Comparing the Performance of Faith-Based and Government Schools in the Democratic Republic of Congo

Backiny-Yetna, Prospere and Wodon, Quentin

World Bank

June 2009

CHAPTER 8

Comparing the Performance of Faith-Based and Government Schools in the Democratic Republic of Congo

Prospere Backiny-Yetna and Quentin Wodon

Introduction

To the extent that faith-based (and more generally nonprofit) providers of education or health services are altruistic (Reinikka and Svensson forthcoming), we could expect that they would provide better services for the poor than public providers. This would be important for African postconflict countries in which faith-based and alternative service providers of education play a large role (e.g., Bekalo et al. 2003; Dennis and Fentiman 2007; Wodon and Ying 2009).

As noted in the previous chapter, there is some evidence that faith-based and nonprofit service providers offer services of good quality and often more so than public schools (e.g., Allcott and Ortega 2009; Asadullah et al. 2009; Altonji et al. 2005; Cox and Jimenez 1990; Evans and Schwab 1995; González and Arévalo 2005; Hoxby 1994; Hsieh and Urquiola 2006). However, in extremely poor countries in which state education systems are especially fragile, in which an overwhelming majority of students attend faith-based schools, and in which because of a lack of

public financing the cost of education is essentially borne by parents whether the children go to public or private schools, differences between faith-based and public schools could be rather limited.

The Democratic Republic of Congo is such a country. The aftermath of independence was a period of political instability in the Democratic Republic of Congo, but the country was relatively peaceful and growing, creating a strong demand for education. From the mid-1960s to the mid-1970s, school enrollment grew, fueled not only by population growth but also by gains in enrollment rates, at an annual rate of 5 percent in primary, 19 percent in secondary, and 24 percent in tertiary education (World Bank 2005). The growth in enrollment decelerated during the economic crisis period that started in the mid-1970s and lasted for two decades (this crisis was triggered by a deterioration in trade caused by a decline in copper prices). Yet it was only after 1995, during a period marked by the end of the 32-year Mobutu regime and the start of a civil war, that primary enrollment started to decrease.

In the decade from 1995 to 2004, the Democratic Republic of Congo suffered from a long civil war that had a devastating effect on the economy and the population (estimates of the number of deaths range from 3 to 5.5 million people). In part as a result of this civil war, in 2005 more than 7 in 10 people lived in poverty (World Bank 2008). The conflict also led to dramatic losses in human development indicators, including a decline in primary enrollment rates and stagnation in secondary enrollment rates, something that had not been observed before (World Bank 2005).

Our objective in this chapter is to conduct an analysis of the comparative performance of faith-based and public schools in the Democratic Republic of Congo. After providing some background on the education system in the Democratic Republic of Congo, we use the nationally representative 1-2-3 survey of 2004–05 to analyze the market share of various types of education providers and whom these providers serve. Next, we use econometric methods to assess whether faith-based providers have a better performance, as measured by literacy and dropout rates, than government schools, taking into account the possibility of endogenous choice of school type by parents. The data on literacy are subjective assessments made by household heads concerning the abilities of their children and are thereby substantially less precise than test scores, but nevertheless useful indicators to assess the comparative performance of various types of schools. We find that faith-based schools perform slightly better at least in some dimensions than government schools, but the differences between the two types of schools are small, and they are not statistically significant in the case of the Democratic Republic of Congo.

Background on the Education Sector

Primary and secondary education in the Democratic Republic of Congo is provided by three types of schools: government schools (*écoles non-conventionées*), faith-based schools (*écoles conventionnées*), and private schools. Both government and faith-based schools receive subsidies and are considered public schools. By contrast, private schools do not benefit from state support. In this chapter, we are concerned with the performance of publicly supported education, which includes public and faith-based schools. The term "publicly supported," although correct, is somewhat of a misnomer in the Democratic Republic of Congo, given the fact that most of the costs of education in the country today are borne by households. As discussed in a World Bank (2005) report, public financing for education has declined substantially since 1986, and as a result public funding for education is very limited. This means that most of the costs of education are borne by parents.

