

ANDRÉS BARRIOS FERNÁNDEZ

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EDUCATION	<i>Ph.D. in Economics</i>	2013-2019
	Thesis title: Essays in Economics of Education London School of Economics and Political Science	
	<i>M.Res. in Economics</i>	2013-2015
	London School of Economics and Political Science	
	<i>M.Sc. in Engineering</i>	2009-2010
	Pontificia Universidad Católica de Chile	
	<i>B.Sc. in Engineering</i>	2003-2009
	Pontificia Universidad Católica de Chile	
TEACHING EXPERIENCE	<i>Graduate Teaching Assistant</i>	2014-2019
	London School of Economics and Political Science	
	<ul style="list-style-type: none">• EC212 Introduction to Econometrics (Summer School).• EC220 Introduction to Econometrics.• EC221 Principles of Econometrics.• EC270 Public Finance.• EC325 Public Economics.• Academic Mentor.	
	<i>Lecturer</i>	2012-2013
	School of Engineering, Pontificia Universidad Católica de Chile	
	<ul style="list-style-type: none">• ICS1513 Economics Principles	
RELEVANT POSITIONS HELD	<i>Postdoc Fellow</i>	2021-2022
	Department of Economics. MIT. Cambridge, MA, USA.	
	<i>Senior Researcher</i>	2019-2022
	VATT Institute of Economic Research, Helsinki, Finland.	
	<i>Research Affiliate</i>	2021-2023
	Centre for Economics Policy Research. London, UK.	
	<i>Associate</i>	2019-2022
Centre for Economics Performance, LSE. London, UK.		
	<i>Research Assistant</i>	2018
	National Bureau of Economic Research. Cambridge, USA.	
	<i>Course Manager</i>	2015-2019
	Introduction to Econometrics and Econometrics Principles. London School of Economics. London, UK.	

**JOB MARKET
PAPER**

Elite Universities and the Intergenerational Transmission of Human and Social Capital with C.Neilson and S.Zimmerman

Do elite colleges renew the elite or reproduce it? This paper combines five decades of intergenerationally linked data on the educational trajectories of parents and children in Chile with a regression discontinuity design to document the joint evolution of social and human capital across generations and provide causal evidence on how elite colleges shape this evolution. We first describe the association between social capital—measured by the type of high school parents attended—and children’s outcomes. Even after controlling for parents’ performance on a national college admission exam, children whose parents attended elite private high schools are more likely to obtain high scores on college entrance exams and to attend elite colleges. These children are also more likely to attend elite private schools themselves. Turning to the causal analysis, we show that parents’ admission to an elite college program changes their children’s educational paths. Children of parents from non-elite social backgrounds are 24% more likely to attend an elite private school and 7.1% more likely to attend an elite college when their parents are admitted to an elite college program. These effects are not driven by generic increases in educational expenditures, but by changes in the family and neighborhood environment: parents admitted to elite college programs are more likely to marry high-status partners and to live near other high-status families. In contrast, parents’ admission does not raise children’s test scores. Back of the envelope calculations show that, among high human capital families, the intergenerational gains in social capital from elite colleges admission accrue disproportionately to the incumbent social capital elite, but that low social capital families are 20.92% more common among the beneficiaries of elite colleges admission than among the next generation’s social elite as a whole. Elite colleges transmit social capital unequally, but less so than other paths through which social capital travels.

**PUBLISHED
PAPERS**

Neighbors’ Effects on University Enrollment (Forthcoming, American Economic Journal: Applied Economics)

This paper provides causal evidence that close neighbors significantly influence potential applicants decision to attend university. I create a unique dataset combining detailed geographic information and individual educational records in Chile, and exploit the quasi-random variation generated by student loans eligibility rules. I find that potential applicants are significantly more likely to attend and complete university when their closest neighbor—defined as the closest individual applying to university one year before-becomes eligible for a student loan and enrolls in university. This increase in enrollment is mediated by an increase in the probability of taking the admission exam and applying to university. The closest neighbor typically lives 0.09 km away, and neighbors influence decays with distance. My results highlight the importance of social influences for university enrollment decisions and suggest that financial aid and university access policies may have important spillover effects.

O Brother, Where Start Thou? Sibling Spillovers on College and Major Choice in Four Countries (The Quarterly Journal of Economics) with A. Altmejd, M. Drlje, J. Goodman, M. Hurwitz, D. Kovac, C. Mulhern, C. Neilson and J. Smith.

