The Effects of User Fee Reductions on Enrollment: Evidence from a quasi-experiment

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**Country**  
Colombia

**Organizing Theme**  
Education and Skills

**Status**  
Completed

**Intervention Category**  
School Fee Reduction

**Sector**  
Education

**Abstract**  
This paper evaluates the impact of a fee reduction program launched by the city of Bogota in 2004. The program is targeted using a proxy means test (the SISBEN index), such that the probability that households benefit from the fee reduction is a discontinuous function of their SISBEN score. This allows us to implement a regression discontinuity design which, as we discuss below, can yield rigorous and credible estimates of this program’s effect. To our knowledge, Bogota is the first setting in which such a design has been applied to evaluate a fee reduction program. Our results suggest that the program had a significant impact. We find that the fee reductions offered to individuals of Sisben levels 1 and 2 have a positive effect on enrollment in primary grades for students in Sisben 1, and in high school grades for Sisben 2. Specifically, the estimates suggest that Gratuidad raises the probability of enrollment for primary aged Sisben 1 students by about 3 percent, and for high school-aged Sisben 2 students by about 6 percent. Importantly, these positive effects seem to be larger for at-risk students, and to not vary by gender. While there are groups for which we find no effect (e.g. students of age to attend high school grades in Sisben 1) the overall pattern of results suggests the program had a significant impact.

**Gender Connection**  
Gender Informed Analysis

**Gender Outcomes**  
Gender disaggregated school enrollment

**IE Design**  
Regression Discontinuity

**Intervention**  
The Gratuidad fee reduction initiative was started by the Bogota government in 2004. The program is targeted using a proxy means test, and children’s fees are reduced based on their score on the index. Sisben 1 children benefit from the elimination of both academic and complementary service fees, while Sisben 2 households receive a reduction in fees of about 50%.

**Intervention Period**  
2004-Present

**Sample population**  
The Sisben reached 4,030,628 individuals in 1,110,588 households.

**Comparison conditions**  
The study compares students in households who are just below (treatment) the Sisben index cutoffs to individuals who are just above (control) the cutoff.
<table>
<thead>
<tr>
<th>Unit of analysis</th>
<th>Student Level</th>
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<tr>
<td>Evaluation Period</td>
<td>2004-2005</td>
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<tr>
<td>Results</td>
<td>The program did have a significant impact. The authors find that the fee reductions offered to individuals of Sisben levels 1 and 2 have a positive effect on enrollment in primary grades for students in Sisben 1, and in high school grades for Sisben 2. Specifically, the estimates suggest that Gratuidad raises the probability of enrollment for primary-aged Sisben 1 students by about 3 percent, and for high school-aged Sisben 2 students by about 6 percent. Importantly, these positive effects seem to be larger for at-risk students, and to not vary by gender. While there are groups for which we find no effect (e.g. students of age to attend high school grades in Sisben 1) the overall pattern of results suggests the program had a significant impact. Additionally, we find evidence that enrollment responses are sensitive to the size of the subsidy. For basic education, the program is significant for boys but not girls. In contrast, for the high school, girls experience a 7.6 p.p. response while the estimator for men is not significant.</td>
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<td>Primary study limitations</td>
<td>Parents may have tried to &quot;game&quot; the system in order to score just low enough to be enrolled in the program. However, there is no bunching of scores around the cutoff.</td>
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<td>Funding Source</td>
<td>The Secretary of Education of the District of Bogota, and Fedesarrollo</td>
</tr>
<tr>
<td>Reference(s)</td>
<td>Barrera-Osorio, F., Linden, L., Urquiola, M. (2007) 'The Effects of User Fee Reductions on Enrollment Evidence from a quasi-experiment'</td>
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<tr>
<td>Microdata</td>
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