Administratively, between 1997 and 2003, a single Ministry for Education was in charge of primary, secondary, and tertiary education, as well as scientific research. After 2003, the ministry was split in two, with primary, secondary, and professional education being under the supervision of the Ministère de l'Enseignement Primaire, Secondaire, et Professionel (MEPSP) and higher education and scientific research under the supervision of the Ministère de l'Enseignement Supérieur et Universitaire (MESU). Yet as noted by the World Bank (2005), the relationship between the government and religious institutions has not been clearly defined. Private schools, including religious schools, which provide about half of all education services in the country, were nationalized in 1974, but only for three years after which the government entered into a "convention" with the four major religious organizations (Roman Catholic, Protestant, Kimbanguiste, and Islamic). The convention stipulates that faith-based schools must follow the public curriculum and norms on class size, teacher qualifications and salaries, and system of student assessment. In principle, the schools belong to the state even if they are managed by religious organizations. A 1986 law that gave broad authority to the Ministry of Education does not mention the religious school networks, even though a National Council of Education with representation from both the government and the religious networks was later created to coordinate national policy.

In practice, each religious network has its own structure to manage its schools. Each network also has to rely for the most part on its own resources to pay for the services provided. Through various levies, parents

provide the bulk of funding, among others for teachers' salaries. Most religious networks have limited ability to provide additional funding. Hence faith-based schools and government schools are in the same situation of relying on parental fees for teacher salaries, with even more limited funding for building new schools or improving existing schools. This also means that the quality of education is low. For example, most children in the fourth grade of primary school have acquired only limited language skills, such as associating words and pictures.

The issues of cost and quality were also documented in a poverty assessment completed at the World Bank (2008). The data confirmed that the private cost of education was very high, especially for the poor, so that affordability issues repeatedly came up as the main reason for not sending children to school, not maintaining them in school regularly, or having them drop out. Two-thirds of potential users of schools found the costs of private schools excessive. The perception concerning publicly funded schools (whether faith-based or government schools) was less extreme, but still a fourth of potential users found costs excessive (27 percent for the *conventionnées* and 22 percent for government schools). Still, despite the high cost of schooling, most households choose their school on the basis of quality (58 percent of parents), as opposed to proximity (23 percent) or cost (16 percent). Among the poor and in rural areas, proximity is a more important limiting factor in regard to the available choice of schools. In urban areas and among better-off households, more weight is placed on quality. Interestingly, slightly more than two-thirds of potential users suggest that the costs of schooling are legitimate to obtain a good education (paying such costs is considered to be a duty for parents).

As for the poor quality of education, it is related to a range of factors. Three-quarters of the school infrastructure is more than 20 years old. Despite norms limiting class size, nearly 40 percent of students in the first grade study in overcrowded classes (class sizes decrease in higher grades as a result of high dropout rates). Appropriate textbooks and instructional materials are missing, and the preparation of new books is not undertaken because of lack of funding. Low-cost instructional aid kits sold to schools and teachers in Kinshasa cannot be supplied in the interior of the country because of logistical problems. As a result of these problems, test scores are low. Under a pilot program, tests were administered in three academic years to 5,000 students in 100 schools (50 target schools receiving assistance form UNICEF and 50 comparator schools receiving no inputs). Average scores for French and mathematics

were below 50 percent. Students in target schools (receiving assistance) scored somewhat higher, but the differences were small versus comparator schools. Still, quality did improve over time in both types of schools, with larger improvements in target schools, particularly in French. This suggests that gains can be made, but substantial efforts are needed.

