ALL IN SCHOOL

Out-of-School Children Initiative

UNICEF AND UNESCO INSTITUTE FOR STATISTICS

DEMOGRAPHIC AND SOCIOECONOMIC DETERMINANTS OF SCHOOL ATTENDANCE: AN ANALYSIS OF HOUSEHOLD SURVEY DATA

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1.   Introduction

According to the most recent estimate of the UNESCO Institute for Statistics (UIS), globally there were 58 million out-of-school children of primary school age and 63 million out-of-school adolescents of lower secondary school age in 2012. While this indicates the number of out-of-school children has been significantly reduced compared to 2000, the progress has stalled since 2007. Around 9% of children of primary school age and around 17% of adolescents of lower secondary school age have remained out of school worldwide since 2007. Experiences in many countries show that the last 10-15% of the population is always hardest to reach and 'business as usual' would not meet the needs of those who have been left out and are being left behind. In order to formulate effective and innovative strategies to address the specific needs of the most disadvantaged groups, it is essential to identify more precisely who and where these out-of-school children are. Base on this need, this paper examines the detailed profiles of out-of-school children using the most recent household survey data. It begins with descriptive summaries detailing where these out of school children reside and what kind of characteristics they have in common. The second part of the paper introduces statistical modeling that attempts to identify the most important predictors of school attendance.

2.   Descriptive overview

This section provides a descriptive overview of the school attendance/non-attendance trend disaggregated by different socioeconomic and demographic characteristics including age, sex, residence (urban/rural), wealth quintile and household heads' education. The descriptive analysis was done using the most recent household survey data from the Multiple Indicator Cluster Surveys (MICS) and the Demographic Health Surveys (DHS) conducted in 63 countries[1] between 2008 and 2012.

Figure 1 shows average school attendance rates[2] among primary and lower secondary school age children[3] across the 63 countries. It indicates that on average 85% of children participated in either primary or secondary school. Large disparities are observed in their schooling status among different socioeconomic groups. The largest gap is found between the wealth quintiles:
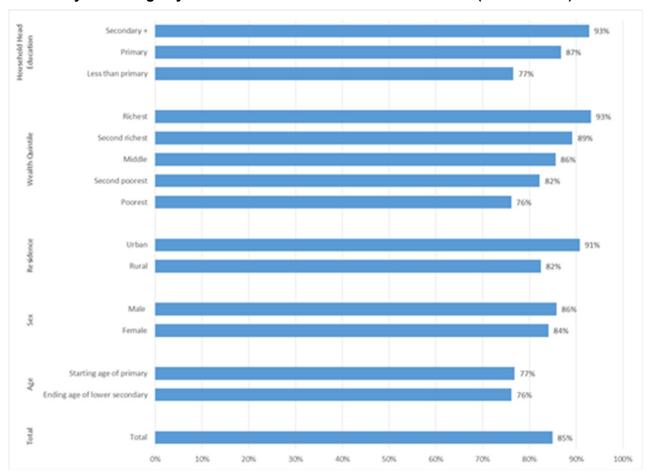
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[1] The 63 surveys reviewed are: Afghanistan 2010-11 MICS, Albania 2008-09 DHS, Armenia 2010 DHS, Bangladesh 2011 DHS, Belarus 2012 MICS, Belize 2011 MICS, Bhutan 2010 MICS, Bolivia 2008 DHS, Bosnia and Herzegovina 2011-12 MICS, Burkina Faso 2010 DHS, Burundi 2010 DHS, Cambodia 2010 DHS, Cameroon 2011 DHS, Central African Republic 2010 MICS, Chad 2010 MICS, Colombia 2010 DHS, Congo 2011-12 DHS, Democratic Republic of the Congo 2010 MICS, Costa Rica 2011 MICS, Cote d'Ivoire 2011-12 DHS, Egypt 2008 DHS, Ethiopia 2011 DHS, Gabon 2012 DHS, Gambia 2010 MICS, Ghana 2011 MICS, Guinea 2012 DHS, Guyana 2009 DHS, Haiti 2012 DHS, Honduras 2011-12 DHS, Indonesia 2012 DHS, Iraq 2011 MICS, Jordan 2012 DHS, Kazakhstan 2010-11 MICS, Kenya 2008-09 DHS, Lao People's Democratic Republic 2011-12 MICS, Lesotho 2009 DHS, Madagascar 2008-09 DHS, Malawi 2010 DHS, Maldives 2009 DHS, Mongolia 2010 MICS, Mozambique 2011 DHS, Nepal 2011 DHS, Niger 2012 DHS, Nigeria 2011 MICS, Pakistan 2012-13 DHS, Peru 2012 DHS, Rwanda 2010 DHS, Sao Tome and Principe 2008-09 DHS, Senegal 2010-11 DHS, Serbia 2010 MICS, Sierra Leone 2010 MICS, Suriname 2010 MICS, Swaziland 2010 MICS, Tajikistan 2012 DHS, The former Yugoslav Republic of Macedonia 2011 MICS, Timor-Leste 2009-10 DHS, Togo 2010 MICS, Tunisia 2011-12 MICS, Uganda 2011 DHS, Ukraine 2012 MICS, United Republic of Tanzania 2010 DHS, Viet Nam 2010-11 MICS and Zimbabwe 2010-11 DHS.

