



## PAKISTAN: What's the best way to invest in private schools?

Private schools that cater to low-income students are popular with parents seeking alternatives to government schools. But these private schools, which are often owned by local entrepreneurs, may lack the resources and incentives to expand enrollment or improve quality. They generally operate in markets where access to credit is limited and where there aren't loan

products tailored to their needs. This means that any improvements have to be financed through school fees or their own funds. When donors and investors step in to provide support to private schools, they tend to focus on larger operators

with a chain of schools, which typically implies selective funding to a limited number of schools rather than broad support to the schooling market. Is this the best way to support private schools that cater to poor families? Could supporting the entire market, rather than select schools—or chains—lead to more competitive pressure to invest in quality improvements that promote students' learning? And is a market for loans for private schools sustainable?

In Pakistan, a research team supported by funders that included the Strategic Impact Evaluation Fund (SIEF) sought

to determine how best to structure cash grants to support rural private schools serving low-income students.\* The team tested two models: In one set of villages, all private school owners were given a grant; in another set, only one private school was targeted in each village. In both groups of villages, schools increased spending on school infrastructure relative to the control group. However, test scores increased only among students who were in private schools in villages where all the private schools received the grants. In these schools, the owners increased teachers' wages too, which may have helped them attract better teachers. They also raised school fees, which helped increase their revenues, while schools that were the only ones in the village to receive the money generally relied on raising enrollment to increase their revenues. The results indicate that improving access to finance may help schools make improvements that benefit students, while also raising their own profits through increases in either enrollment or fees, or a combination of the two. The research team has now partnered with a major microfinance institute in Pakistan, Telenor Bank, and others to develop and evaluate the impact of new loan products for private schools that cater to low-income students in Punjab. Among other things, the research team will measure whether making loans available leads schools to make changes that improve student learning and also raise revenues so they can repay the loans.

### Context

About one-third of all children of primary school age in Pakistan attend private school, and most of these schools keep their fees low and cater to poor students. Schools hold down costs largely because they hire as teachers local, unmarried young women with a secondary school education.\*\* While learning

across all Pakistani schools lags behind what is in the curriculum, students in these schools tend to outperform their peers in government schools. By grade three, the test scores of students in these private schools put them ahead by 1.5 to 2.5 years of learning.

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\*\*Tahir Andrabi, Jishnu Das, Asim Ijaz Khwaja, "Students today, teachers tomorrow: Identifying constraints on the provision of education," *Journal of Public Economics*, 100 (2013) 1–14



In Punjab Province, where this study took place, private schools enroll close to 40 percent of children between the ages of six and 10 years. Median school fees are under \$2 a month, which is less than half the daily minimum wage in the province. These schools operate in competitive environments. In the area where the study took place, 64 percent of villages had at least one private school, and many had a mix of up to five private and government schools. These private schools

produce higher test scores at lower costs than government schools but they don't show continual quality improvements nor do they expand enrollment, based on data from the Learning and Educational Achievement in Pakistan Schools (LEAPS), an ongoing study of education in Punjab. Two-thirds of school owners surveyed through LEAPS reported that they would like to borrow to improve their schools, but only 2 percent had school-related loans.



## Intervention and Evaluation

The researchers tested the impact of two different approaches for making funding available: providing all private schools in a village with a one-time cash grant of Rs. 50,000 (about \$500 at the time), versus giving the grant to only one of the private schools in a village. The money was distributed in a minimum of two installments over a one-year period. The amount was equal to about five months of profit and was enough to pay for two teachers a year or to buy an additional 25 to 100 desks and chairs. There were no conditions attached to receiving the money, although school owners had to submit a nonbinding business plan and they had to open a one-time use bank account to receive the money.

The intervention took place in Faisalabad district in Punjab and it covered all villages that had at least two non-governmental schools, which was 42 percent of the district's 786 villages. On average, each village had three private and

two government primary schools. Researchers randomly selected 266 of the villages for the experiment. The villages were divided into two treatment groups and one control. In 114 villages, researchers randomly assigned one private school in each village to receive the cash grant; in 75 villages, all 228 private schools were offered the grant; and in the control group of 77 villages, none of the 249 private schools received a grant. The baseline survey was carried out in July 2012 and distribution of the money started later the same year, halfway through the 2012-2013 school year. There were five rounds of follow-up surveys starting in May 2013, and then every three to four months through November 2014 focusing on enrollment, fees, and revenues. Children were tested at baseline and then again 14 months later. The typical school year runs from April to March, with a three-month break in the summer.