Basic Statistics

This section provides basic statistics on the role of public, private faith-based, and other service providers of education in the Democratic Republic of Congo using the nationally representative 1-2-3 survey. The Democratic Republic of Congo's education system consists of three main levels: primary schools (six years of study), secondary schools (six years), and tertiary education. In this chapter, we focus on primary education indicators. Table 8.1 provides the market shares of various types of providers by quintile of per capita consumption (with the first quintile, "Q1," representing the poorest 20 percent of the population, and the top quintile, "Q5," the richest 20 percent). Given that the proportion of the population in poverty is above 70 percent, the first four quintiles can be considered as representing the poor, or at least households that are vulnerable to poverty.

Faith-based providers account for almost 79 percent of all primary school students in rural areas and 51 percent in urban areas (70 percent

Table 8.1 School Enrollment in Primary School by Quintile

	Q1	*Q2*	*Q3*	*Q4*	*Q5*	*All*
Urban						
Public	16.6	20.6	18.5	22.4	21.9	100.0
Religious	18.6	20.0	18.7	21.9	20.8	100.0
Private	9.1	14.3	14.8	27.6	34.2	100.0
All	15.6	18.6	17.6	23.5	24.6	100.0
Rural						
Public	27.8	21.2	20.8	19.9	10.3	100.0
Religious	24.9	23.4	21.5	17.4	12.7	100.0
Private	28.0	19.6	21.8	12.2	18.3	100.0
All	25.6	22.9	21.4	17.6	12.5	100.0
Congo, Dem. Rep. of						
Public	23.4	21.0	19.9	20.9	14.9	100.0
Religious	23.5	22.6	20.9	18.5	14.6	100.0
Private	14.3	15.8	16.7	23.3	29.9	100.0
All	22.4	21.5	20.2	19.5	16.4	100.0

Source: Authors' calculations using 1-2-3 survey, Democratic Republic of Congo, 2005.

at the national level). Government public schools have a market share of 23 percent in urban areas and 17 percent in rural areas. Private schools are important in urban areas (28 percent market share), but rather limited in rural areas (less than 5 percent market share). Faith-based schools and public schools serve rather similar constituencies in regard to the level of well-being of the students as measured by the quintiles of per capita consumption. Private schools by contrast tend to serve on average better-off students, as expected.

In urban areas, faith-based schools have a large share of Catholic students (61 percent, versus overall market share of 51 percent), and they enroll relatively few children who do not belong to the main religions listed in the table (see table 8.2). However, as a rule, faith-based schools seem to be open to students from all backgrounds, and in rural areas especially, their student body seems roughly representative of the various faiths. This points to the fact that faith-based schools, which function in a way similar to public schools, do not discriminate against any specific religion.

To compare the performance of faith-based and government schools, we rely on two indicators: (1) whether students can read and write in French and (2) whether students are still enrolled in school between the ages of 13 and 18. Table 8.3 provides summary statistics on these two

Table 8.2 School Enrollment in Primary School by Student's Religion

	Catholic	*Protestant*	*Other Christian*	*Other religion*	*Other*	*All*
Urban						
Public	19.5	23.3	24.7	22.0	46.8	22.5
Religious	60.7	49.1	41.6	49.7	15.7	50.8
Private	19.7	27.5	33.7	28.3	37.5	26.7
All	100.0	100.0	100.0	100.0	100.0	100.0
Rural						
Public	17.9	13.1	21.4	13.8	22.4	16.5
Religious	78.1	83.6	68.7	82.7	71.7	78.7
Private	4.1	3.3	9.9	3.5	5.9	4.8
All	100.0	100.0	100.0	100.0	100.0	100.0
Congo, Dem. Rep. of						
Public	18.4	15.5	22.9	16.4	31.0	18.4
Religious	72.5	75.6	56.5	72.3	51.9	69.8
Private	9.1	8.9	20.6	11.3	17.1	11.8
All	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculations using 1-2-3 survey, Democratic Republic of Congo, 2005.