[2] The values are unweighted averages.

[3] Number of children attending primary or secondary school who are of official primary or lower secondary school age, expressed as a percentage of the total number of children of official primary or lower secondary school age.

on average the school attendance rate of children from the richest households is 17 percentage points higher than that of children from the poorest households. In other words, the latter children are more than three times as likely to be out of school as the children in the former group. A similar trend is found as to the education level of household heads: children from the households where the head has secondary education or above are 16 percentage points more likely to attend school than those from households headed by someone with less than primary education.

Figure 1. Average rate of total school attendance among children of primary and lower secondary school age by individual and household characteristics (63 countries)
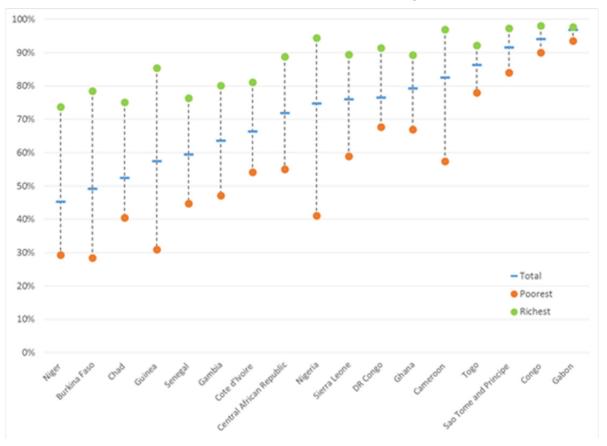
Overall children in urban areas show an advantage over rural ones: the school attendance rate of urban children is 9 percentage points higher than that of rural children. On average the gender gap is found small (2 percentage points) although some countries still show significant gaps as is discussed below. The difference in the school participation rates between the youngest and oldest children is very small as well. One of the reasons for this is because in some countries the oldest children are at a disadvantage while in other countries the youngest ones are more likely to be out of school and in yet other countries both the oldest and youngest children are equally less likely to attend school compared to the national averages. Specific country cases are discussed below.

A closer look at the country-level data (Table A1 in the Appendix) shows some striking disparities among different groups in a number of countries. First, in terms of economic disparities (wealth quintiles) 21 of the 63 countries show more than 20 percentage point differences in school attendance rates between the richest and poorest groups. This trend is particularly acute in some of the countries in the Western and Central Africa region: in Burkina Faso, Guinea, Niger and Nigeria the difference in the school participation rates between the two groups is over 40 percentage points *(see Figure 2).* In Nigeria this indicates children form the poorest households are 10 times more likely to be out of school compared to those from the richest households. The differences by household head's education level mostly follow the pattern exhibited by the wealth groups: again in 21 of the 63 countries the gaps in school participation rates between children from less educated families (less than primary) and those from more educated families (secondary or above) are more than 20 percentage points.

In terms of residence, 9 countries show the gaps more than 20 percentage points between urban and rural children. Here again the largest disparities are observed in the Western and Central Africa region: in Burkina Faso, Guinea and Niger children living in urban areas are more than 30 percentage points likely to attend school than those in rural areas. As for gender gaps, in many countries girls remain at a disadvantage when it comes to school participation. In five countries boys' school attendance rates are more than 20 percentage points higher than girls' attendance rates. The largest gender gap is observed in Afghanistan where only 68 girls per 100 boys attended school.

Figure 2. School attendance rate among children from the poorest and richest households, 17 countries in Western and Central Africa region

In terms of age, it is found in 17 countries the youngest children are more disadvantaged (attendance rates more than 10 percentage point lower than national total), in another 17 countries the oldest ones are more disadvantaged and in 8 countries children at both ends are equally disadvantaged. For instance, in Ghana only one third of children aged 6 years (official starting age of primary education) attended school while over 90% of children aged 14 (official ending age of lower secondary education) attended either primary or secondary school. This implies late school entry is a major issue in Ghana. In contrast, in Indonesia nearly all children aged 7 (official starting age of primary education) attended primary school whereas only 61% of children aged 15 (official ending age of lower secondary education) attended school. This indicates many children drop out of school before completing lower secondary education in the country. Furthermore, in countries like Lao People's Democratic Republic both late school entry and early dropout appear to be an issue: while the total school attendance rate for the whole age group (6-14) is 84%, that of both 6-year-olds (official starting age of primary education) and 14-year-olds (official ending age of lower secondary education) is as low as 70%.

3. Multivariate analysis

The previous section covered descriptive summaries of out-of-school children profiles, which highlighted major disparities in school attendance among different socioeconomic groups. Statistical modeling can further deepen the analysis of children's non-participation in school. A series of multivariate analyses were conducted to examine child and household background influences on school attendance using the household survey data from the 63 countries.

