Designing Public Finance Systems for Non-State Schools in the Developing World: Evidence from Diverse Contexts

Symposium proposal for the SREE 2019 conference

This panel brings together four papers from four different developing-country settings -- Liberia, Haiti, Chile, and India -- spanning a range of experimental and observational methods, all seeking to inform the design of systems that provide public finance to offer families free access to non-state schools. The design of the programs varies, ranging from vouchers that provide school choice and limited restrictions on private school activities to charter-style management of public schools with government teachers on public payroll. These design differences reflect, in part, different goals, with different weights placed on access, equity, and learning outcomes.

In Haiti, where the state has limited capacity to provide basic education access, Melissa Adelman and coauthors show that public finance elicits a strong supply-side response from the private sector, boosting enrollment in non-state schools. In a wealthier context with greater state capacity, Cristián Sánchez analyzes how targeting vouchers to poorer households (as opposed to universal vouchers) poses trade-offs, as stronger schools may be less likely to participate. In India, Lee Crawfurd and coauthors present experimental evidence that targeted vouchers designed to offer poorer households access to low-cost (but ostensibly higher quality) private schooling generate high demand among parents but fail to achieve learning goals. In contrast, Mauricio Romero and coauthors find that outsourcing the management of randomly assigned public schools to private operators in Liberia produced significant increases in learning, but at fairly high fiscal cost and with some unintended consequences in terms of access.

As discussant, Clare Leaver will bring the perspective of an economist working in organizational and contract theory to reflect on how these diverse experiences can inform the design of future policy experiments.

**Contact person:** Justin Sandefur (Senior Fellow, Center for Global Development, jsandefur@cgdev.org)

**Discussant:** Clare Leaver (Associate Prof., Oxford University, clare.leaver@bsg.ox.ac.uk)

NB: Presenters are marked with an asterisk (*)

*Melissa Adelman* (Senior Economist, World Bank, madelman@worldbank.org)
Peter Holland (Program Lead, World Bank, pholland@worldbank.org)
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Link to full draft

Despite recent gains in increasing access, an estimated 58 million children worldwide are still out of school. Abolishing school fees has increased enrollment rates in several countries where enrollments were low and fees were high. However, such policies may be less effective or even have negative consequences, when supply-side responses are weak. This article evaluates the impacts of a tuition waiver program in Haiti, which provided public financing to nonpublic schools conditional on not charging tuition. We conclude that a school’s participation in the program results in more students enrolled, more staff, and slightly higher student-teacher ratios. The program also reduces grade repetition and the share of overage students. While the increase in students does not directly equate to a reduction in the number of children out of school, it does demonstrate strong demand from families for the program and a correspondingly strong supply response from the nonpublic sector.

Paper #2: “Understanding School Competition Under Voucher Regimes”

*Cristian Sanchez* (Assistant Prof., ITAM, cristian.sanchez@itam.mx)

Link to full draft

**Short abstract:** I study how different voucher designs and policies affect school competition in education markets, and their consequences for students' school choices and welfare. To that end, I build a structural model of demand and supply for primary education in markets that allow the use of vouchers. Unlike previous studies, I not only model schools' pricing behavior, but also their program participation decisions, a discrete strategy that adds an additional layer of complexity to the solution of the supply side game. I fit my model to rich administrative data from Chile, and leverage its simultaneous implementation of universal (available to all students) and targeted (available only to low-income students) vouchers to estimate my model's parameters. Counterfactual simulations indicate that universal and targeted vouchers affect school competition differently. On the one hand, a higher targeted voucher attracts more schools to participate in the targeted program. However, high-quality schools join only if the subsidy is sufficiently high. On the other hand, a higher universal voucher induces schools to lower the top-up fees they charge to parents. Specifically, a $1 increase in the subsidy translates into a $0.58 decrease in the average fee. Finally, policies that favor the universal voucher are more mobility- and welfare-enhancing in the aggregate, but increase the welfare gap between low- and high-income students, relative to policies favoring the targeted voucher.
**Paper #3: “Low Returns to Low-Cost Private Schools: Evidence from a Voucher Lottery in Delhi”**

*Lee Crawfurd* (Ph.D. candidate, University of Sussex, lee.crawfurd@gmail.com)
Dev Patel (Ph.D. candidate, Harvard University, devapatel3@gmail.com)
Justin Sandefur (Senior Fellow, Center for Global Development, jsandefur@cgdev.org)

[Link to full draft](#)

**Short abstract:** Over half of parents in urban India pay to send their children to private schools, and India’s 2009 Right to Education Act subsidizes disadvantaged students to attend these schools. Do the educational benefits of private schools explain this high demand? We present results from a voucher lottery that provided roughly 800 households in low-income neighborhoods in East Delhi with tuition-free access to low-cost private schools of their choice for five years. A year after the end of primary school, we find no impact of vouchers on English scores, math scores, non-cognitive skills, or student aspirations, and small negative effects on Hindi scores. Winning the lottery granted students access to slightly smaller class sizes, but did not reduce travel distance to school or expose them to significantly more affluent friends. Consistent with our finding of limited educational impacts, take-up of the vouchers declined considerably over the five years of the program.

**Paper #4: “Outsourcing Service Delivery in a Fragile State: Experimental Evidence from Liberia”**

*Mauricio Romero* (Assistant Prof., ITAM, mtromero@itam.mx)
Justin Sandefur (Senior Fellow, Center for Global Development, jsandefur@cgdev.org)
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[Link to full draft](#)

**Short abstract:** In 2016, the Liberian government delegated management of 93 randomly-selected public schools to private providers. After one academic year, students in outsourced schools scored 0.18σ higher in English and mathematics. Private providers improved managerial practices and reduced teacher absenteeism (``better management''), but also spent more per student and employed more teachers (``extra resources''). Non-experimental mediation analysis suggests these two factors played roughly equal roles in learning gains. We find significant heterogeneity across providers, both in learning gains and other unintended consequences of outsourcing.