Table 8.3 Performance Measurement by School Type

	% of students in primary schools who can read and write in French	*% of students still enrolled in school at age 13–18 among those ever enrolled*
Urban		
Public	24.4	60.4
Religious	24.7	71.6
Private	27.6	70.6
All	25.4	68.3
Rural		
Public	8.8	61.7
Religious	8.8	63.9
Private	12.2	74.4
All	9.0	64.0
Congo, Dem. Rep. of		
Public	14.9	61.2
Religious	12.5	65.2
Private	23.4	72.3
All	14.3	65.0

Source: Authors' calculations using 1-2-3 survey, Democratic Republic of Congo, 2005.

performance indicators among all children enrolled in school for the first indicator, and among all children 13–18 years of age for the second (for that indicator, we associate children who dropped out of school to various school networks on the basis of where the children went to school when they were still enrolled). Only a small minority of the students can read and write in French in primary schools. This is the case for 1 child in 4 in urban areas, and less than 1 child in 10 in rural areas. However, almost 2 in 3 children who previously enrolled in school are still enrolled in school at age 13–18.

Looking at the data at the national level in table 8.3, it is clear that students going to private schools tend to be better able to read and write, and they tend to have a higher probability of being enrolled at age 13–18. This is as expected given that these children come from slightly more privileged backgrounds. In regard to the comparison between government and faith-based schools, the ranking is less clear. On the one hand, a slightly higher proportion of students in government schools can read and write in French, but on the other hand, the proportion of children still enrolled at age 13–18 is higher in faith-based schools (this is however not necessarily a positive outcome because a higher enrollment rate may simply reflect more repetition).

For literacy, at least, much of the difference seems to be due to the geographic location of the schools. Faith-based schools are especially important in rural areas, where literacy is lower. If one looks at the average literacy rates in urban and rural areas separately, there are very few differences between public and faith-based schools. This illustrates how simple comparisons of performance between both types of schools may not account for the fact that there are potentially important differences in the types of students that enroll in government and faith-based schools. In the next section to assess performance controlling for a wide range of child and household characteristics and controlling for the possibility of endogenous school selection, we use regression techniques .

Econometric Analysis

Our technique for assessing the correlates of performance is simple and follows closely what was done for Sierra Leone by Wodon and Ying (2009). We estimate binary outcome (probit) models on whether or not a child can read or write, as well as whether the child is still enrolled at age 13–18, as a function of a large number of child, household, and geographic characteristics, including whether or not the child is in a faith-based or government school (children going to private schools are dropped from the sample). However, the choice of school for a child can itself depend on the child's performance. To avoid endogeneity bias, we instrument the choice of the type of school the child goes to through a first regression that includes as regressors all the correlates of the outcome regression, plus the leave-out share of the students in the child's geographic area that are going to faith-based schools (this follows among others Ravallion and Wodon 2000 and Wodon 2000). The child's geographic area is identified through the primary sampling unit to which the household belongs in the survey (each primary sampling unit includes typically between 20 and 30 households). We compute the leave-out participation rate in faith-based schools not taking into account whether the child himself or herself goes (thus, for each child in the same primary sampling unit, we compute a different leave-out mean; see Box 7.1 in Wodon and Ying [2009] in chapter 7 for a more detailed explanation of the method adopted).

The analysis is undertaken only on the sample of children who are attending government and faith-based schools. The regressors or correlates for the school choice and the performance of the student are (1) the type of school attended by the child (in the outcome regressions this variable is

instrumented as explained above to avoid endogeneity issues); (2) the grade the child is in (first grade of the cycle is the reference category); (3) the time it takes for the child to go to school and the square of that time; (4) the characteristics of the child—the age of the child and the age squared, the gender of the child, whether the child lives with his or her parents; (5) the geographic location of the child according to urban or rural status and the main provinces in the country (we also run separate urban and rural regressions); (6) the quintile of per capita consumption of the household in which the child lives; (7) the religion of the child (with Catholic being the reference category); (8) household demographic variables—the household size and its square, whether the household head is male or female, and whether there is a spouse in the household; (9) the education level of the household head and spouse; and (10) the occupation of the father and the mother (farming is the reference category).