Statistical analysis of this type makes it possible to assess the impact of each variable on school attendance while controlling for the impact of the other variables in the model. Due to the dichotomous nature of the dependent variable (school attendance), a logistic model was used. The model looked into how school attendance is shaped by variables in the background circumstances of the individual child: their age and gender, where they live, the wealth of their household and the education level of their household heads. **Table 1** summarizes the results for school attendance among primary and lower-secondary school-age children[4]. Complete results for all countries are provided in Table A2 in the Appendix.

Table 1. Marginal effects on school attendance

Background variables	Number of countries	Marginal effects		
		Positive and significant*	Negative and significant*	Not significant
Age	63	19	34	10
Male	63	24	6	33
Urban	63	22	12	29
Wealth (richest quintile)	63	56	0	7
Household head education (secondary or above)	63	54	0	9

Note: * Significant at 5% level minimum.
Source: UNICEF calculations based on household survey data from 63 countries, 2008-2012

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[4] The age ranges are based on the International Standard Classification of Education (ISCED) and vary from country to country.

Major findings on each of the background characteristics are summarized below.

Households' wealth

Table 1 shows that household wealth is, by far, the main and most significant determinant of a child's school attendance in 56 of the 63 countries studied. The results indicate, for instance, that in Guinea children from the wealthiest families are nearly 40 percentage points more likely to attend school than those from the poorest quintile when other socioeconomic factors are held constant (see Table A2 in the Appendix). Many countries in sub-Saharan Africa and South Asia show marginal effects higher than 20 percentage points, which indicate households' wealth has a substantial impact on children's school participation even after controlling for other factors. The majority of the countries that did not find a significant effect of household wealth are those that already achieved high attendance rates (above 95%).

Household heads' education

In 54 of the 63 countries, the education level of household heads is found to have a positive association with a child's participation in school. In Chad, Niger and Senegal, for instance, children from the households where the head has secondary education or above were found over 30 percentage points more likely to attend school than those from households headed by someone with less than primary education, even after the household wealth level is controlled for. This implies the intergenerational effect of investment in education. Again, the countries that did not show a significant effect of the household head's education level are those that have already achieved school attendance rates higher than 95%.

Age

Children's age has a significant association with their schooling status in the majority of countries: the relationship between age and school attendance is found positive and significant in 19 countries and negative and significant in 34 countries. This indicates that in some countries young children are less likely to attend school while in other countries older children are at a greater disadvantage. Late school entry for the former cases and school dropout for the latter cases are considered to be major reasons for the results as is discussed earlier. Some countries (e.g. Mozambique, Nepal, Pakistan and Sao Tome and Principe) yielded a non-significant association between age and school attendance. A closer look at the descriptive statistics reveals, however, children at both younger and older ends ages were equally disadvantaged in these countries, which may have cancelled out the age effect. These countries are likely to have the problems of both late school entry and early dropouts.

Place of residence

The location of residence is significantly associated with school attendance in only about half of the countries: in 22 countries children in urban areas are found to be more likely to attend school, whereas in 12 countries rural children show higher attendance rates after controlling for other factors.

The size of the marginal effect is generally small, except for a few countries: in Niger and Senegal, children in urban areas are found more than 20 percentage points as likely to attend school compared with those in rural areas. On the other hand, in countries such as Bangladesh and Pakistan, children in rural areas were found nearly 10 percentage points more likely to attend school than those in urban areas when holding constant other socioeconomic

backgrounds. The results imply that peculiar urban issues (e.g. slums and squatter settlements) exist in these countries, where a large number and proportion of children are out of school in major cities and towns.

Gender

Gender is found to be a significant determinant of a child's school participation in less than half of the reviewed countries: in 24 countries, boys are more likely to attend school while in 6 countries girls were at an advantage. The effect size is generally small. In countries such as Afghanistan, Central African Republic, Chad, Cote d'Ivoire, Iraq, Niger and Nigeria, however, the likelihood of boys' school attendance is more than 10 percentage points higher than that of girls, all else equal. Descriptive statistics (see Table A1 in the Appendix) show that the gender gap in school attendance does exist in many more countries. When other important factors such as wealth and place of residence were controlled for, however, the gender effect diminishes in scores of countries.

4. Conclusion

The analyses above confirm that particular groups of children are more likely to be out of school: those from poor families, those from less-educated households, those in rural areas, younger and older children and girls (and boys in some countries). In order to achieve universal basic education, these children must be placed at the center of education policies in all countries. One-size-fits-all approaches would not work. Specific barriers and needs of these disadvantaged children must be identified and diversified and tailored strategies must be implemented.

As shown in this paper, the analysis of education data from household surveys helps divulge the detailed profile of out-of-school children, which forms a basis of more in-depth investigation of barriers and bottlenecks of children's school participation. The analysis conducted in this paper focused on the major demand-side determinants of children's school participation. Supply-side factors (e.g. distance to the nearest school, quality of education on offer etc.) are also considered to significantly affect their schooling status. Household surveys usually do not collect supply-side data. Further analysis will be valuable to find out the effect of supply-side factors on school attendance using administrative education data.