## Findings

**School owners used the money on schools: All school owners who received the cash grants increased spending on their schools, with more than half the money spent on desks, chairs, and other infrastructure improvement.**

The first year of the program, all of the school owners who received the grants spent between 39 percent and 44 percent more than the control group on fixed costs like room upgrades, new furniture, school infrastructure, and education materials. This increase in investments amounted to 70

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percent of the total grant amount in the villages where all private schools received the cash grants and to 61 percent in the villages where only one private school received the money.

**How schools spent the money differed depending on if they were the only school in the village to get the money or one of many schools: The real difference was in spending on teachers—schools in villages where all private schools received grants increased teachers’ salaries.**

Spending on teachers’ salaries and other variable expenses rose by 12 percent when all private schools in a village received grants. The increase was driven by higher salaries for teachers and not an increase in the number of teachers. These schools were more likely to have hired new teachers, and they paid higher salaries for their teachers. This suggests that schools were trying to attract better teachers to raise the quality of the schools, consistent with prior research in Pakistan linking students’ test scores and teachers’ wages.\*\*\* In schools that were the only ones in their villages to receive the grant, variable monthly spending didn’t increase significantly.

**Student learning improved only when all private schools in a village received cash grants.**

Researchers tested the students in math, English, and the local language, Urdu, at baseline and 14 months after the start of the intervention. In villages where all private schools received grants, the test scores of children in the private schools rose by 0.21 standard deviations, which corresponds to an additional six months of learning over two years. Test score gains remained when researchers restricted their sample to those students who had been in the schools before the grants, ruling out gains because the composition of the students in these schools had changed. However, students in the schools that were the only ones in the villages to receive a grant showed no statistically significant test score improvements.

**All schools that received cash grants showed an increase in revenues. In schools that were the only ones in the village to receive a grant, revenue increases were driven by increases in enrollment,**

**while in villages where all schools received the grant the rise in revenues was driven by an increase in school fees.**

Revenues increased in all schools that received grants, indicating they either expanded the number of students they enrolled or raised fees, or did a combination of the two. After two years, schools that were the only ones in the villages to receive the grants had an average of 22 more students than the control group, an increase of around 13 percent. These schools were also nine percentage points less likely to close down during the study period. When all schools in a village received the grant, they were not any less likely to close when compared with the control group and enrollment in each school rose by an average of nine students.



The returns on these grants were remarkably high. In villages where only one private school received the grants, the authors compute returns on investment between 61 percent and 83 percent and in villages where all private schools received the grants, the returns were lower at 12 percent to 32 percent, but still exceptional compared to typical programs in this sector.

**School fees, however, only went up when all private schools in the village received grants.**

\*\*\*Natalie Bau and Jishnu Das, “The Misallocation of Pay and Productivity in the Public Sector: Evidence from the Labor Market for Teachers,” World Bank Working Paper, WPS8050 (2016)

The investments in learning—particularly, the increased spending on teacher salaries—allowed schools in villages where all schools received the grant to increase their fees. Average monthly tuition fees were about Rs. 19 higher in these schools than in control schools, or an eight percent hike. There was no increase in school fees in schools that were the only ones in the villages to receive the grant. In other words,

when only one school in a village received money, revenues rose because enrollment increased; in villages where all private schools received the money, revenues rose primarily from charging higher fees. The fact that schools increased their overall expenditures despite the grant being essentially unconditional suggests that school investments offer better returns relative to other investment options.

## Conclusion

In some low- and middle-income countries, private schools that target poor families are used to fill gaps in government services or are attracting families that believe the quality is better than in government schools. While government-run education systems can rely on public financing to improve services, private providers' access to financing is more limited. This evaluation sought to test the effectiveness of offering unconditional cash grants to small private schools in rural Pakistan and measured the effects on enrollment, school investments, school revenues, and student learning. The evaluation also explored whether it mattered if one school in the village received the money or if all schools did. The evaluation found that with both types of grants,

schools increased their investments relative to a control group, focusing mainly on infrastructure, and their revenues rose. In schools in villages where every school was offered a grant, teachers' salaries also increased, as did student learning. In villages where only one school received a grant, schools increased enrollment but not student learning. The results indicate that opening up credit could be an effective route for improving small-scale private schools. Currently, the SIEF-supported research team is testing the impact of offering loans to private schools in Pakistan that cater to low-income students, to see whether they generate similar impacts as the unconditional cash grants.

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