The first-stage regressions are not provided here but are available on request. They suggest that the religion of the child is not a key determinant of school choice, with two exceptions, in that "other Christian" children (i.e., those who are not Catholic or Protestant) and children whose parents declare not having a religion are less likely to go to faith-based schools. Another key result is that children from wealthier households are less likely to enroll in faith-based schools, although the effect is not systematic (remember that the sample is limited to children going to public and faith-based schools and does not include private school students). A better education for the household head and spouse makes it more likely that the child will go to a faith-based school, whereas a child in a female-headed household has a higher probability of going to a public school. Employment type for the household head or spouse in general does not have much impact on school choice, but the leave-out participation rate in faith-based schools, which is our instrument, is highly statistically significant, and the impact is also large, as expected.

We focus our discussion on the results of the outcome regressions, which are provided in table A8.1 and for literacy (for the probability of being still enrolled at age 13–18, the references are not shown as fewer variables are statistically significant, but the results are available upon request). The key variable of interest is the impact of the type of school attended by the child on performance as measured by literacy and the likelihood of still being enrolled at age 13–18. Controlling for other characteristics, attending a faith-based school increases literacy performance in the national-level regression (the effect is marginally significant at the 6 percent level), but not in the separate urban and rural

regressions. The magnitude of the effect on literacy at the national level is also small. As for the probability of still being enrolled in school, the effect is not significant (even at the 10 percent level) either nationally or in the urban and rural regressions. Thus, one could argue that there are no substantial differences in performance between both sets of schools for either of the two outcome indicators.

A number of other results are worth noting. If a child is in a higher grade, the likelihood of being able to read or write a letter in English is higher, and this also increases the probability of being enrolled (for grades 3 to 5, but not for grade 6, as expected, because the child has then completed primary school). If children live with their parents, that has a positive effect on both literacy and the likelihood of being in school at age 13–18. The age of the child also increases the likelihood of literacy and enrollment. Girls are less likely to be literate than boys, and they are also less likely to be enrolled at age 13–18. Children from migrant households are more likely to be literate, but less likely to be enrolled at age 13–18. Religion does not seem to affect literacy and dropping out, controlling for other characteristics, but there are some geographic effects, with most provinces faring worse than the capital, Kinshasa. In most cases, the distance to schools does not affect literacy and dropout. By contrast, children from wealthier backgrounds are, as expected, more likely to be literate. Surprisingly, the education of the head or spouse does not have much impact on literacy or dropout, except when the head has a university-level education. The same is observed for the occupation of the head and spouse.

Conclusion

As a result of both historical factors and a legacy of conflict, faith-based schools account for 70 percent of students in primary schools in the Democratic Republic of Congo. Using a recent nationally representative and multipurpose household survey, the first such survey implemented in the country in more than 15 years, the objective of this chapter was to provide a comparative assessment of the performance of faith-based and government schools in regard to literacy (ability to read and write in French) and dropout (being enrolled in school at age 13–18).

Our results suggest that subjectively assessed literacy rates are very low in the Democratic Republic of Congo, which confirms previous research in this area. As expected, children who are better off tend to go to private schools instead of government or faith-based schools, and when they do go to government or faith-based schools, they tend to perform better

(higher probability of literacy and lower probability of dropout). There are also differences between geographic areas in performance, but by contrast, differences related to the religion of the household, the education of the household head or spouse, and their occupation tend to be small.

In regard to the comparison of faith-based and public schools, simple basic statistics suggest few differences in outcomes measures between the two types of schools. The data also suggest that faith-based and government schools serve similar populations in regard to their levels of well-being. After controlling for child and household characteristics, and after taking into account the potential endogeneity of school choice depending on the performance of the student, we still find very few differences in performance between faith-based and public schools (all coefficients from the regression analysis are positive in favor of faith-based schools, but in most cases the coefficients are not statistically significant).