Appendix

Table A1. School attendance rate by background

Country	Survey	Year	Attendance Rate†										
			Total	Age		Sex		Residence		Wealth Quintile		Household Head Education		
				Starting age of primary	Ending age of lower secondary	Male	Female*	Urban	Rural*	Poorest*	Richest	Less than primary*	Primary	Secondary +
Central and Eastern Europe(CEE) / Commonwealth of Independent States (CIS)														
Albania	DHS	2008-09	96.4%	78.8%	96.6%	96.4%	96.4%	96.5%	96.3%	95.2%	97.2%	91.0%	96.0%	97.4%
Armenia	DHS	2010	96.4%	100.0%	85.6%	95.5%	97.5%	96.8%	95.9%	93.5%	99.4%	69.1%	93.9%	97.2%
Belarus	MICS	2012	96.3%	70.9%	100.0%	96.9%	95.6%	95.9%	97.1%	97.4%	96.8%	100.0%	78.0%	96.3%
Bosnia and Herzegovina	MICS	2011-12	97.6%	83.2%	98.3%	98.0%	97.1%	96.8%	98.0%	94.4%	97.1%	77.9%	97.4%	98.2%
Kazakhstan	MICS	2010-11	99.5%	98.4%	99.5%	99.5%	99.6%	99.5%	99.5%	99.4%	100.0%	88.4%	99.8%	99.6%
The former Yugoslav Rep. of Macedonia	MICS	2011	98.3%	93.3%	97.1%	98.7%	97.8%	98.6%	97.9%	95.3%	99.7%	.	97.1%	99.1%
Serbia	MICS	2010	99.1%	98.0%	99.5%	98.7%	99.5%	99.4%	98.8%	96.4%	99.2%	96.8%	98.3%	99.5%
Tajikistan	DHS	2012	95.8%	96.5%	88.3%	97.4%	94.1%	97.6%	95.3%	94.0%	97.3%	85.6%	95.8%	96.0%
Ukraine	MICS	2012	95.9%	68.1%	97.9%	96.0%	95.9%	95.4%	97.1%	97.3%	93.8%	60.6%	100.0%	96.1%
East Asia and the Pacific														
Cambodia	DHS	2010	87.6%	62.5%	78.1%	87.1%	88.1%	92.2%	86.8%	78.9%	95.0%	81.2%	87.4%	93.9%
Indonesia	DHS	2012	88.7%	99.7%	61.4%	89.0%	88.4%	90.0%	87.4%	84.6%	93.0%	81.3%	85.6%	92.7%
Lao People's Democratic Republic	MICS	2011-12	84.1%	69.3%	70.3%	85.2%	83.1%	92.8%	81.7%	70.9%	96.0%	73.7%	83.2%	92.8%
Mongolia	MICS	2010	97.8%	97.4%	93.8%	96.9%	98.7%	98.8%	96.6%	94.5%	99.2%	93.2%	96.0%	98.4%
Timor-Leste	DHS	2009-10	81.6%	63.9%	80.9%	81.5%	81.8%	86.9%	80.2%	71.8%	89.1%	76.5%	82.4%	88.9%
Viet Nam	MICS	2010-11	95.4%	95.4%	86.3%	95.3%	95.5%	96.9%	94.9%	90.1%	98.6%	83.1%	92.3%	98.1%
Eastern and Southern Africa														
Burundi	DHS	2010	80.9%	67.4%	61.0%	82.4%	79.5%	84.2%	80.6%	71.4%	86.8%	78.7%	83.8%	84.1%
Ethiopia	DHS	2011	66.6%	46.6%	60.7%	65.6%	67.6%	86.1%	62.9%	53.5%	85.8%	61.5%	71.7%	86.4%
Kenya	DHS	2008-09	94.8%	90.4%	95.0%	94.5%	95.0%	97.3%	94.4%	84.9%	98.5%	82.7%	97.3%	98.7%
Lesotho	DHS	2009	89.9%	90.2%	71.6%	86.1%	93.6%	95.1%	88.6%	83.2%	96.3%	85.0%	90.2%	95.1%
Madagascar	DHS	2008-09	78.1%	65.7%	61.3%	77.5%	78.6%	92.1%	76.2%	58.2%	92.6%	61.5%	79.4%	90.9%
Malawi	DHS	2010	87.6%	70.1%	82.0%	87.0%	88.2%	92.8%	86.8%	79.6%	95.7%	87.3%	89.4%	95.3%
Mozambique	DHS	2011	74.3%	62.0%	59.3%	75.4%	73.2%	85.3%	69.5%	61.3%	92.6%	62.7%	77.1%	91.2%
Rwanda	DHS	2010	87.8%	94.3%	60.7%	87.6%	88.1%	86.5%	88.0%	84.9%	86.7%	85.5%	88.7%	89.9%
Swaziland	MICS	2010	95.9%	90.7%	89.8%	95.6%	96.1%	95.4%	96.0%	94.6%	98.0%	94.7%	95.4%	97.1%
United Republic of Tanzania	DHS	2010	75.3%	73.4%	43.0%	76.1%	74.5%	82.8%	73.2%	66.4%	84.8%	63.4%	78.4%	85.7%
Uganda	DHS	2011	89.7%	79.7%	72.7%	90.5%	88.9%	90.3%	89.6%	80.4%	91.5%	82.5%	90.9%	93.0%
Zimbabwe	DHS	2010-11	92.4%	93.3%	75.9%	91.8%	93.0%	93.9%	92.0%	88.6%	96.2%	88.5%	90.6%	95.1%
Latin America and the Caribbean														
Belize	MICS	2011	93.8%	87.3%	80.5%	94.3%	93.2%	98.1%	91.0%	88.3%	98.0%	78.6%	94.5%	98.2%
Bolivia	DHS	2008	97.3%	91.7%	94.5%	97.6%	97.0%	97.2%	97.3%	94.1%	99.3%	93.3%	96.8%	98.7%
Colombia	DHS	2010	97.0%	96.3%	92.4%	96.4%	97.6%	97.6%	95.5%	94.2%	99.0%	93.3%	96.3%	98.3%
Costa Rica	MICS	2011	93.7%	85.2%	83.1%	93.3%	94.1%	95.4%	91.6%	90.1%	98.4%	85.2%	92.0%	96.3%
Guyana	DHS	2009	95.4%	97.2%	85.2%	94.9%	95.9%	97.8%	94.6%	92.1%	98.5%	94.2%	94.3%	96.2%
Haiti	DHS	2012	94.0%	90.8%	93.3%	93.5%	94.5%	96.5%	92.5%	88.2%	98.3%	90.4%	95.3%	97.7%
Honduras	DHS	2011-12	86.2%	95.5%	59.7%	85.1%	87.4%	92.3%	81.5%	76.9%	97.4%	76.8%	85.1%	96.4%
Peru	DHS	2012	95.8%	95.9%	90.7%	95.7%	96.0%	96.2%	95.2%	93.3%	98.2%	94.3%	93.6%	97.4%
Suriname	MICS	2010	96.5%	92.7%	89.0%	95.4%	97.8%	96.8%	95.6%	92.8%	97.9%	92.3%	95.1%	98.3%