Family and social networks are widely believed to influence important life decisions but causal identification of those effects is notoriously challenging. Using data from Chile, Croatia, Sweden, and the United States, we study within-family spillovers in college and major choice across a variety of national contexts. Exploiting college-specific admissions thresholds that directly affect older but not younger siblings col-

lege options, we show that in all four countries a meaningful portion of younger siblings follow their older sibling to the same college or college-major combination. Older siblings are followed regardless of whether their target and counterfactual options have large, small or even negative differences in quality. Spillover effects disappear, however, if the older sibling drops out of college, suggesting that older siblings college experiences matter. That siblings influence important human capital investment decisions across such varied contexts suggests that our findings are not an artifact of particular institutional detail but instead a more generalizable description of human behavior. Causal links between the postsecondary paths of close peers may partly explain persistent college enrollment inequalities between social groups and suggests that interventions to improve college access may have multiplier effects.

It's Time to Learn: School Institutions and Returns to Instruction Time
(Economics of Education Review) with G.Bovini.

This paper investigates whether the effects of a reform that substantially increased daily instruction time in Chilean primary schools vary depending on school institutions. Focusing on incumbent students and exploiting an IV strategy, we find that longer daily schedules increase reading scores at the end of fourth grade and that the benefits are greater for pupils who began primary education in no-fee charter schools rather than in public schools. We provide evidence that these two types of publicly subsidized establishments, which cater to similar students but differ in their degree of autonomy, expand the teaching input in different ways: in order to provide the additional instruction time, no-fee charter schools rely more on hiring new teachers and less on increasing teachers working hours than public schools do.

**WORKING
PAPERS &
ONGOING
WORK**

Closing Gaps in Higher Education Trajectories: The Effect of Targeted Information and Mentorship with Josefina Eluchans-Errázuriz and Fernanda Ramírez-Espinoza

Using a randomized controlled trial (RCT), this project aims to assess whether the provision of targeted information and mentoring to students attending vocational high schools affect the quantity and type of post-secondary studies they pursue and their higher education aspirations. The RCT randomly assigned 80 high schools to the control group, 80 high schools to an information-only treatment group, and 80 high schools to a combination of information and mentoring treatment group. The mentoring treatment is randomly assigned to only a few students per class, a feature that will allow us to study the spillovers of the mentoring program on the social network of treated individuals. With this last part of the experiment, we aim to understand to which extent social spillovers could be used to design more efficient and effective interventions to help students to make informed decisions about their post-secondary education trajectories.

Recidivism and Neighborhood Institutions: Evidence from the Rise of the Pentecostal Church in Chile with Jorge García-Hombrados.

Rehabilitating convicted criminals is challenging; indeed, an important share of them return to prison only a few years after their release. Thus, finding effective ways of encouraging crime desistance, particularly among young individuals, has become an important policy goal to reduce crime and incarceration rates. This paper provides causal evidence that the local institutions of the neighborhood that receives young individuals after prison matter. Specifically, we show that the opening of an Evangelical church reduces twelve-months re-incarceration rates among property crime offenders by more than 10 percentage points. This effect represents a drop of 16% in the probability of returning to prison for this group of individuals. We find smaller and less precise effects for more severe types of crime. We discuss three classes of

mechanisms that could explain our results: social support, promotion of evangelical values, and social monitoring. We provide evidence that the social support provided by evangelical churches is an important driver of our findings. This suggests that non-religious local institutions could also play an important role in the rehabilitation of former inmates.

Inequality in College Applications: Evidence from Three Continents with A.Altjmed, A.Bizopoulou, M.Kaila, C.Neilson, S.Otero, and X.Ye

This paper combines rich administrative data on college applications from seven very different countries: Brazil, Chile, China, Croatia, Finland, Greece, and Sweden. In all these countries, an important share of colleges select their students through centralized admission systems that only consider students' preferences and academic performance. We use these data to study differences in preferences for colleges and majors by gender and socioeconomic status. We find important differences both across the gender and socioeconomic dimensions. In all countries, female students are more likely to apply to health and education majors. Male students, on the other hand, are more likely to apply to STEM majors. These differences persist along the whole distribution of academic ability. Differences in preferences for fields of study are less prominent when comparing individuals from different socioeconomic backgrounds. However, we do find that conditional on academic ability, students from low-SES households apply to less selective programs. These differences could be important to understand some of the inequality we observe in labor market trajectories. Finally, in none of the countries we study applicants to education programs come from the top of the ability distribution. However, whereas in most of them applicants trend to come from middle- and low-SES backgrounds, in Finland there is an important share of them who come from a high-SES background.