Our results do not suggest that in the Democratic Republic of Congo, faith-based schools provide better services than public schools. This result is different from those reported in the literature for other countries, in which faith-based schools tend to do slightly better than public schools. The fact that faith-based schools are comparable with public schools in the Democratic Republic of Congo could be related to the context of the country, whereby because of a lack of public financing, the cost of education essentially is borne by parents whether the children go to public or private schools. In addition, the very large market share of faith-based schools in the Democratic Republic of Congo makes it also more difficult to achieve excellence, or simply improve performance, across the board.

Annex: Regression Results

Table A8.1 Determinants of School Performance—Literacy

	National			*Urban*			*Rural*		
	Coef.	*Std. err.*	*P>z*	*Coef.*	*Std. err.*	*P>z*	*Coef.*	*Std. err.*	*P>z*
Religious school, instrumented	0.1574	0.0819	*	0.0886	0.1277	***	0.1530	0.1174	***
Grade									
Grade 1	réf								
Grade 2	0.1159	0.0642	*	0.1365	0.0833		0.0718	0.1089	
Grade 3	0.4117	0.0630	***	0.3401	0.0836	***	0.5242	0.1015	***
Grade 4	0.6365	0.0657	***	0.5590	0.0886	***	0.7632	0.1038	***
Grade 5	0.9569	0.0660	***	0.9035	0.0893	***	1.0601	0.1046	***
Grade 6	1.2903	0.1546	***	1.3113	0.1662	***	–4.7944	7497.4	
Child with biological parents	0.1049	0.0533	**	0.1101	0.0687		0.1315	0.0899	
Age	0.0372	0.0093	***	0.0283	0.0126	**	0.0495	0.0147	***
Age square	–0.0003	0.0002	**	–0.0002	0.0002		–0.0005	0.0003	**
Female (yes)	–0.1240	0.0355	***	–0.1120	0.0472	**	–0.1404	0.0563	**
Migrant (yes)	0.1131	0.0546	**	0.1704	0.0739	**	0.1407	0.0866	
Religion									
Catholic	réf								
Protestant	0.0229	0.0436		0.0642	0.0620		–0.0715	0.0648	
Kimbanguiste	–0.0907	0.1169		0.2481	0.1618		–0.4753	0.1919	**
Muslim	0.0183	0.1366		0.0439	0.1813		–0.1052	0.2203	
Other Christian	–0.0802	0.0529		–0.0776	0.0665		–0.1101	0.0950	
Animist	–0.2001	0.3337		–0.3556	0.4221		0.1033	0.5559	
Other religion	–0.0614	0.0773		–0.1102	0.1048		–0.0521	0.1208	
No religion	–0.0181	0.2127		0.2253	0.3769		–0.0795	0.2710	

Rural (yes)	–0.4285	0.0479	***						
Province									
Kinshasa	réf								
Bas-Congo	–0.3286	0.0890	***	–0.3055	0.1041	***	0.1100	0.1397	
Bandundu	–0.4487	0.0924	***	–0.3853	0.1119	***	–0.1186	0.1395	
Equateur	–0.5202	0.0892	***	–0.5694	0.1111	***	–0.1152	0.1268	
Orientale	–0.3770	0.0895	***	–0.4406	0.1118	***	0.1284	0.1309	
Nord-Kivu	–0.2372	0.0867	***	–0.1450	0.0982				
Maniema	–0.7391	0.0942	***	–0.7647	0.1214	***	–0.2309	0.1419	
Sud-Kivu	–0.4950	0.0918	***	–0.5509	0.1124	***	–0.0288	0.1348	
Katanga	–0.2065	0.0899	**	0.1190	0.1103		–0.1402	0.1384	
Kasai-Oriental	–0.3666	0.0939	***	–0.1101	0.1161		–0.1848	0.1567	
Kasai-Occidental	–0.7530	0.0968	***	–0.8024	0.1223	***	–0.2811	0.1549	*
Access to primary school									
Less than 1 km	réf								
1 km	0.0752	0.0567		0.1410	0.0801	*	0.0024	0.0853	
2–4 km	–0.0203	0.0684		–0.1724	0.1393		–0.0251	0.0829	
5–9 km	–0.0147	0.1125		0.2556	0.3784		–0.1511	0.1241	
10 km and more	–0.5453	0.3438		–4.7727	1017.0		–0.5770	0.3800	
Not available	0.1804	0.1021	*	0.3096	0.1488	**	–0.0229	0.1551	
Welfare									
Q1	réf								
Q2	0.0678	0.0545		0.0860	0.0757		0.0460	0.0823	
Q3	0.1189	0.0568	**	0.2569	0.0789	***	–0.0232	0.0874	
Q4	0.1296	0.0613	**	0.2357	0.0833	***	0.0108	0.0977	
Q5	0.3121	0.0695	***	0.4838	0.0939	***	0.0888	0.1147	