				Attendance Rate									
				Age		Sex		Residence		Wealth Quintile		Household Head Education		
Country	Survey	Year	Total	Starting age of primary	Ending age of lower secondary	Male	Female	Urban	Rural	Poorest	Richest	Less than primary	Primary	Secondary +
Middle East and North Africa														
Egypt	DHS	2008	89.6%	57.9%	86.6%	90.5%	88.6%	92.6%	87.6%	80.5%	96.0%	82.8%	88.7%	93.9%
Iraq	MICS	2011	85.1%	85.7%	66.0%	90.0%	79.9%	89.4%	76.8%	71.8%	95.4%	74.1%	81.9%	91.0%
Jordan	DHS	2012	96.6%	95.7%	90.8%	96.2%	97.0%	96.3%	97.8%	93.6%	98.7%	86.7%	92.8%	97.6%
Tunisia	MICS	2011-12	96.1%	96.8%	86.9%	96.7%	95.5%	98.2%	92.5%	91.1%	99.4%	90.7%	95.7%	98.4%
South Asia														
Afghanistan	MICS	2010-11	52.8%	46.2%	43.2%	62.1%	42.5%	75.2%	47.9%	37.2%	76.7%	44.9%	63.9%	73.0%
Bangladesh	DHS	2011	83.9%	92.4%	60.6%	82.2%	85.7%	82.4%	84.4%	75.3%	89.0%	77.3%	85.4%	91.5%
Bhutan	MICS	2010	87.9%	81.6%	73.6%	87.2%	88.6%	94.1%	85.4%	77.9%	94.0%	85.2%	92.9%	93.1%
Maldives	DHS	2009	98.4%	95.7%	96.5%	98.3%	98.6%	99.4%	98.1%	97.7%	99.5%	98.1%	98.8%	99.3%
Nepal	DHS	2011	92.6%	87.6%	88.4%	95.2%	89.8%	96.4%	92.1%	88.1%	98.6%	87.8%	95.2%	98.3%
Pakistan	DHS	2012-13	73.4%	63.3%	69.4%	77.6%	68.7%	84.9%	68.5%	43.9%	95.5%	60.2%	75.9%	88.9%
West and Central Africa														
Burkina Faso	DHS	2010	49.1%	35.8%	32.8%	50.8%	47.4%	77.4%	42.3%	28.4%	78.5%	44.1%	72.7%	81.5%
Cameroon	DHS	2011	82.5%	70.6%	76.1%	85.2%	79.7%	92.1%	75.1%	57.4%	97.0%	61.1%	87.7%	95.9%
Central African Republic	MICS	2010	71.8%	57.9%	58.3%	79.0%	64.6%	83.8%	63.9%	55.0%	88.8%	58.7%	68.0%	85.0%
Chad	MICS	2010	52.4%	38.9%	47.8%	57.6%	47.2%	71.5%	47.2%	40.5%	75.2%	38.2%	75.8%	84.1%
Congo	DHS	2011-12	94.1%	87.8%	84.0%	94.6%	93.5%	95.3%	92.1%	90.1%	98.1%	87.1%	90.0%	96.1%
Democratic Republic of the Congo	MICS	2010	76.5%	54.6%	81.2%	79.4%	73.7%	86.6%	72.2%	67.7%	91.4%	62.1%	68.5%	84.4%
Cote d'Ivoire	DHS	2011-12	66.3%	53.1%	47.6%	71.1%	61.5%	73.6%	60.9%	54.1%	81.1%	56.4%	72.8%	83.8%
Gabon	DHS	2012	96.8%	91.7%	95.7%	96.4%	97.2%	97.0%	95.8%	93.5%	97.7%	96.3%	95.8%	97.3%
Gambia	MICS	2010	63.6%	47.6%	59.6%	62.6%	64.5%	75.8%	54.7%	47.1%	80.1%	58.5%	76.0%	84.6%
Ghana	MICS	2011	79.2%	33.8%	90.5%	78.7%	79.8%	85.2%	74.5%	66.9%	89.3%	72.8%	76.8%	85.3%
Guinea	DHS	2012	57.4%	52.4%	48.3%	63.6%	51.3%	80.6%	46.2%	30.9%	85.4%	49.3%	69.0%	81.0%
Niger	DHS	2012	45.2%	50.8%	21.8%	48.9%	41.2%	76.5%	39.0%	29.4%	73.8%	40.8%	60.2%	81.9%
Nigeria	MICS	2011	74.7%	56.2%	79.3%	76.8%	72.6%	89.6%	67.5%	41.1%	94.5%	55.1%	85.4%	89.3%
Sao Tome and Principe	DHS	2008-09	91.5%	82.3%	82.5%	91.5%	91.5%	91.9%	91.2%	84.0%	97.3%	86.1%	90.5%	96.4%
Senegal	DHS	2010-11	59.4%	56.5%	48.7%	59.5%	59.4%	75.8%	48.4%	44.7%	76.3%	52.5%	76.7%	88.2%
Sierra Leone	MICS	2010	76.1%	55.6%	76.9%	75.2%	76.8%	81.8%	73.6%	58.9%	89.5%	71.5%	80.7%	87.6%
Togo	MICS	2010	86.3%	82.1%	73.4%	89.4%	83.0%	90.8%	84.2%	78.1%	92.2%	78.6%	88.5%	94.4%

