2015). Rates of intergenerational mobility are similar to the US and UK (Núñez and Miranda 2011, Solon 1992, Björklund and Jäntti 1997). Rates of educational attainment in Chile today are also similar to the US (OECD 2012). This is a topic awaiting further research, but there is little reason to think the Chilean case is unique.

One policy lesson to be drawn is that convincing low-SES students to enrol in selective universities may not by itself be enough to expand access to top jobs and top incomes. Integrating social networks at these institutions by



gender and social background is also important. A number of recent studies (Rao forthcoming, Lowe 2018) provide evidence supporting the ‘contact hypothesis’—that people from different backgrounds become friends when pushed to interact—but results thus far focus on younger children and/or relatively low-stakes outcomes. Does something similar hold for high-stakes choices at the top of the career ladder? The answer to this question has important implications for the efficacy of elite universities in integrating not just the well off, but the economic elite. ■

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