(continued)

Table A8.1 Determinants of School Performance—Literacy *(Continued)*

	National			*Urban*			*Rural*		
	Coef.	*Std. err.*	*P>z*	*Coef.*	*Std. err.*	*P>z*	*Coef.*	*Std. err.*	*P>z*
Household size	0.0041	0.0206		0.0354	0.0288		–0.0376	0.0316	
Household size square	0.0009	0.0009		–0.0003	0.0013		0.0023	0.0014	
Female head (yes)	0.1173	0.1101		0.2037	0.1382		0.0210	0.1889	
Spouse in the hh (yes)	0.2505	0.1603		0.2777	0.2043		0.2324	0.2834	
Education of the head									
No education	réf								
Primary	0.0632	0.0786		0.0289	0.1181		0.0697	0.1106	
Secondary	0.1088	0.0763		0.0981	0.1128		0.0923	0.1089	
Nonformal	0.2437	0.1705		0.3580	0.2052	*	–4.8995	892.2202	
University	0.1627	0.1051		0.1673	0.1381		-0.0055	0.2514	
Education of the spouse									
No education									
Primary	–0.0566	0.0569		–0.0834	0.0941		–0.0237	0.0752	
Secondary	0.0464	0.0594		0.0415	0.0922		0.0993	0.0854	
Nonformal	0.0486	0.2361		–0.0277	0.2602		–4.9249	1984.7	
University	0.4651	0.2093	**	0.5211	0.2343	**	–4.6740	2046.5	

Occupation of the head									
Wage earner, high level	réf								
Wage earner, others	–0.0545	0.0725		–0.0411	0.0842		–0.1049	0.1612	
Independent, nonagriculture	–0.1096	0.0648	*	–0.0706	0.0756		–0.1230	0.1494	
Independent, agriculture	–0.0952	0.0607		–0.0989	0.0838		–0.0621	0.1024	
Unpaid family worker	0.1104	0.0917		0.1032	0.1186		0.1381	0.1593	
Unemployed	–0.0858	0.0991		–0.1150	0.1120		0.3057	0.2358	
Inactive	0.0619	0.0915		0.0306	0.1098		0.0976	0.1822	
Occupation of the spouse									
Wage earner, high level	réf								
Wage earner, others	–0.1296	0.1752		–0.2766	0.2058		0.5416	0.3581	
Independent, nonagriculture	–0.1445	0.1217		–0.1162	0.1456		–0.4051	0.2809	
Independent, agriculture	–0.1823	0.1214		0.0312	0.1535		–0.3079	0.2212	
Unpaid family worker	–0.0905	0.1234		–0.1364	0.1641		–0.0972	0.2224	
Unemployed	–0.1070	0.1534		–0.0527	0.1769		–0.4816	0.4080	
Inactive	–0.2238	0.1222	*	–0.2858	0.1474	*	–0.0433	0.2398	
Constant	–1.8551	0.2077	***	–2.0585	0.2791	***	–2.4601	0.3269	***
Statistics									
Number of obs.	9505				4414		5091		
Wald chi2	1069.88				603.54		357.44		

Source: Authors' calculations using 1-2-3 survey, Democratic Republic of Congo, 2005.