Sources: MICS and DHS 2008-2012.

Notes:

† Number of children attending primary or secondary school who are of official primary or lower secondary school age, expressed as a percentage of the total number of children of official primary or lower secondary school age.

* Reference category.

Table A2. Marginal effects of children's background characteristics on primary and lower secondary school attendance

Region / Country	Survey	Year	Age Group	Attendance Rate†	Marginal Effects								
					Age	Sex Male	Residence Urban	Wealth Quintile				Household Head Education	
								2nd	3rd	4th	Richest	Primary	Secondary +
Central and Eastern Europe(CEE) / Commonwealth of Independent States (CIS)													
Albania	DHS	2008-09	6-13	96.4%	0.00927***	0.00167	-0.00864	0.0107*	0.00683	0.0135	0.0130	0.0242*	0.0287**
Armenia	DHS	2010	7-14	96.4%	-0.00441**	-0.00175	-0.00438*	0.00302*	0.00261	0.00574*	0.00703**	0.00638*	0.0541
Belarus	MICS	2012	6-14	96.3%	0.000776	0.000197	-0.000137	0.000011	-0.0000929	-0.000194	0.0000981	-0.991	-0.000511
Bosnia and Herzegovina	MICS	2011-12	6-14	97.6%	0.00394***	0.00472*	-0.00353	0.00856***	0.00570**	0.00722**	0.00202	0.0126***	0.0472**
Kazakhstan	MICS	2010-11	7-15	99.5%	0.000766**	-0.000711	-0.00307	-0.000437	0.00011	0.00339*	.	0.00533***	0.0522*
Serbia	MICS	2010	7-14	99.1%	0.000646	-0.00288	0.00022	0.00599*	0.00394	0.00432	0.00192	0.0029	0.00854
Tajikistan	DHS	2012	7-15	95.8%	-0.00660***	0.0268***	0.0110*	0.00393	0.0133**	0.0196***	0.0151**	0.0215***	0.0659**
The former Yugoslav Rep. of Macedonia	MICS	2011	6-14	98.3%	0.00102	0.00589	-0.00756	0.00938*	0.0134**	0.0103*	0.0180***	-0.00554	.
Ukraine	MICS	2012	6-14	95.9%	0.00369**	-0.000191	-0.000967	-0.00134	-0.000211	0.00000849	-0.00347	.	.
East Asia and the Pacific													
Cambodia	DHS	2010	6-14	87.6%	0.00931***	-0.00728	-0.0322*	0.0301***	0.0515***	0.0782***	0.0926***	0.0449***	0.0812***
Indonesia	DHS	2012	7-15	88.7%	-0.0290***	0.00345	-0.00470	0.0102**	0.0235***	0.0343***	0.0351***	0.0123*	0.0452***
Lao People's Democratic Republic	MICS	2011-12	6-14	84.1%	-0.00859***	0.0214***	0.0257***	0.0440***	0.0875***	0.0996***	0.133***	0.0475***	0.0898***
Mongolia	MICS	2010	6-14	97.8%	-0.00243***	-0.0106***	0.000151	0.00519*	0.0119***	0.0165***	0.0116***	0.00321	0.0115*
Timor-Leste	DHS	2009-10	6-14	81.6%	0.0189***	-0.00424	0.00713	0.0471***	0.0593***	0.102***	0.0974***	0.0372***	0.0874***
Viet Nam	MICS	2010-11	6-14	95.4%	-0.00686***	-0.00171	-0.00754	0.00977***	0.0181***	0.0194***	0.0229***	0.0146***	0.0687***