Teacher Value Added and Gender Gaps on Educational Outcomes with Marc Riudavets-Barcons.

This paper estimates teacher value added (TVA) models to study differences in teacher effectiveness for male and female students. Taking advantage of rich administrative data from Chile, we build a unique dataset that allows us to link students with their eighth-grade math and reading teachers, and follow them in high school and in their transition to higher education. We estimate TVA in test scores and in an educational attainment index, and show that differences on teacher effectiveness explain an important part of the gender gaps we observe on standardized tests and on postsecondary education trajectories. Next, using survey data covering the universe of eighth grade students and their math teachers, we explore whether teachers characteristics and practices explain the differences that we document on teacher effectiveness. Although we do not find important differences in the relationship between teachers practices and their effectiveness for male and female students, we do find significant associations that suggest that certain teaching practices benefit both male and female students.

STEM-Moms: Intergenerational Transmission of Preferences for STEM Majors with C.Neilson and S.Zimmerman

We use data covering more than five decades of college applications from Chile to study the evolution of the gender gap on STEM majors. We then take advantage of family links that allow us to link mothers and their children, and exploiting sharp admission cutoffs, we study how having a mother marginally admitted into a STEM major affects the college applications of their sons and daughters. Preliminary results indicate that daughters whose mothers were marginally admitted to STEM majors are more likely to enroll in STEM majors themselves. We find no significant changes

on the applications of sons. These preliminary results suggest that policies designed to close the gender gap in STEM majors could also have an indirect effect on the next generation.

(Dis)Connecting People: Labor Market Consequences of the Nokia Decline with Jarkko Harju and Tuomas Matikka

This paper exploits a large shock that affected the Finnish telecommunications industry—i.e., the launch of the iPhone and the decline of Nokia that followed—to study how different types of displaced workers responded to the shock. Using Finnish administrative registers we are able to follow individuals displaced from Nokia for up to eight years after the shock. Preliminary analyses show that although all displaced workers suffered important losses in the labor market, high skilled individuals were more likely to recover. In addition, many high skilled workers eligible to receive seed capital as part of their exit agreement, started new businesses. In comparison to other firms started by similar individuals around the same time, the firms started by ex-Nokia employees have higher survival rates and higher annual turnover.

REFERENCES

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**FELLOWSHIPS
AND GRANTS**

<i>Yrjo Jahnsson Foundation MIT Fellowship (USD 55,000)</i>	2021
<i>MueveTP Project Incubator. Fundación Luksic (USD 150,000)</i>	2021
<i>Department of Economics Fellowship, LSE.</i>	2014-2018
<i>Ph.D. Fellowship, CONICYT.</i>	2013-2018

**COMPUTER
SKILLS**

Stata, Matlab, ArcGIS, C++, R, Python.

LANGUAGES

Spanish (native), English (fluent).

**PROFESSIONAL
ACTIVITIES**

Referee: Economic Journal, Economics of Education Review, Journal of Human Capital, Journal of Public Economics, Journal of Policy and Management.

CONFERENCES	<i>WEAI 96th Annual Conference</i>	2021
	Online.	
	<i>Royal Economic Society 2021 Annual Meeting</i>	2021
	Online.	
	<i>5th IZA Workshop: The Economics of Education</i>	2020
	Bonn, Germany.	
	<i>Econometric Society Virtual World Congress.</i>	2020
	Milan, Italy.	
	<i>30th European Economic Association Congress.</i>	2020
	Rotterdam, Netherlands.	
	<i>Sixth LEER Conference on Education Economics</i>	2020
	Leuven, Belgium.	
	<i>XXVII Meeting on Public Economics</i>	2020
	Barcelona, Spain.	
	<i>LEER Workshop: Improving Quality and Returns to Education</i>	2019
	Leuven, Belgium.	
	<i>Econometric Society Winter Meeting.</i>	2018
	Naples, Italy.	
	<i>43rd Simposio de la Asociación Española de Economía (SAEe).</i>	2018
	Madrid, Spain.	
	<i>3rd IZA Workshop: The Economics of Education.</i>	2018
	Bonn, Germany.	
	<i>European Doctoral Program Jamboree.</i>	2018
	Florence, Italy.	
	<i>Annual Conference of the European Association of Labor Economists.</i>	2017
	St. Gallen, Switzerland.	
	<i>International Workshop on Applied Economics of Education.</i>	2017
	Catanzaro, Italy.	
	<i>LEER Workshop on Education Economics.</i>	2017
	Leuven, Belgium.	