References

Allcott, H., and D. E. Ortega. 2009. "The Performance of Decentralized School Systems: Evidence from Fe y Alegría in Venezuela." In *Emerging Evidence on Private Participation in Education: Vouchers and Faith-Based Providers*, ed. F. Barrera-Osorio, H. A. Patrinos, and Q. Wodon. Washington, DC: World Bank.

Altonji, J. G., T. E. Elder, and C. R. Taber. 2005. "An Evaluation of Instrumental Variable Strategies for Estimating the Effects of Catholic Schooling." *Journal of Human Resources* 40 (4): 791–821.

Asadullah, M. N., N. Chaudhury, and A. Dar. 2009. "Student Achievement in Religious and Secular Secondary Schools in Bangladesh." In *Emerging Evidence on Private Participation in Education: Vouchers and Faith-Based Providers*, ed. F. Barrera-Osorio, H. A. Patrinos, and Q. Wodon. Washington, DC: World Bank.

Bekalo, S., M. Brophy, and A. Welford. 2003. The Development of Education in Post-Conflict Somaliland." International *Journal of Educational Development* 23 (2): 459–75.

Cox, D,. and E. Jimenez. 1990. "The Relative Effectiveness of Private and Public Schools: Evidence from Two Developing Countries." *Journal of Development Economics* 34 (1–2) (November): 99–121.

Dennis, C., and A. Fentiman. 2007. "Alternative Basic Education in African Countries Emerging from Conflict: Issues of Policy, Co-ordination and Access." DFID Education Paper No. 67. Department for International Development, United Kingdom.

Evans, W., and R. Schwab. 1995. "Finishing High School and Starting College: Do Catholic Schools Make a Difference?" *Quarterly Journal of Economics* 110 (4) (November): 941–74.

González, R. A., and G. Arévalo. 2005. "Subsidized Catholic Schools in Venezuela." In *Private Education and Public Policy in Latin America*, ed. L. Wolff, J. C. Navarro, and P. González. Washington, DC: Project for Educational Revitalization in the Americas.

Hsieh, C., and M. Urquiola. 2006. "The Effects of Generalized School Choice on Achievement and Stratification: Evidence from Chile's School Voucher Program." *Journal of Public Economics* 90: 1477–1503.

Hoxby, C. M. 1994. "Do Private Schools Provide Competition for Public Schools?" NBER (National Bureau of Economic Research) Working Paper 4978. NBER, Cambridge, MA.

Ravallion M., and Q. Wodon. 2000. "Does Child Labor Displace Schooling? Evidence on Behavioral Responses to an Enrollment Subsidy." *Economic Journal* 110: C158–75.

Reinikka, R., and J. Svensson. Forthcoming. "Working for God? Evidence from a Change in Financing of Not-for-Profit Health Care Providers in Uganda." *Journal of the European Economic Association*.

Wodon Q. 2000. "Low Income Energy Assistance and Disconnection in France." *Applied Economics Letters* 7: 775–79.

Wodon, Q., and Y. Ying. 2009. "Literacy and Numeracy in Faith-Based and Government Schools in Sierra Leone." In *Emerging Evidence on Private Participation in Education: Vouchers and Faith-Based Providers*, ed. F. Barrera-Osorio, H. A. Patrinos, and Q. Wodon. Washington, DC: World Bank.

World Bank. 2005. "Education in the Democratic Republic of Congo: Priorities and Options for Regeneration." World Bank Country Studies, Washington, DC.

———. 2008. "Democratic Republic of Congo: Poverty Diagnostic." Report No. 36489-Democratic Republic of Congo. World Bank, Washington, DC.