Eastern and Southern Africa													
Burundi	DHS	2010	7-16	80.9%	-0.0103***	0.0248**	-0.0178	0.0484***	0.0860***	0.0957***	0.123***	0.0208*	-0.00990
Ethiopia	DHS	2011	7-16	66.6%	0.0140***	-0.0123	0.101***	0.0552***	0.0803***	0.137***	0.202***	0.0564***	0.117***
Kenya	DHS	2008-09	6-13	94.8%	0.00352***	-0.00213	-0.0220	0.0259***	0.0268***	0.0311***	0.0293***	0.0470***	0.0382***
Lesotho	DHS	2009	6-15	89.9%	-0.0164***	-0.0608***	0.00300	0.0252***	0.0361***	0.0560***	0.0668***	0.0284***	0.0395***
Madagascar	DHS	2008-09	6-14	78.1%	-0.0114***	-0.0114	0.0431***	0.0836***	0.121***	0.155***	0.170***	0.104***	0.154***
Malawi	DHS	2010	6-15	87.6%	0.00977***	-0.0182	0.0266	0.0178	0.0358**	0.0540***	0.0918***	0.0534***	0.0644***
Mozambique	DHS	2011	6-15	74.3%	-0.00277	0.0256**	0.00279	0.0162	0.0715***	0.135***	0.226***	0.104***	0.138***
Rwanda	DHS	2010	7-15	87.8%	-0.0316***	-0.00564	-0.00564	0.0183**	0.0382***	0.0428***	0.0152*	0.0155**	0.0317***
Swaziland	MICS	2010	6-15	95.9%	-0.00112	-0.00404	-0.0351**	0.00973	0.00667	0.0150*	0.0311***	0.00235	0.0144*
Uganda	DHS	2011	6-16	89.7%	-0.00513***	0.0143**	-0.0273**	0.0524***	0.0613***	0.0836***	0.0581***	0.0503***	0.0550***
United Republic of Tanzania	DHS	2010	7-17	75.3%	-0.0394***	0.0255**	0.0212	0.0251*	0.0740***	0.107***	0.127***	0.109***	0.127***
Zimbabwe	DHS	2010-11	6-14	92.4%	-0.0145***	-0.00858	-0.0400**	0.0228***	0.0297***	0.0389***	0.0559***	0.00831	0.0367***
Latin America and the Caribbean													
Belize	MICS	2011	5-14	93.8%	-0.00412***	0.00798	0.0294***	0.00591	0.00522	0.0235***	0.0187*	0.0484***	0.0602***
Bolivia	DHS	2008	6-13	97.3%	0.00100	0.00493*	-0.00259	0.0110***	0.0185***	0.0202***	0.0224***	0.0127***	0.0171***
Colombia	DHS	2010	6-14	97.0%	-0.00409***	-0.00924***	-0.00599**	0.0131***	0.0154***	0.0209***	0.0232***	0.00966***	0.0181***
Costa Rica	MICS	2011	6-14	93.7%	-0.00678***	-0.00731	0.0139	0.0221**	0.0112	0.0190*	0.0482***	0.0295*	0.0548***
Guyana	DHS	2009	6-14	95.4%	-0.00977***	-0.00364	0.0118*	0.0123*	0.0128**	0.0259***	0.0277***	0.0148	0.0209
Haiti	DHS	2012	6-14	94.0%	0.00204*	-0.00546	-0.0212	0.0244***	0.0368***	0.0429***	0.0540***	0.0259***	0.0350***
Honduras	DHS	2011-12	6-14	86.2%	-0.0324***	-0.0136***	0.0136**	0.0158***	0.0377***	0.0587***	0.0767***	0.0238***	0.0511***
Peru	DHS	2012	6-14	95.8%	-0.00516***	-0.00219	-0.0256***	0.0184***	0.0276***	0.0303***	0.0338***	-0.00657	0.0153*
Suriname	MICS	2010	6-15	96.5%	-0.00350***	-0.0169***	-0.000394	0.00571	0.0194***	0.0207***	0.0150***	0.0123**	0.0370***

Region Country	Survey	Year	Age Group	Attendance Rate†	Marginal Effects								
					Age	Sex Male	Residence Urban	Wealth Quintile				Household Head Education	
								2nd	3rd	4th	Richest	Primary	Secondary +
Middle East and North Africa													
Egypt	DHS	2008	6-14	89.6%	0.0163***	0.0165***	-0.0104	0.0354***	0.0493***	0.0618***	0.0735***	0.0213***	0.0603***
Iraq	MICS	2011	6-14	85.1%	-0.0240***	0.0881***	0.0413***	0.0404***	0.0662***	0.0799***	0.105***	0.0278***	0.0831***
Jordan	DHS	2012	6-15	96.6%	-0.00411***	-0.00561	-0.0147***	0.00753*	0.00949**	0.0200***	0.0220***	0.0104**	0.0547***
Tunisia	MICS	2011-12	6-14	96.1%	-0.00561***	0.00478	0.0144**	0.00455	0.0123***	0.0146***	0.0234***	0.00788*	0.0116**
South Asia													
Afghanistan	MICS	2010-11	7-15	52.8%	-0.00848***	0.230***	0.0996***	0.0621***	0.0849***	0.183***	0.290***	0.163***	0.209***
Bangladesh	DHS	2011	6-13	83.9%	-0.0398***	-0.0319***	-0.0880***	0.0465***	0.0763***	0.0811***	0.0921***	0.0477***	0.0898***
Bhutan	MICS	2010	6-16	87.9%	-0.0129***	-0.0106*	0.0219**	0.0323***	0.0630***	0.0885***	0.0907***	0.0386***	0.000721
Maldives	DHS	2009	6-15	98.4%	0.000253	-0.00193	0.000163	0.00257	0.000922	0.0110**	0.0126*	0.00429	0.00432
Nepal	DHS	2011	5-12	92.6%	0.000176	0.0400***	-0.00346	0.00639	0.0144*	0.0288***	0.0466***	0.0359***	0.0610***
Pakistan	DHS	2012-13	5-12	73.4%	-0.00176	0.0987***	-0.0980***	0.139***	0.214***	0.246***	0.288***	0.0679***	0.143***
West and Central Africa													
Burkina Faso	DHS	2010	6-15	49.1%	-0.0133***	0.0601***	0.176***	0.114***	0.181***	0.251***	0.338***	0.193***	0.171***
Cameroon	DHS	2011	6-15	82.5%	0.00307**	0.0531***	-0.0317***	0.0792***	0.105***	0.136***	0.144***	0.105***	0.152***
Central African Republic	MICS	2010	6-15	71.8%	-0.00323*	0.147***	0.0723***	0.0313**	0.0771***	0.133***	0.192***	0.0671***	0.165***
Chad	MICS	2010	6-15	52.4%	0.00994***	0.123***	0.0901***	-0.0065	0.0291**	0.0737***	0.187***	0.360***	0.377***
Congo	DHS	2011-12	6-15	94.1%	-0.00517***	0.0109*	-0.0198*	0.0159***	0.0270***	0.0433***	0.0537***	0.0103	0.0538***
Cote d'Ivoire	DHS	2011-12	6-15	66.3%	-0.0100***	0.112***	0.0506***	0.0933***	0.0385*	0.0768***	0.146***	0.142***	0.231***
Democratic Republic of the Congo	MICS	2010	6-13	76.5%	0.0334***	0.0592***	0.0315**	0.00696	0.0313***	0.0401***	0.147***	0.0509***	0.171***
Gabon	DHS	2012	6-14	96.8%	0.00281**	-0.00493	-0.00902**	0.0159***	0.0275***	0.0274***	0.0241***	-0.00386	-0.00322
Gambia	MICS	2010	7-15	63.6%	0.00727***	-0.0123	0.121***	0.109***	0.0925***	0.0926***	0.158***	0.133***	0.205***
Ghana	MICS	2011	6-14	79.2%	0.0573***	-0.00498	0.0116	0.0445***	0.0727***	0.103***	0.112***	0.0245**	0.0581***
Guinea	DHS	2012	7-16	57.4%	-0.0138***	0.157***	0.0814***	0.117***	0.197***	0.315***	0.392***	0.140***	0.179***
Niger	DHS	2012	7-16	45.2%	-0.0510***	0.111***	0.227***	0.0726***	0.112***	0.193***	0.328***	0.137***	0.320***
Nigeria	MICS	2011	6-14	74.7%	0.0241***	0.0466***	0.0489***	0.124***	0.183***	0.210***	0.228***	0.138***	0.144***
Sao Tome and Principe	DHS	2008-09	6-14	91.5%	-0.00404	0.00213	-0.0117	0.0204*	0.0454***	0.0618***	0.0757***	0.00966	0.0424**
Senegal	DHS	2010-11	7-16	59.4%	-0.0178***	-0.00642	0.218***	0.0629***	0.0446***	0.0179	0.0363	0.190***	0.301***
Sierra Leone	MICS	2010	6-14	76.1%	0.0177***	-0.00667	0.000551	0.0642***	0.118***	0.169***	0.188***	0.0565***	0.0854***
Togo	MICS	2010	6-15	86.3%	-0.0104***	0.0663***	-0.00245	0.0320***	0.0682***	0.0634***	0.0577***	0.0613***	0.115***

Sources: MICS and DHS 2008-2012.

Notes:

† Number of children attending primary or secondary school who are of official primary or lower secondary school age, expressed as a percentage of the total number of children of official primary or lower secondary school age.

* $p<0.05$, ** $p<0.01$, and *** $p<0.001$